



Coventry City Council

**A3.1. Who can we Contact about your Application?**

*It will help us to have someone who we can contact directly with any questions about your application. The person you name should have the authority to act on behalf of the operator. This could be an agent or consultant rather than the operator.*

Name: Toni Hoggett

Position: Secretary

Address: Hilmore House, Gain Lane, Bradford

\_\_\_\_\_  
\_\_\_\_\_

Postcode: BD3 70L

Telephone Number: 0845 611 5000

Fax Number: 0845 611 6741

E-mail Address: toni.hoggett@morrisonspc.co.uk

**B. About the installation**

**B1.2. Please provide a plan of the premises showing the location of:**

- (a) The premises
- (b) Where the dry cleaning machine(s) will be installed
- (c) Where the dry cleaning solvents will be stored
- (d) Where the dry cleaning residue will be stored
- (e) Any drains within the installation and in the immediate area of the installation which may be affected as a result of any potential Volatile Organic Compound (VOC) release from the dry cleaning operations

Document Reference: See Appendix 1

**B1.3. Please provide a description of the location and methods of storage of:**

- (a) Dry cleaning solvents
- (b) Dry cleaning residue

Document Reference: See Appendix 5

**B1.4. Please provide information regarding the:**

- (a) Make
- (b) Model name/number
- (c) Serial number
- (d) Load capacity
- (e) Date of installation
- (f) Type of dry cleaning solvent used for each machine.

Document Reference: See Appendix 5

## LAPPC Application Form: to be Completed by the Operator

For Local Authority use		
Application Reference:	Officer Reference:	Date Received:

### A1.1. Name of the premises

Wm Morrison Supermarkets plc

### A1.2. Please give the address of the premises

Alvis Retail Park, Holyhead Road, Coventry

West

Postcode: CV5 8BX Telephone: 02476 601333

Ordnance Survey national grid reference 8 characters:

(For example, SJ 123 456)

*There are a number of Internet mapping sites that will convert a Post Code to a grid references*

### A1.3. Do you have an existing permit for a dry cleaning installation?

Yes

No



Coventry City Council

### A2.1. The Applicant

Please provide the full name of company or corporate body or the name of the sole trader or the names of the partners

Wm Morrison Supermarkets plc

Trading/business name (if different):

Registered Office address:

Hillmore House

Gain Lane

Bradford

Postcode: B03 70L

Telephone: 0845 611 5000

### A2.2. Holding Companies

Is the operator a subsidiary of a holding company within the meaning of Section 736 of the Companies Act 1985?

No

Yes - Name of ultimate holding company: \_\_\_\_\_

Ultimate holding company Registered office address:

Postcode: \_\_\_\_\_

Telephone: \_\_\_\_\_



### B1.5. Maintenance

Please provide details, including a schedule, of checking and maintenance procedures for each machine. This should include the machine manufacturer's recommended operating procedures, checking and maintenance requirements and any other additional procedures undertaken by the operator. This should be submitted in a form of a list of the activities carried out and their frequencies.

*Clarify frequencies.*

Document Reference: See Appendix 5

### B1.6. Other use of solvents

Provide details of any other activities carried out within the dry cleaning installation which involve the use of organic solvents in particular spot clean solutions, water-proofing solutions and any other solvents or solvent bourne preparations

*More detail - eg procedures.*

Document Reference: See Appendix 5

### B1.7. Staff Training

Provide details on the training and relevant qualifications regarding operating and maintaining the dry cleaning machines. This should include details of operation of dry cleaning machines, control and use of dry cleaning solvents and location of machine's operating manuals.

Document Reference: See Appendix 5

### B1.8. Product weight

Specify how the product will be weighed and recorded weekly and annually.

Document Reference: See Appendix 5

*Appendix 4 Missing. See PG Note*

### B1.9. Determination of solvent consumption

Provide details how the mass or volume of solvent used will be determined and recorded weekly and annually (due to the low use spot cleaning solvents they need only to be determined annually).

Document Reference: See Appendix 5

*Not said anything! See PG Note*

## B2.0. Risk Phrase Solvents

At the time of writing and in the future it is believed unlikely that these materials will be used within the dry cleaning industry. *(Details of the risk phrases of the materials used can be found on the original suppliers packaging and in the Materials Safety Data Sheet (MSDS) for the product)*

### **B2.1 Are any substances or preparations which, because of their VOC content are required to carry one or more of the following risk phrases, used within the installation:**

- R45 - May cause cancer
- R46 - May cause heritable genetic damage
- R49 - May cause cancer by inhalation
- R60 - May impair fertility
- R49 - May cause harm to the unborn child.

*Your supplier should be able to advise you whether any such substances or preparations are being supplied.*

Yes

No

If Yes, provide full details of how and why these risk phrase materials are used and how the requirements of the amendment 1C of Schedule 1 of The Solvent Emissions (England and Wales) Regulations, 2004 SI 107, substitution, control and limiting of emissions of risk phrase materials will be met.

Document Reference: \_\_\_\_\_



Coventry City Council

## C1. Fees and Charges

The enclosed charging scheme leaflet gives details of how to calculate the application fee. Your application cannot be processed unless the application fee is correct and enclosed.

### C1.1. Please state the amount enclosed as an application fee for this installation.

£ 134.00 Cheques should be made payable to: Coventry City Council

We will confirm receipt of this fee when we write to you acknowledging your application.

### C1.2.

Please give any company purchase order number or other reference you wish to be used in relation to this fee.

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## C2. Annual charges

If we grant you a permit, you will be required to pay an annual subsistence charge. If you don't pay, your permit can be revoked and you will not be able to operate your installation.

### C2.1.

Please provide details of the address you wish invoices to be sent to and details of someone we may contact about fees and charges.

Toni Hoggelt

Hilmore House, Cain Lane, Bradford

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Postcode: B03 70L

Telephone: 0845 611 6741



Coventry City Council

### C3. Commercial confidentiality

#### C3.1.

Is there any information in the application that you wish to justify being kept from the public register on the grounds of commercial confidentiality?

Yes

No

*I have never supplied full store plans as these contain sensitive details, eg cash office.*

If Yes, please provide full justification, considering the definition of commercial confidentiality within the PPC regulations.

Document Reference: \_\_\_\_\_

### C4. Data Protection

The information you give will be used by the Local Authority to process your application. It will be placed on the relevant public register and used to monitor compliance with the permit conditions. We may also use and/or disclose any of the information you give us in order to:

- Consult with the public, public bodies and other organisations
- Carry out statistical analysis, research and development on environmental issues
- Provide public register information to enquirers
- Investigate possible breaches of environmental law and take any resulting action
- Prevent breaches of environmental law
- Assess customer service satisfaction and improve our service

We may pass on the information to agents/ representatives who we ask to do any of these things on our behalf.

It is an offence under Regulation 32 of the PPC regulations, for the purpose of obtaining a permit (for yourself or anyone else) to:

- Make a false statement which you know to be false or misleading in a material particular
- Recklessly make a statement which is false or misleading in a material particular.

**If you make a false statement we may prosecute you, and if you are convicted, you are liable to a fine or imprisonment (or both).**



**C5. Declaration**

**C5.1. Signature of current applicant(s)\***

I / We certify that the information in this application is correct. I / We apply for a permit in respect of the particulars described in this application (including supporting documentation) I / We have supplied. Please note that each individual applicant must sign the declaration themselves, even if an agent is acting on their behalf.

For the application from: \_\_\_\_\_

Premises Name: Wm Morrison Supermarkets plc

Signature:  \_\_\_\_\_

Name: Toni Hoggelt

Position: Secretary

Date: 16.6.06

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Date: \_\_\_\_\_

*\* Where more than one person is defined as the applicant, all should sign. Where a company or other body corporate - an authorised person should sign and provide evidence of authority from the board of the company or body corporate.*

B1.3

## Appendix 5

Both new solvent in unopened containers, and still pump out residues, will be stored in the ventilated machine room, in the position shown on the cad layout. The solvents and the residues will both stand on the solvent catchment tray, in case of any leakage.

B1.4

	Machine 1	Machine 2
Make	Firbimatic	Firbimatic
Model	2018	2018
Serial No	192FS0064	192FS0065
Load Capacity	18 kg	18 kg
Date of Installation	2005	2005
Dry Cleaning Solvent	Perchloroethylene	Perchloroethylene

B1.5

Please refer to Appendix 2 attached. This details all checking and maintenance procedures. All equipment will be subject to planned preventative maintenance and servicing programmes carried out on a monthly basis, and by the equipment suppliers service dept. We do not allow our staff to carry out anything other than good house keeping procedures.

B1.6

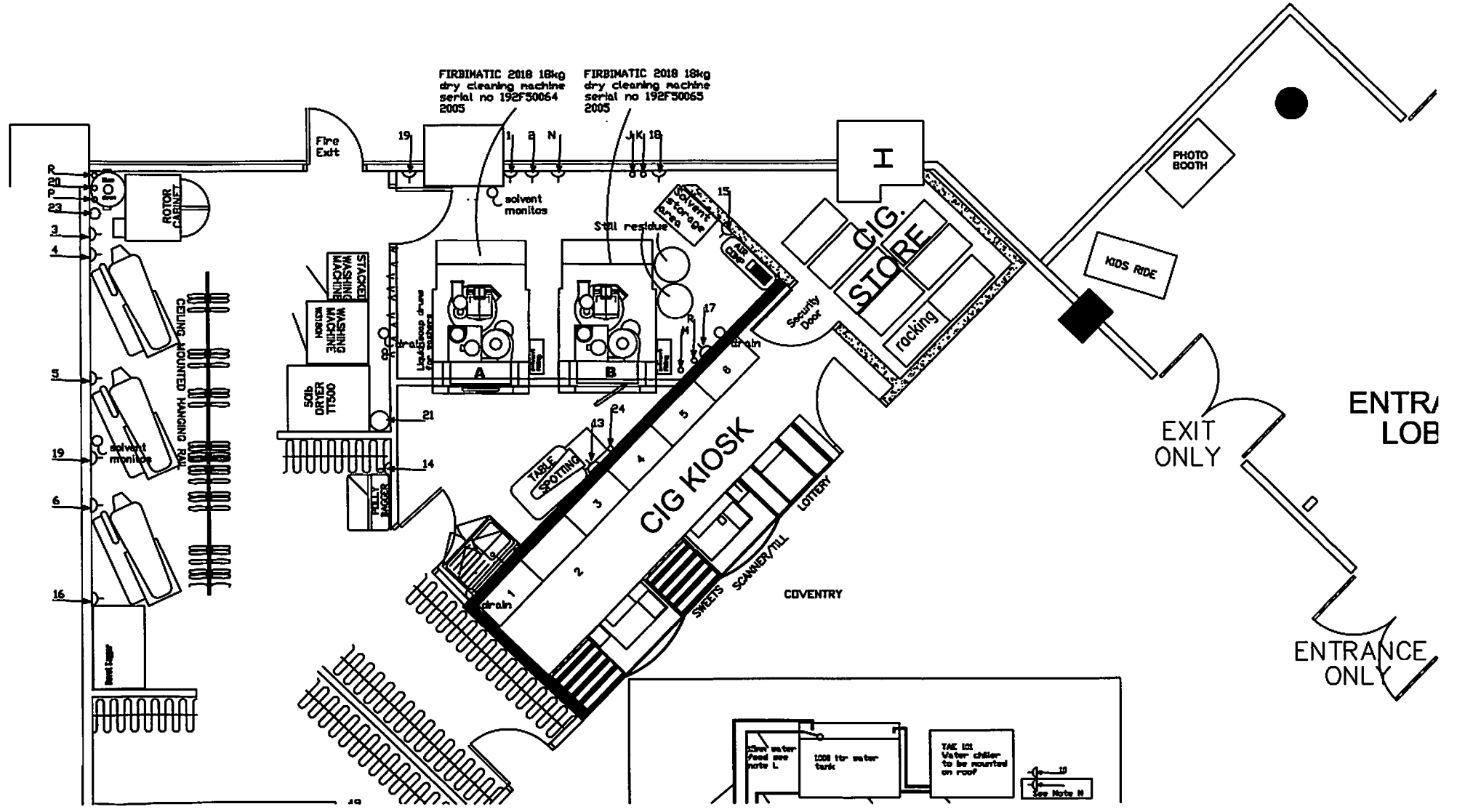
Other activities are primarily pre and/or post spotting techniques. For this we use the following products which contain VOC's: - Prenett A+B. Deprit 1, 2 & 3. Vinoy Plus. A full set of all MSDS sheets is attached as Appendix 3.

B1.7

Equipment training is provided by the suppliers, our servicing company and also by our Area Managers, all of whom have significant experience.

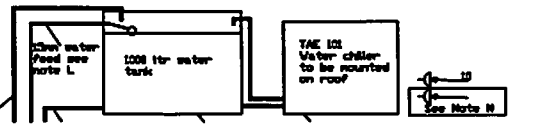
B1.8

We have developed and implemented our own systems and documentation in accordance with the SCD requirements. A copy of our implementation pack is attached as Appendix 4.



FIRBIMATIC 2018 18kg dry cleaning machine serial no 192F30064 2005  
FIRBIMATIC 2018 18kg dry cleaning machine serial no 192F30065 2005

COVENTRY



**FIRBIMATIC-UK** (A Division of the TES group)

**Morrisons Drycleaning Machine Service Schedule**

Issue 6

**ONE SHEET PER MACHINE**

PLEASE USE ADDITIONAL INFORMATION NOTES

	A	A+	C		A	A+	C
<b>(1) STILL</b>				<b>(12) LOADING DOOR</b>			
(a) Rake out still	A		C	a) Check: Loading door seal	A		C
(b) Clean sight glass	A		C	b) hinge adjustment	A		C
(c) Check: door seal	A		C	c) interlock & micro switch	A		C
(d) sight glass seal	A		C	d) loading door mechanism	A		C
(e) float	A		C	e) drum	A		C
(f) interlock & micro switch	A		C	<b>(13) MAIN BELTS</b>			
(g) element connections	A		C	a) Check: for wear			C
(h) low level water probe/s			C	b) adjustment			C
(i) water level	A		C	<b>(14) BEARING HOUSING</b>			
(j) boiler pressure	A		C	a) Check: bolts			C
(k) Service safety valve			C	<b>(15) SOAP INJECTOR/S</b>		A+	C
<b>(2) SLUDGE PUMP-OUT</b>				a) Check: operation			
a) Check: outlet / drain	A		C	<b>(16) SPRAY UNIT</b>	A		C
b) valves	A		C	a) Check: spray nozzle		A+	C
c) sludge drum float	A		C	b) strainers		A+	C
d) for leaks	A		C	c) operation			
e) pump	A		C	<b>(17) CARBON RECOVERY UNIT</b>			
<b>(3) SEPARATORS (Both)</b>				a) Visual inspection (run 10 min to ensure hot)			C
a) Drain	A		C	<b>(18) ELECTRICAL</b>	A		C
b) Check water drain valve	A		C	a) Clamp test all elements (drying & still)			C
c) Clean separator & sight glass	A		C	b) Check: 3PH terminals			C
<b>(4) CONDENSER</b>				c) rotation of all motors	A		C
a) Check: lid seal			C	d) lamps			C
b) modulating valve (danfoss)			C	e) thermostats / sensors			
<b>(5) ECO FILTER</b>				<b>(19) PNEUMATICS</b>	A		C
a) Remove filter			C	a) Check: Air regulator / lubricator	A		C
b) Check: discs			C	b) for air leaks			
c) seals			C	<b>(20) FIXINGS</b>			
d) belts			C	a) Holding down bolts			C
<b>(6) CARBON FILTER</b>				<b>(21) STRAINERS</b>			
a) Change cartridge		A+	C	a) Water			C
b) Check seals		A+	C	<b>(22) RUN MACHINE CHECK P2 or P3 WITH GARMENTS</b>	A		C
<b>(7) RECOVERY HEAD</b>				a) Filter pressure (1 bar)	A		C
a) Clean lint screen	A		C	b) Distillation	A		C
b) Remove lint from screen area	A		C	c) Valve operation	A		C
c) Drycontrol unit			C	d) Fridge gas level	A		C
d) Check: Interlock & micro switch	A		C	e) Fridge high pressure (20 bar)	A		C
e) seal	A		C	f) Visual solvent leak inspection	A		C
f) drain			C	<b>(23) MISCELLANEOUS</b>			
g) modulating valve (danfoss)			C	a) Top up solvent filling system = litres	A		C
h) Remove fridge coil (12 monthly)			C	b) Check: solvent filling system operation	A		C
<b>(8) SELF CLEANING LINT SCREEN</b>				c) solvent monitors	A		C
a) Clean bars	A		C	d) water purifying unit			C
<b>(9) SOLVENT CHILLER (if fitted)</b>				e) water pump			C
a) Remove & clean			C	f) product low level alarms	A		C
b) Check: seal			C	g) all air lubricators in unit & top up oil	A		C
<b>(10) AIR COMPRESSOR</b>				h) PH test distilled solvent			
a) Change over compressor in use	A		C	i) PPM test-1(<150) = test-2(<40) =	A		C
b) Drain compressor in use	A		C	j) Change water filter (Phosphate) on water supply			C
c) Check all airlines & equipment for leaks	A		C	k) Visual inspection of all equipment in unit	A		C
<b>(11) BUTTON TRAP</b>				l) Check ventilation control panel	A		C
a) Check: Interlock & micro switch	A		C	m) Separator drain valve operation (No73)	A		C
b) seal	A		C				
c) pipe from drum to button trap			C				

**IMPORTANT** Any work not listed on the appropriate service above, other than very minor items, is chargeable and an order number must be obtained before commencing work.

STORE LOCATION	STORE No	MACHINE SERIAL No	DATE
ENGINEERS NAME	JOB SHEET No		
CUSTOMERS SIGNATURE			

# MORRISONS SERVICE SCHEDULE ADDITIONAL INFORMATION

## Dry-Cleaning Machines

Issue No2

'A+' Service = 'A' & 'A+' items

**Always refer to the machine manual when doing maintenance, the following notes are 'general' additional information only**

Machine ON / Button 20 (still heat) OFF / Doors unlocked

### (1) Still

- a) Rake out still - Ensure base & sides are clean, down to bare metal.
  - (Wash with water & dry off – water into waste drum)
  - (If still base needs grinding ensure new pad is used each time 'Green P36')
  - (Blue will work but needs more pads!)
- b) Clean sight glass - Wipe inside & out with damp cloth

### Check

- c) door seal - Wipe / replace if required
- d) sight glass seal - for wear / replace if required
- e) float - clean ball & shaft / alarm sounds when raised up
- f) interlock & micro switch - check correct operation (you should not be able to lock the doors using the computer if any door is open).
- g) Element connections - ensure connections are tight
- h) low level water probe/s – check connection / water leaks
- i) water level - (button type, push button until light off to refill / check in-line non-return valve) (lever type, check level & vent @ 2bar)
- j) boiler pressure - cut In 4bar / Out 4.5bar
- k) Service safety valve – See separate sheet (attached)

### (2) Sludge pump-out

#### Check

- a) outlet / drain - for blockages
- b) valves - operation / air leaks
- c) sludge drum float - check condition of arm & ball
  - operate float, ensure light on front operates in 1<sup>st</sup> & 2<sup>nd</sup> position & pump switches off on 2<sup>nd</sup> position.
- d) for leaks - all pipe work and joints from still to sludge drum, including re-circulation pipe work.
- e) Pump - put 10 litres of solvent into still (from distilled tank)
  - re-circulate on 'manual' by pressing buttons **31** & **33**
  - pump out small amount of solvent from still to drum, pressing buttons **31** & **32**
  - ensure drum clamp is closed correctly (if poor fit, controller to advise 'Silver Lining')

### (3) Separators

- a) Drain separator - drain water from 1<sup>st</sup> separator to 2<sup>nd</sup> separator, button **34**
    - drain solvent from 1<sup>st</sup> separator to still, button **14**
    - drain solvent from 2<sup>nd</sup> separator to still, using lever valve.
    - (Ball only floats on perc)
  - b) check water drain valve – drain water from separator to water purifying unit or container (valve opens when doors unlocked)
  - c) clean separator & sight glass - remove sight glasses, clean inside separators with cloths & refit sight glasses. Do not over tighten. (Check seal condition)
- (Refill separator = **21** - **25** - **28** to clear pump line then **13** - **24** - **28** for 12 seconds ONLY)
- NOTE: Put 'Still Heat' button **20** ON at this stage.

#### **(4) Condenser**

##### **Check**

- a) Lid seal - for leaks
- b) Modulating valve- normally set between 1 and 2 but might be fully open if on a cooling tower, Ice tower or other water re circulating devices (stops pump burning out pumping against a closed head).

#### **(5) Eco Filters**

- a) Remove filter - drain to the still manually using buttons **[16]** & **[25]** when empty turn off buttons **[16]** & **[25]**. Remove filter belt guard, belt and motor, undo clamp, and remove filters.

##### **Check**

- b) Discs - If the filters are covered in dirt they can be washed in the machine. Remove the discs by undoing the belt pulley, remove the circlip and the lid can be removed from the shaft, undo the nut and put the discs in the drum, **put the filter lid back onto the filter housing** (in case the filter valves are letting by). Wash the discs (the button trap will need cleaning every 20 seconds or so due to the high volume of dirt coming off), Dry the discs and replace, making sure the nut Holding the discs together is tight.

If disc/s damaged then replace the damaged ones.

- c) Seals – lid seal for wear and the shaft seal for leaks, replace if necessary.
- d) Belt – for wear and adjustment, replace if necessary. (Vee belt A39)

#### **(6) Carbon Filter**

- a) Change cartridge – drain filters with ball valve. When empty remove clamp, change cartridge and dispose of in sludge bin.
- b) Check seal – for wear, replace if necessary.

#### **(7) Recovery Head**

- a) Clean lint screens - take apart and check for lint, if blocked advice controller (one set should be washed every week, see maintenance guide).
- b) Remove lint from screen area – make sure you remove any lint from the back of the screen runners, as this can cause a solvent leak, and from the probe pockets.
- c) Drycontrol unit – normally set between 2<sup>nd</sup> and 3<sup>rd</sup> marks. Check when on dry that it holds and then moves on within the maximum time.

##### **Check.**

- d) Interlock & micro switch – check for correct operation.
- e) Seal – wipe / change if required.
- f) Drain – from the recovery head to the separator is clear
- g) Modulating valve – when the machine is drying the test load check the fridge high pressure gauge is on 20 bar. Normally set between 4 & 5.
- h) Fridge gas – when on dry no bubbles in the sight glass.
- i) Remove fridge coil – if blocked with lint can be cleaned with airline (do not use spotting table, use the spare air compressor). If self-sealing couplers leak then tap on each side to seal, if not isolate unit using the service valves.

#### **(8) Self-cleaning lint screen.**

- a) Clean bars – unscrew and check when replacing ensuring the holes are facing down.

#### **(9) Solvent chiller.**

- a) Remove and clean – clean in machine room, not on spotting table. If this is blocked you can get very poor solvent flow and dirty marks on light garments.
- b) Check – Seal, replace if necessary

**(10) Air compressor.**

- a) Change over compressor in use – this will ensure both compressors get the same usage.
- b) Drain compressor in use – use drain valve, shut when on 0 bar.
- c) Check for air / oil leaks – visual inspection, check for air leaks throughout unit.

**(11) Button trap**

**Check**

- a) Interlock & micro switch – Check for correct operation.
- b) Seal - wipe, replace if necessary.
- c) Pipe from drum to button trap

**(12) Loading door**

**Check**

- a) Loading door seal – wipe, replace if necessary.
- b) Hinge adjustment – for wear
- c) Interlock & micro switch – check for correct operation
- d) Loading door handle – check for correct operation, replace parts as necessary.

**(13) Main belts**

**Check**

- a) for wear – replace if necessary (Main drive = poly belts 1992J)
- b) adjustment – threaded rod on main motor

**(14) Bearing housing**

- a) Check bolts – for tightness (ensure locking washer is not damaged)

**(15) Soap injector/s**

**Check**

- a) Operation – ensure detergent actually goes into machine when injector is activated.
  - (If manually checking injector ensure function **21** button trap valve is open)
  - (No2 is a spare injector, for temporary spare parts – ensure replaced next visit)

**(16) Spray unit**

**Check**

- a) Spray nozzle, inside loading door @ 12 o'clock – remove & clean with air only
- b) Strainers (solvent & product) – remove and clean
- c) Operation – ensure both product and solvent injectors are working, the holding tank (diluted type only) fills and stops at float, mixture sprays into drum for a couple of seconds ONLY uniformly and without dripping down door. Function button **27**  
(Ensure the product drum hole is protected from dirt getting into the drum-cloth ok!)

**(17) Carbon recovery unit**

- a) Visual inspection – put onto manual and buttons **5** - **6** - **7** - **8** - **10** for 10 minutes to ensure unit warms up. (Still needs to be ON and up to normal pressure)  
**DO NOT** allow to warm up longer than 10 minutes, otherwise carbon will be too warm to absorb solvent on the next load!



### (18) Electrical

a) Clamp test all elements (drying & still)- open electrical panel, put machine onto drying manually, clamp test drying and still elements.

(If cant get clamp meter onto wires on contactor / overload use the incoming phases on machine isolator)

Drying – Contactor No C008 (9amps per phase)

Still – Contactor No C020 (16amps per phase)

#### Check

b) 3-Phase terminals –visually check all 3-phase connections on the contactors and overloads for loose or burnt wires.

c) Rotation of all motors – each motor will have a direction arrow on it, the direction on all motors **must** be checked.

d) Lamps – if lamp needs changing switch machine off, as the fuse on the computer will blow if wires short out.

e) Thermostats / sensors – ensure probes are correctly located in pockets and grub screws are secure.

### (19) Pneumatics

#### Check

a) Air regulator / lubricator – drain water if required, top up with lubricant (airline oil DTE15 or equivalent)

b) For air leaks – rectify as appropriate, bad leaks can cause the compressor to burn out and give reduced air pressure to the rest of the unit.

#### Note: SETTING UP Air Regulator Oil Lubrication Rate:

Anti-clockwise = opens

Clockwise = closes

Rate = 1drop per 3 - 4 air valve movements.

- One person will press a valve function button (i.e. 21) 3 seconds ON / 3 seconds OFF

- Engineer to count number of drops & adjust if required.

**DO NOT leave wide open!**

### (20) Fixings

a) Holding down bolts – tighten if required.

### (21) Strainers

a) Check water strainer – switch off water pump and machine isolating valve, hold jug under strainer when loosening to prevent water on electrics / air valves.

### (22) Run Machine check P2 or P3 with garments

Note: Operator to prepare one load for each machine

#### Check

a) Filter pressure (1 bar) – 2<sup>nd</sup> bath, two / three minutes into the wash.

If very low or no pressure at all this could mean hole/s in disc (dust on loads), pump partially blocked or valve/s letting by.

If fluctuating pressure this can be due to insufficient solvent in drum.

If pressure very high (1.2 bar or above), even after cleaning, the discs may need changing.

b) Distillation – should be finished or almost finished by the end of the load, on a P2

c) Valve operation – ensure correct dip levels, draining of drum, no solvent entering drum on drying, still not overfilling, solvent is not going into tanks or still during 1<sup>st</sup> wash and filter wash.

d) Fridge gas level – On drying, with fridge running, sight glass should be full, with no bubbles.

**It is no longer allowed to top up fridge gas, other than by a recognised / agreed method.**

**NOTIFY OFFICE FOR ADVICE IF LEAK SUSPECTED.**

e) Fridge high pressure (18 bar) – when machine is drying ensure high pressure gauge is 18 bar. The heat produced at 18 bar greatly assists drying.  
Do not allow to go to 20 bar.

f) Visual solvent leak inspection – check machine for leaks, especially those parts that have been opened up during service, i.e. still door / safety valve, filter housings, recovery head, solvent chiller, button trap, lint screen, separators, condenser etc.  
(certain items will only show leaks when hot)

**(23) Miscellaneous**

a) Top up solvent filling system – (still must be empty) check machine solvent levels,

b) Transfer solvent from Tank-2 to Tank-1 using functions 13222846

(Ensure pump cuts out on float)

-Transfer solvent from filling system to Tank-2, using functions 231728

**Working only use functions** 232845

- Refill solvent filling system.

Note: Solvent should be ordered in advance by the department controller, if not being ordered and machine is drastically short of solvent advise line manager. Advise Phil Thompson if problem persists on a regular basis.

Solvent levels can also be checked when attending a breakdown

c) Solvent monitors – ensure all are switched on, in particular the final (5ppm) monitor should NEVER sound an alarm.

Test procedure

- Place small amount of solvent into a jug.

- Hold 18" away from the sensor.

- Using back of hand waft vapour in direction of sensor, until the alarm sounds.

(Behind machines = 40ppm)

(In front of machine = 15ppm)

(Shop area = 5ppm)

Sound will stop when gets to ppm set on monitor

Note: If not functioning correctly, inform office and arrange to replace faulty unit

d) Water purifying unit -

**Bowe type** – 4 compartments

Remove the first compartment and refill with new carbon.

Move the other 3 compartments along in order.

Re-fit compartment one, into position four.

Note; Drain and clean each compartment if required.

**Duvals / Firbimatic type** – 3 compartments

Compartment one - drain solvent and water, check alarm sounds when no water on sensor. Re-fill with water and ensure alarm stops.

Compartment two – Ensure bubbles are seen, replace carbon filter once per year.

Compartment three – Replace carbon once per year

Note; Drain and clean each compartment if required.

e) Water pump

**check**

- operation

- direction of motor (3-Phase)

- for leaks

- return to tank valve is not shut (one turn open is normal position)

f) Product low level alarms – take detergent / spray product low level alarms out of drums.  
Ensure appropriate red light comes on (front panel)

(If no light comes on check bulb / function)

g) Check **all air lubricators** in unit and top up with oil (airline oil)

h) Ph test distilled solvent (see Ph test kit / method)

i) PPM test both machines

Test-1 (below 150 PPM)

At the end of the program (P2 or P3) a Gas Tec reading should be taken inside the drum, 12" above the load and the results recorded on the sheet provided.

Test-2 (below 40 PPM)

Garments are removed from the drum and placed in a tub, a second Gas Tec reading is taken 12" above the garments and the results recorded on the sheet provided.

Note;

If either of the results are above the recommended figures, work must be carried out to remedy the problem. The tests should then be re-run and the new results recorded. If you are unable to attain results lower than the correct figures you must inform the office.

Areas to look at include drying efficiency, button trap drying / draining.

It is possible that lack of lint screen maintenance may have caused the carbon bed to become saturated, reiterate the importance of cleaning and washing the foam as recommended, carbon regeneration will need to be run before an accurate reading can be taken, therefore this can only be done next service (advise the office if this is the case, check all possible causes before leaving)

j) Change water (Phosphate) filter, found on water supply feeding finishing equipment. These are to be changed twice a year, unless frequency is altered as a result of problems.  
Return used filter cartridge to office for evaluation of its condition (advise Phil)

k) Visual inspection of **all equipment** in unit.

- Ask staff if they are aware of any particular problems  
(see tick sheet regarding chargeable items / order numbers)

l) Ensure no fans have tripped out (red light on) If fan trips more than once inform controller.



**OPERATING-PROCEDURE (S9/S10) PERC – Combi Morrison 09-06-05**

- If Door Locked - Press The **DOOR OPEN BUTTON** When Light Stops Flashing – wait 5 sec
- a) PLACE THE **LOAD INTO THE DRUM** & CLOSE THE DOOR
  - b) CHECK **LINT SCREEN & BUTTON TRAP** CLEAN IF REQUIRED
  - c) ENSURE THE **STILL HAS FINISHED**
  - d) PRESS THE **DOOR OPEN BUTTON** TO LOCK THE DOOR
  - e) ENSURE **BUTTON No20** – STILL HEAT IS ON!

**STARTING THE SAME PROGRAM AGAIN**

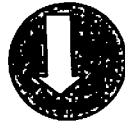
PRESS



(OR)

**SELECTING A DIFFERENT PROGRAM**

PRESS



DOWN ARROW

THEN PRESS

PRESS



OR



TO SELECT NEW PROGRAM No

(OR PRESS NUMERICAL NUMBER i.e. 6 or 12 ETC)

PRESS



TO CONFIRM

PRESS



Please cut along top of this box before laminating

09-06-05

## Additional Information



Alarm messages can be displayed on the computer screen for various reasons, if you are able to rectify the problem 'End Alarm' will then be displayed – then proceed as follows:

### OPTION -1

**LOAD running at time** =

When 'End Alarm' displayed (after problem is resolved)

Press

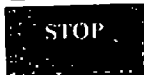


### OPTION -2

**NO LOAD running at time** =

When 'End Alarm' displayed (after problem is resolved)

Press



Note: If you accidentally press Stop / Reset to clear an alarm whilst in a program you will come out of the program!

In this instance wait until distillation has finished then re-start the program

---

### Help line Contact Numbers

Work hours Tel: 01386 – 55582

Out of hours Tel: 07779 - 332805

Printing date 10.03.2004

Reviewed on 10.03.2004

**1 Identification of the substance/preparation and of the company/undertaking**

- Product details
- Trade name: Clip Comfort
- Article number: 2261
- Application of the substance / the preparation  
Concentrated drycleaning detergent with odour absorbant, neutral smell, excellent antistatic properties as well as bactericidal and comfort retexturing. Application in perc and hydrocarbon.
- Manufacturer/Supplier:  
Chemische Fabrik Kreussler & Co. GmbH  
Postfach 120454  
D-65082 Wiesbaden
- Further information obtainable from:  
Abteilung TQM  
Herr Vogel  
0611/9271-175

**2 Composition/information on ingredients**

- Chemical characterization
- Description:  
Combination of anionic/non-ionic surfactants, disinfectants, odour-absorbant and fragrance.
- Dangerous components:

nonionic surfactants	Xi; R 38-41	5.0-10%
anionic surfactants	Xi; R 38-41	5.0-10%
cationic surfactants	C; R 22-34	2.5-5.0%

- Additional information: For the wording of the listed risk phrases refer to section 16.

**3 Hazards identification**

- Hazard description:  
Xi Irritant
- Information concerning particular hazards for human and environment:  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 41 Risk of serious damage to eyes.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**4 First-aid measures**

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.

**5 Fire-fighting measures**

- Suitable extinguishing agents:  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 2)

GB

Printing date 10.03.2004

Reviewed on 10.03.2004

Trade name: Clip Comfort

Protective equipment: No special measures required. (Contd. of page 1)

**6 Accidental release measures**

- Person-related safety precautions: Not required.
- Measures for environmental protection: Dilute with plenty of water.
- Measures for cleaning/collecting:  
Small spills - wash to sanitary sewer with plenty of water. Large spills - soak up with approved absorbent, shovel produkt into approved container for disposal. Wash area with plenty of water.

**7 Handling and storage**

- Handling:  
· Information for safe handling: No special measures required.  
· Information about fire - and explosion protection: No special measures required.
- Storage:  
· Requirements to be met by storerooms and receptacles: No special requirements.  
· Information about storage in one common storage facility: Not required.  
· Further information about storage conditions: None.

**8 Exposure controls/personal protection**

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.
- Respiratory protection: Not required.
- Protection of hands: Protective gloves
- Material of gloves  
Recommended thickness of the material:  $\geq 0.4$  mm  
PVC or PE gloves
- Penetration time of glove material  
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- For the permanent contact gloves made of the following materials are suitable:  
PVC or PE gloves
- Eye protection: Tightly sealed goggles

**9 Physical and chemical properties**

· General Information

Form:	Liquid
Colour:	Dark yellow
Odour:	Characteristic

· Change in condition  
Melting point/Melting range: Undetermined.

(Contd. on page 3)



Printing date 10.03.2004

Reviewed on 10.03.2004

Trade name: Clip Comfort

Boiling point/Boiling range:	Undetermined.	(Contd. of page 2)
Flash point:	> 100°C	
Self-igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Density at 20°C:	1.0 g/cm³	
Solubility in / Miscibility with water:	Fully miscible.	
pH-value at 20°C:	7.5	
Viscosity: Dynamic at 20°C:	125 mPas	
Solvent content: Organic solvents:	0 %	

**10 Stability and reactivity**

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Dangerous reactions: No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

**11 Toxicological information**

- Acute toxicity:
- Primary irritant effect:  
on the skin: No irritant effect.  
on the eye: Strong irritant with the danger of severe eye injury.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

**12 Ecological information**

- General notes: bio-degradable

**13 Disposal considerations**

- Product:  
Recommendation: Dispose of in accordance with Local, State, and Federal Regulations.
- Uncleaned packaging:  
Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

**14 Transport information**

- Land transport ADR/RID (cross-border)
- ADR/RID class:

(Contd. on page 4)

GB

Printing date 10.03.2004

Reviewed on 10.03.2004

Trade name: Clip Comfort

(Contd. of page 3)

- Danger code (Kemler): -
- UN-Number: -
- Packaging group: -
- Hazard label -

## · Maritime transport IMDG:

- IMDG Class: -
- UN Number: -
- Label -
- Packaging group: -
- EMS Number: -
- Marine pollutant: No

## · Air transport ICAO-TI and IATA-DGR:

- ICAO/IATA Class: -
- UN/ID Number: -
- Label -
- Packaging group: -

**15 Regulatory information**

## · Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

## · Code letter and hazard designation of product:

Xi Irritant

## · Risk phrases:

41 Risk of serious damage to eyes.

## · Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
39 Wear eye/face protection.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

## · Relevant R-phrases

22 Harmful if swallowed.

34 Causes burns.

38 Irritating to skin.

41 Risk of serious damage to eyes.

## · Department issuing MSDS:

Abteilung TQM

Herr Vogel

0611/9271-175

· Contact: Herr Vogel

**1 Identification of the substance/preparation and of the company/undertaking**

- Product details
- Trade name: Deprit 1
- Article number: 2239
- Application of the substance / the preparation Postspotting agent for textile cleaning
- Manufacturer/Supplier:  
Chemische Fabrik Kreussler & Co. GmbH  
Postfach 120454  
D-65082 Wiesbaden
- Further information obtainable from:  
Abteilung TQM  
Herr Vogel  
0611/9271-175

**2 Composition/information on ingredients**

- Chemical characterization
- Description:  
DEPRIT 1 - 2 - 3 has a very broad degree of effectiveness and removes nearly all kind of stains which exist in practise. The products are well-suited to each other in that way, that unknown stains can be treated straight one after the other with DEPRIT 1 -2 -3.

Dangerous components:			
CAS: 112-34-5	2-(2-butoxyethoxy)ethanol	Xi; R 36	4.0%
EINECS: 203-961-6	nonionic surfactants		
CAS: 85711-69-9	sodium alkansulfonates	Xi; R 38-41	3.5%
		Xn; R 22	1.2%

Additional information: For the wording of the listed risk phrases refer to section 16.

**3 Hazards identification**

- Hazard description: Not applicable.
- Information concerning particular hazards for human and environment:  
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**4 First-aid-measures**

- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.

**5 Fire-fighting measures**

- Suitable extinguishing agents:  
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Protective equipment: No special measures required.

Printing date 10.03.2004

Reviewed on 10.03.2004

Trade name: Deprit 1

(Contd. of page 1)

**6 Accidental release measures**

- Person-related safety precautions: Not required.
- Measures for environmental protection: Dilute with plenty of water.
- Measures for cleaning/collecting:  
Small spills - wash to sanitary sewer with plenty of water. Large spills - soak up with approved absorbent, shovel produkt into approved container for disposal. Wash area with plenty of water.
- Additional information: No dangerous substances are released.

**7 Handling and storage**

- Handling:  
· Information for safe handling: No special measures required.
- Information about fire - and explosion protection: No special measures required.
- Storage:  
· Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.

**8 Exposure controls/personal protection**

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:  
The usual precautionary measures are to be adhered to when handling chemicals.
- Respiratory protection: Not required.
- Protection of hands: Protective gloves
- Material of gloves PVC or PE gloves
- Penetration time of glove material  
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:  
PVC or PE gloves
- Eye protection: Goggles recommended during refilling

**9 Physical and chemical properties**

## · General Information

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic

## · Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

## · Flash point:

Not applicable.

## · Self-igniting:

Product is not selfigniting.

## · Danger of explosion:

Product does not present an explosion hazard.

(Contd. on page 3)

GB

Printing date 10.03.2004

Reviewed on 10.03.2004

Trade name: Deprit 1

		(Contd. of page 2)
· Density at 20°C:	1 g/cm <sup>3</sup>	
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.	
· pH-value at 20°C:	9.6	
· Viscosity:		
Dynamic at 20°C:	8 mPas	
· Solvent content:		
Organic solvents:	4.0 %	

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Dangerous reactions:** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.  
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

**12 Ecological information**

- **General notes:** readily bio-degradable

**13 Disposal considerations**

- **Product:**
- **Recommendation:** Dispose of in accordance with Local, State, and Federal Regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No

Printing date 10.03.2004

Reviewed on 10.03.2004

Trade name: Deprit 1

(Contd. of page 3)

- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: -

### 15 Regulatory information

- **Labelling according to EU guidelines:**  
Observe the general safety regulations when handling chemicals.  
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
- **Special labelling of certain preparations:**  
Safety data sheet available for professional user on request.
- **National regulations:**
- **Technical instructions (air):**

Class	Share in %
II	4.0

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**  
22 Harmful if swallowed.  
36 Irritating to eyes.  
38 Irritating to skin.  
41 Risk of serious damage to eyes.
- **Department issuing MSDS:**  
Abteilung TQM  
Herr Vogel  
0611/9271-175
- **Contact: Herr Vogel**

**1 Identification of the substance/preparation and of the company/undertaking**

- Product details
- Trade name: Deprit 2
- Article number: 2240
- Application of the substance / the preparation Postspotting agent for textile cleaning
- Manufacturer/Supplier:  
Chemische Fabrik Kreussler & Co. GmbH  
Postfach 120454  
D-65082 Wiesbaden
- Further information obtainable from:  
Abteilung TQM  
Herr Vogel  
0611/9271-175

**2 Composition/information on ingredients**

- Chemical characterization
- Description:  
DEPRIT 1 - 2 - 3 has a very broad degree of effectiveness and removes nearly all kind of stains which exist in practise. The products are well-suited to each other in that way, that unknown stains can be treated straight one after the other with DEPRIT 1 -2 -3.

· **Dangerous components:**

CAS: 123-86-4 EINECS: 204-658-1	n-butyl acetate	R 10	20-40%
	2-Butoxy-ethylacetat	Xn; R 20/21	10-20%
CAS: 112-34-5 EINECS: 203-961-6	2-(2-butoxyethoxy)ethanol	Xi; R 36	5.0-10%
CAS: 85711-69-9	sodium alkansulfonates	Xn; R 22	5.0-10%
	Sulfosuccinat-sodiumsalt	Xi; R 38-41	2.5-5.0%
	Isotridecanoethoxylat, polymer	Xn; R 22-41	1.0-2.5%

- Additional information: For the wording of the listed risk phrases refer to section 16.

**3 Hazards identification**

- Hazard description:  
Xn Harmful
- Information concerning particular hazards for human and environment:  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 10 Flammable.  
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
R 41 Risk of serious damage to eyes.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**4 First-aid measures**

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

(Contd. on page 2)

Printing date 09.09.2004

Reviewed on 09.09.2004

Trade name: Deprit 2

· After swallowing: If symptoms persist consult doctor.

(Contd. of page 1)

**5 Fire-fighting measures**

- Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents: Water
- Protective equipment: No special measures required.

**6 Accidental release measures**

- Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.
- Measures for cleaning/collecting:  
Small spills - wash to sanitary sewer with plenty of water. Large spills - soak up with approved absorbent, shovel produkt into approved container for disposal. Wash area with plenty of water.

**7 Handling and storage**

- Handling:  
· Information for safe handling: Ensure good ventilation/exhaustion at the workplace.
- Information about fire - and explosion protection:  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- Storage:  
· Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.

**8 Exposure controls/personal protection**

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:

**123-86-4 n-butyl acetate**

OES	Short-term value: 966 mg/m <sup>3</sup> , 200 ppm
	Long-term value: 724 mg/m <sup>3</sup> , 150 ppm

**2-Butoxy-ethylacetat**

OES	Short-term value: 50 ppm
	Long-term value: 20 ppm
	Sk

- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.
- Respiratory protection: Not required.
- Protection of hands: Protective gloves
- Material of gloves PVC or PE gloves

(Contd. on page 3)



Printing date 09.09.2004

Reviewed on 09.09.2004

Trade name: Deprit 2

(Contd. of page 2)

- Penetration time of glove material  
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:  
PVC or PE gloves
- Eye protection: Tightly sealed goggles

**9 Physical and chemical properties**

· **General Information**

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.  
Boiling point/Boiling range: Undetermined.

· **Flash point:** 36°C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Density at 20°C:** 0.96 g/cm<sup>3</sup>

· **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

· **pH-value at 20°C:** 7.4

· **Viscosity:**

Dynamic at 20°C: 5 mPas

· **Solvent content:**

Organic solvents: 60.0 %

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

2-Butoxy-ethylacetat

Oral	LD50	2400 mg/kg (rat)
Dermal	LD50	1580 mg/kg (bunny)

· **Primary irritant effect:**

- on the skin: No irritant effect.
- on the eye: Irritating effect.

· **Sensitization:** No sensitizing effects known.

(Contd. on page 4)

Printing date 09.09.2004

Reviewed on 09.09.2004

Trade name: Deprit 2

## Additional toxicological information:

(Contd. of page 3)

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

**12 Ecological information**

- General notes: bio-degradable

**13 Disposal considerations**

- Product:
- Recommendation  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

**14 Transport information**

- Land transport ADR/RID (cross-border)
- ADR/RID class: 3 Flammable liquids.
- Danger code (Kemler): 30
- UN-Number: 1993
- Packaging group: III
- Hazard label: 3
- Description of goods: 1993 FLAMMABLE LIQUID, N.O.S. (not viscous) (BUTYL ACETATES)

## Maritime transport IMDG:

- IMDG Class: 3
- UN Number: 1993
- Label: 3
- Packaging group: III
- EMS Number: F-E,S-E
- Marine pollutant: No
- Proper shipping name: FLAMMABLE LIQUID, N.O.S. (BUTYL ACETATES)

## Air transport ICAO-TI and IATA-DGR:

- ICAO/IATA Class: 3
- UN/ID Number: 1993
- Label: 3
- Packaging group: III
- Proper shipping name: FLAMMABLE LIQUID, N.O.S. (BUTYL ACETATES)

**15 Regulatory information**

## Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:  
Xn Harmful

## Risk phrases:

- 10 Flammable.
- 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

(Contd. on page 5)

Printing date 09 09 2004

Reviewed on 09.09.2004

Trade name: Deprit 2

41 Risk of serious damage to eyes.

(Contd of page 4)

## Safety phrases:

- 16 Keep away from sources of ignition - No smoking.
- 24/25 Avoid contact with skin and eyes.
- 36 Wear suitable protective clothing.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

## Relevant R-phrases

- 10 Flammable.
- 20/21 Harmful by inhalation and in contact with skin.
- 22 Harmful if swallowed.
- 36 Irritating to eyes.
- 38 Irritating to skin.
- 41 Risk of serious damage to eyes.

## Department issuing MSDS:

Abteilung TQM

Herr Vogel

0611/9271-175

Contact: Herr Vogel

Printing date 10.03.2004

Reviewed on 10.03.2004

**1 Identification of the substance/preparation and of the company/undertaking**

- Product details
- Trade name: Deprit 3
- Article number: 2241
- Application of the substance / the preparation Postspotting agent for textile cleaning
- Manufacturer/Supplier:  
Chemische Fabrik Kreussler & Co. GmbH  
Postfach 120454  
D-65082 Wiesbaden
- Further information obtainable from:  
Abteilung TQM  
Herr Vogel  
0611/9271-175

**2 Composition/information on ingredients**

- Chemical characterization
- Description: Mixture of substances listed below with nonhazardous additions.

## · Dangerous components:

CAS: 56-81-5 EINECS: 200-289-5	glycerol		2.5-10%
CAS: 112-34-5 EINECS: 203-961-6	2-(2-butoxyethoxy)ethanol	Xi; R 36	2.5-10%
	N,N-Bis(carboxymethyl)glycin, Trinatium-Salz	Xn; R 22-36	≤ 2.5%

- Additional information: For the wording of the listed risk phrases refer to section 16.

**3 Hazards identification**

- Hazard description: Not applicable.
- Information concerning particular hazards for human and environment:  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**4 First-aid measures**

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.

**5 Fire-fighting measures**

- Suitable extinguishing agents:  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Protective equipment: No special measures required.

**6 Accidental release measures**

- Person-related safety precautions: Not required.

(Contd. on page 2)

Printing date 10.03.2004

Reviewed on 10.03.2004

Trade name: Deprit 3

- Measures for environmental protection: Dilute with plenty of water.
- Measures for cleaning/collecting:  
Small spills - wash to sanitary sewer with plenty of water. Large spills - soak up with approved absorbent, shovel produkt into approved container for disposal. Wash area with plenty of water.

(Contd. of page 1)

### 7 Handling and storage

- Handling:  
· Information for safe handling: No special measures required.  
· Information about fire - and explosion protection: No special measures required.
- Storage:  
· Requirements to be met by storerooms and receptacles: No special requirements.  
· Information about storage in one common storage facility: Not required.  
· Further information about storage conditions: Keep container tightly sealed.

### 8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:

56-81-5 glycerol

OES | Long-term value: 10 mg/m<sup>3</sup>

- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:  
· General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.
- Respiratory protection: Not required.
- Protection of hands: Protective gloves  
· Material of gloves PVC or PE gloves
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:  
PVC or PE gloves
- Eye protection: Tightly sealed goggles

### 9 Physical and chemical properties

#### · General Information

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic

#### · Change in condition

Melting point/Melting range: Undetermined.  
Boiling point/Boiling range: Undetermined.

· Flash point: > 100°C

· Self-igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Density at 20°C: 1.08 g/cm<sup>3</sup>

(Contd. on page 3)

Printing date 10.03.2004

Reviewed on 10.03.2004

Trade name: Deprit 3

(Contd. of page 2)

- Solubility in / Miscibility with water: Fully miscible.
- pH-value at 20°C: 3.4
- Viscosity: Dynamic at 20°C: 5 mPas
- Solvent content: Organic solvents: 3.0 %

**10 Stability and reactivity**

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Dangerous reactions: No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

**11 Toxicological information**

· Acute toxicity:

· LD/LC50 values relevant for classification:

1310-58-3 potassium hydroxide

Oral LD50 273 mg/kg (Ratte)

- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information: The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant

**12 Ecological information**

- General notes: readily bio-degradable

**13 Disposal considerations**

- Product:
  - Recommendation: Dispose of in accordance with Local, State, and Federal Regulations.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

**14 Transport information**

- Land transport ADR/RID (cross-border)
- ADR/RID class: -
- Danger code (Kemler): -
- UN-Number: -
- Packaging group: -

(Contd. on page 4)

Printing date 10.03.2004

Reviewed on 10.03.2004

Trade name: Deprit 3

(Contd. of page 3)

- Hazard label -
- Maritime transport IMDG:
- IMDG Class: -
- UN Number: -
- Label -
- Packaging group: -
- EMS Number: -
- Marine pollutant: No

- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: -
- UN/ID Number: -
- Label -
- Packaging group: -

### 15 Regulatory information

- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **National regulations:**
- **Technical instructions (air):**

Class	Share in %
II	3.0
NK	5.0

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**  
22 Harmful if swallowed.  
36 Irritating to eyes.
- **Department issuing MSDS:**  
Abteilung TQM  
Herr Vogel  
0611/9271-175
- **Contact:** Herr Vogel

# INEOS Chlor

PRODUCT NAME: 'PERKLONE' A / D / DX PLUS / EXT / MD

## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Address/Phone No.: INEOS Chlor Limited  
Runcorn Site HQ  
South Parade, PO Box 9  
Runcorn, Cheshire, WA7 4JE  
Tel : (01928) 561111, Fax : (01928) 516632

Emergency Phone No.: IN AN EMERGENCY DIAL 999 (UK Only)  
For specialist advice in an emergency telephone (01928) 572000

Use of Substance / Preparation: Dry cleaning fluid and Degreasing agent.  
For details on specific grades please refer to technical literature.

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT DESCRIPTION: Perchloroethylene (tetrachloroethylene) stabilised.

EC INDEX No. 602-028-004

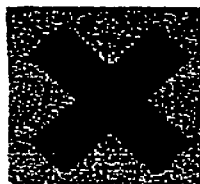
#### 2.1 HAZARDOUS INGREDIENT(S)

Hazardous ingredient(s)	%(w/w)	CAS No.	EC No.	Symbol	R Phrases
Perchloroethylene (Tetrachloroethylene)	>99	000127-18-4	204-825-9	Xn, N	R40 R51/53

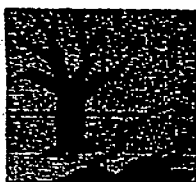
### 3. HAZARDS IDENTIFICATION

This data sheet is based on a consideration of the properties of the constituents.

EC Classification: EU Category 3 Carcinogen , DANGEROUS FOR THE ENVIRONMENT



HARMFUL



DANGEROUS  
FOR THE  
ENVIRONMENT

#### Hazards

Harmful by inhalation. High exposures by inhalation will cause anaesthetic effects. This may result in a loss of consciousness and could prove fatal if exposure has been severe. Repeated and/or prolonged skin contact may cause reddening, burning and blisters. Repeated exposure to levels well above the occupational exposure limit may produce adverse effects on the liver and kidneys. Perchloroethylene has been shown to cause cancer in rodents, but this is by a mechanism of little or no relevance to man, even at high exposure levels. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Welding or cutting should not be carried out on any vessel likely to contain solvent as toxic and corrosive decomposition products (hydrogen chloride) can be formed.



PRODUCT NAME:

'PERKLONE' A / D / DX PLUS / EXT / MD

#### 4. FIRST-AID MEASURES

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##### Inhalation

Remove patient from exposure, keep warm and at rest.

DO NOT walk the patient about. Administer oxygen if necessary. Apply artificial respiration if breathing has ceased or shows signs of failing. During resuscitation, care must be taken to avoid contamination by the substance from the patient.

Obtain immediate medical attention.

##### Skin Contact

Remove contaminated clothing. Wash skin with soap and water.

If symptoms develop, obtain medical attention.

##### Eye Contact

Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes.

Obtain medical attention.

##### Ingestion

Provided the patient is conscious, wash out mouth with water and give 200-300 ml (half a pint) of water to drink.

Obtain immediate medical attention.

##### Further Medical Treatment

Symptomatic treatment and supportive therapy as indicated. Adrenaline and similar sympathomimetic drugs should be avoided following exposure as cardiac arrhythmia may result with possible subsequent cardiac arrest. Gastric lavage may be effective and should preferably be undertaken within 1 hour. Aspiration of this material into the lungs should be avoided. Following ingestion adsorbents such as activated charcoal may be of value.

#### 5. FIRE-FIGHTING MEASURES

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Non-flammable. Welding or cutting should not be carried out on any vessel likely to contain solvent as toxic and corrosive decomposition products (hydrogen chloride) can be formed.

Containers may burst if overheated.

##### Extinguishing Media

Keep fire exposed containers cool by spraying with water.

##### Fire Fighting Protective Equipment

A self contained breathing apparatus and full protective clothing must be worn in fire conditions.

#### 6. ACCIDENTAL RELEASE MEASURES

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Provided it is safe to do so, isolate the source of the leak.

Ensure suitable personal protection (including respiratory protection) during removal of spillages.

Small spillages: Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal or recovery.

Large spillages: Contain spillages with sand, earth or any suitable adsorbent material. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

#### 7. HANDLING AND STORAGE

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##### 7.1 HANDLING

Do not breathe vapour. Use only in well ventilated areas. Avoid contact with skin and eyes.

The vapour is heavier than air and may reach dangerously high concentrations in pits, tanks, and other confined spaces. In such cases provide adequate ventilation or wear suitable respiratory protective equipment with positive air supply. Avoid contact with naked flames and hot surfaces as toxic and corrosive decomposition products (hydrogen chloride) can be formed. Do not weld in the presence of vapours as toxic decomposition products (hydrogen chloride) may be formed. When using do not smoke.

PRODUCT NAME:

'PERKLONE' A / D / DX PLUS / EXT / MD

#### 7.2 STORAGE

Containers should be of mild steel, or amber or dark green solvent resistant plastic or glass.  
Keep away from direct sunlight. Keep container dry. Keep in a cool, well ventilated place.  
Keep away from heat, sources of ignition and direct sunlight. All bulk storage vessels should be made of steel and require a suitable vent or pressure relief valve and secondary containment to prevent uncontrolled losses from accidental release. Do not use aluminium or its alloys in the construction of storage vessels, pipework and ancillary equipment, including internal components e.g. pump impellers. Storage tanks should be banded to accommodate 110% of the tank volume.  
Use of galvanised components should be avoided because of the risk of producing highly toxic dichloroacetylene.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Wear suitable protective clothing and gloves.  
Nitrile rubber is better than PVC. Gloves should be changed regularly to avoid permeation problems. Gloves should be changed if excessive exposure has occurred. Wear eye/face protection. Atmospheric levels must be controlled in compliance with the occupational exposure limit. Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. Positive air supplied RPE is recommended.

#### 8.1 Occupational Exposure Limits

Hazardous ingredient(s)	CAS No.	LTEL 8 hr TWA ppm	LTEL 8 hr TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>	Note:
Perchloroethylene(Tetrachloroethylene)	000127-18-4	50	345	100	689	OES

### 9. PHYSICAL AND CHEMICAL PROPERTIES

These properties are the most relevant and no other properties are available.  
For specific physical properties of individual grades, please refer to technical literature and/or product specifications.

Form	volatile liquid
Colour	clear
Odour	characteristic ethereal
Boiling Point (Deg C)	121
Melting Point (Deg C)	- 22.4
Vapour Pressure (mm Hg)	14.7 at 20 Deg C
Solubility (Water)	marginally soluble 0.015 %(w/w) at 25 Deg C
Solubility (Other)	Miscible with most organic solvents.
Specific Gravity	1.623 at 20 Deg C
Vapour Density (Air= 1)	5.83 at 74 Deg C
Additional properties	Physio-chemical data refers to perchloroethylene.

### 10. STABILITY AND REACTIVITY

Stable under normal conditions.

#### Hazardous Reactions

May react violently with metals such as sodium, potassium and barium, particularly if they are finely divided.  
May react with freshly galvanised surfaces to produce highly toxic dichloroacetylene.

#### Hazardous Decomposition Product(s)

Contact with red hot surfaces, sparks or naked flames may generate toxic and corrosive fumes of hydrogen chloride and phosgene.

PRODUCT NAME:

'PERKLONE' A / D / DX PLUS / EXT / MD

## 11. TOXICOLOGICAL INFORMATION

This health hazard assessment is based on a consideration of the composition of this product.

### **Inhalation**

High atmospheric concentrations will lead to anaesthetic effects and adverse effects on the central nervous system. Symptoms may include lightheadedness, nausea, vomiting and headache. Exposure to concentrations of the order of 500ppm for short periods of time (e.g. 5 minutes) may lead to lightheadedness or dizziness. Very high concentrations may result in a loss of consciousness. Very high exposures may cause an abnormal heart rhythm and prove suddenly fatal.

### **Skin Contact**

Irritating to skin. Will remove the natural greases resulting in dryness, cracking and dermatitis. Repeated and/or prolonged skin contact may cause reddening, burning and blisters. Can be absorbed through skin but not in sufficient amounts to cause adverse effects.

### **Eye Contact**

Liquid splashes and high concentrations of vapour may cause irritation. Permanent damage is unlikely.

### **Ingestion**

The swallowing of small splashes is unlikely to cause any adverse effects. Large amounts may cause internal irritation, nausea, vomiting and may lead to drowsiness and unconsciousness.

### **Long Term Exposure**

Repeated exposure to levels well above the occupational exposure limit may produce adverse effects on the liver and kidneys. Perchloroethylene has been associated with cancer in rodents. Extensive evaluations of possible mechanisms have led to the conclusion that they are of little, if any, relevance to man even at high exposure levels. Studies in workers have failed to demonstrate a relationship between exposure to perchloroethylene and cancer.

## 12. ECOLOGICAL INFORMATION

This environmental hazard assessment is based on the properties of perchloroethylene.

### **Environmental Fate and Distribution**

High tonnage material produced in wholly contained systems.

High tonnage material used in partially contained systems.

Liquid with high volatility.

The product is essentially insoluble in water.

The product has no potential for bioaccumulation.

### **Persistence and Degradation**

The substance is degraded fairly rapidly in the lower atmosphere (troposphere). Atmospheric lifetime is approximately 5 months.

Does not deplete ozone. The substance evaporates rapidly from open water systems but persists in groundwater.

### **Toxicity**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. This effect is mitigated by its rapid evaporation from open water systems.

### **Effect on Effluent Treatment**

The product is anticipated to be substantially removed in biological treatment processes.

## 13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation. Transfer solvent residues to a labelled, sealed container for disposal or recovery. Waste disposal must be by an accredited contractor. Large volumes may be suitable for redistillation by solvent recovery contractors. Solvent residues must not be allowed to enter drains, sewers or watercourses or to contaminate the ground.

Welding or cutting should not be carried out on any vessel likely to contain solvent as toxic and corrosive decomposition products (hydrogen chloride) can be formed.

PRODUCT NAME:

'PERKLONE' A / D / DX PLUS / EXT / MD

#### 14. TRANSPORT INFORMATION

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UN No.	1897
UN Pack. Group	III
<b>AIR</b>	
ICAO/IATA	
: primary	6.1
UN Packing group Air	III
<b>SEA</b>	
IMDG	
: primary	6.1
Marine Pollutant	Classified as a Marine Pollutant (P)
U.N. Packing group Sea	III
Proper Shipping Name	TETRACHLOROETHYLENE
<b>Road/Rail</b>	
ADR/RID Class	6.1
ADR Sin	1897

#### 15. REGULATORY INFORMATION

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Name & Address of Supplier:	INEOS Chlor Limited Runcom Site HQ South Parade, PO Box 9 Runcom, Cheshire, WA7 4JE Tel : (01928) 561111, Fax : (01928) 516632
Name of Substance or Preparation:	'PERKLONE' A / D / DX PLUS / EXT / MD
Hazard(s) and Symbol(s):	HARMFUL : Xn DANGEROUS FOR THE ENVIRONMENT : N
Risk Phrases	R40 Limited evidence of a carcinogenic effect. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases	S23 Do not breathe vapour. S36/37 Wear suitable protective clothing and gloves. S61 Avoid release to the environment. Refer to special instructions/Safety data sheet.
EC No.	204-825-9 EC Label
UK Control Regulations	Control of Substances Hazardous to Health Regulations (COSHH) 1999 SI 1999/437 and COSHH essentials: Easy steps to control chemicals - Control of Substances Hazardous to Health Regulations HSG193.

#### 16. OTHER INFORMATION

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This data sheet was prepared in accordance with Directive 2001/58/EC

The following sections contain revisions or new statements: 1,2,3,9,14,15,16

'Perklone' is a trade mark of Ineos Chlor Limited.

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PRODUCT NAME:

'PERKLONE' A / D / DX PLUS / EXT / MD

### Glossary

OES : Occupational Exposure Standard (UK HSE EH40)  
MEL : Maximum Exposure Limit (UK HSE EH40)  
COM : The company aims to control exposure in its workplace to this limit  
TLV : The company aims to control exposure in its workplace to the ACGIH limit  
TLV-C : The company aims to control exposure in its workplace to the ACGIH Ceiling limit  
MAK : The company aims to control exposure in its workplace to the German limit  
Sk : Can be absorbed through skin  
Sen : Capable of causing respiratory sensitisation  
Bmgv : Biological monitoring guidance value (UK HSE EH40)  
ILV : Indicative Limit Value (UK HSE EH40)  
IOELV : Indicative Occupational Exposure Limit Value

**1 Identification of the substance/preparation and of the company/undertaking**

- Product details
- Trade name: Prenett A
- Article number: 2229
- Application of the substance / the preparation Spotting and prespotting agent for drycleaning
- Manufacturer/Supplier:  
Chemische Fabrik Kreussler & Co. GmbH  
Postfach 120454  
D-65082 Wiesbaden
- Further information obtainable from:  
Abteilung TQM  
Herr Vogel  
0611/9271-175

**2 Composition/information on ingredients**

- Chemical characterization
- Description:  
PRENETT A-B-C are soluble in water and solvents. They do not contain halogenated hydrocarbons. The surfactants used are biologically degradable.

· Dangerous components:		
isoparaffin C10-C13	Xn; R 65-66	20-40%
Isotridecanelethoxylat, polymer	Xn; R 22-41	10-20%
Sulfosuccinat-sodiumsalt	Xi; R 38-41	10-20%

- Additional information: For the wording of the listed risk phrases refer to section 16.

**3 Hazards identification**

- Hazard description:  
Xi Irritant
- Information concerning particular hazards for human and environment:  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 38 Irritating to skin.  
R 41 Risk of serious damage to eyes.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**4 First-aid measures**

- After inhalation:  
In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.

**5 Fire-fighting measures**

- Suitable extinguishing agents:  
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Printing date 03.06.2004

Reviewed on 03.06.2004

Trade name: Prenett A

Protective equipment: No special measures required.

(Contd. of page 1)

**6 Accidental release measures**

- Person-related safety precautions: Not required.
- Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.
- Measures for cleaning/collecting:  
Small spills - wash to sanitary sewer with plenty of water. Large spills - soak up with approved absorbent, shovel produkt into approved container for disposal. Wash area with plenty of water.

**7 Handling and storage**

- Handling:
- Information for safe handling: No special measures required.
- Information about fire - and explosion protection: No special measures required.
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.

**8 Exposure controls/personal protection**

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- Respiratory protection: Not required.
- Protection of hands: Protective gloves
- Material of gloves  
PVC or PE gloves  
Recommended thickness of the material:  $\geq 0.4$  mm
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:  
PVC or PE gloves
- Eye protection: Tightly sealed goggles

**9 Physical and chemical properties**

General Information

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic

Change in condition

Melting point/Melting range: Undetermined.

(Contd. on page 3)

Printing date 03.06.2004

Reviewed on 03.06.2004

Trade name: Prenett A

(Contd. of page 2)

Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Density at 20°C:	0.9 g/cm <sup>3</sup>
Solubility in / Miscibility with water:	Fully miscible.
pH-value at 20°C:	3.5
Viscosity:	
Dynamic at 20°C:	75 mPas
Solvent content:	
Organic solvents:	35.0 %

### 10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:  
No decomposition if used according to specifications.
- Dangerous reactions: No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

### 11 Toxicological information

Acute toxicity:

LD/LC50 values relevant for classification:

Sulfosuccinat-sodiumsalt

Oral | LD50 | 1900 mg/kg (rat)

Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.
- on the eye: Strong irritant with the danger of severe eye injury.
- Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

### 12 Ecological information

General notes: bio-degradable

### 13 Disposal considerations

- Product:
- Recommendation: Dispose of in accordance with Local, State, and Federal Regulations.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations



Printing date 03.06.2004

Reviewed on 03.06.2004

Trade name: Prenett A

(Contd. of page 3)

**14 Transport information**

- Land transport ADR/RID (cross-border)
- ADR/RID class: -
- Danger code (Kemler): -
- UN-Number:
- Packaging group: -
- Hazard label -

- Maritime transport IMDG:
- IMDG Class: -
- UN Number: -
- Label -
- Packaging group: -
- EMS Number: -
- Marine pollutant: No

- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: -
- UN/ID Number: -
- Label -
- Packaging group: -

**15 Regulatory information**

- Labelling according to EU guidelines:  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- Code letter and hazard designation of product:  
Xi Irritant
- Risk phrases:  
38 Irritating to skin.  
41 Risk of serious damage to eyes.
- Safety phrases:  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
37/39 Wear suitable gloves and eye/face protection.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant R-phrases  
22 Harmful if swallowed.  
38 Irritating to skin.  
41 Risk of serious damage to eyes.  
65 Harmful: may cause lung damage if swallowed.  
66 Repeated exposure may cause skin dryness or cracking.
- Department issuing MSDS:  
Abteilung TQM  
Herr Vogel  
0611/9271-175
- Contact: Herr Vogel
- \* Data compared to the previous version altered.

Printing date 07.06.2004

Reviewed on 07.06.2004

**1 Identification of the substance/preparation and of the company/undertaking**

- Product details
- Trade name: Prenett B
- Article number: 2227
- Application of the substance / the preparation Spotting and prespotting agent for drycleaning
- Manufacturer/Supplier:  
Chemische Fabrik Kreussler & Co. GmbH  
Postfach 120454  
D-65082 Wiesbaden
- Further information obtainable from:  
Abteilung TQM  
Herr Vogel  
0611/9271-175

**2 Composition/information on ingredients**

- **Chemical characterization**
- **Description:**  
PRENETT A-B-C are soluble in water and solvents. They do not contain halogenated hydrocarbons. The surfactants used are biologically degradable.

· **Dangerous components:**

Isotridecanoethoxylat, polymer	Xn; R 22-41	15-20%
Sulfosuccinat-sodiumsalt	Xi; R 38-41	10-15%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

**3 Hazards identification**

- **Hazard description:**  
Xi Irritant
- **Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 38 Irritating to skin.  
R 41 Risk of serious damage to eyes.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**4 First-aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Rinse with warm water.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

**5 Fire-fighting measures**

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

Trade name: Prenett B

(Contd. of page 1)

**6 Accidental release measures**

- Person-related safety precautions: Not required.
- Measures for environmental protection: Dilute with plenty of water.
- Measures for cleaning/collecting:  
Small spills - wash to sanitary sewer with plenty of water. Large spills - soak up with approved absorbent, shovel produkt into approved container for disposal. Wash area with plenty of water.

**7 Handling and storage**

- Handling:  
· Information for safe handling: No special measures required.  
· Information about fire - and explosion protection: No special measures required.
- Storage:  
· Requirements to be met by storerooms and receptacles: No special requirements.  
· Information about storage in one common storage facility: Not required.  
· Further information about storage conditions: None.

**8 Exposure controls/personal protection**

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:  
· General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.
- Respiratory protection: Not required.
- Protection of hands: Protective gloves
- Material of gloves  
PVC or PE gloves  
Recommended thickness of the material:  $\geq 0.4$  mm
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:  
PVC or PE gloves
- Eye protection: Tightly sealed goggles

**9 Physical and chemical properties**

· General Information	
Form:	Fluid
Colour:	Yellow
Odour:	Characteristic
· Change in condition Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.	
· Flash point:	Not applicable.
· Self-igniting:	Product is not selfigniting.

(Contd. on page 3)

**kreussler** *co***Material Safety Data Sheet**  
According to 91/155 EEC

Printing date 07.06.2004

Reviewed on 07.06.2004

Trade name: Prenett B

(Contd. of page 2)

· Danger of explosion:	Product does not present an explosion hazard.
· Density at 20°C:	0.9 g/cm <sup>3</sup>
· Solubility in / Miscibility with water:	Fully miscible.
· pH-value at 20°C:	10.7
· Viscosity: Dynamic at 20°C:	40 mPas

**10 Stability and reactivity**

- Thermal decomposition / conditions to be avoided:  
No decomposition if used according to specifications.
- Dangerous reactions: No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

**11 Toxicological information**

## · Acute toxicity:

## · LD/LC50 values relevant for classification:

Isotridecanoethoxylat, polymer

Oral | LD50 | &gt;200 &lt;2000 mg/kg (rat)

## · Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.
- on the eye: Strong irritant with the danger of severe eye injury.
- Sensitization: No sensitizing effects known.

## · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

**12 Ecological information**

- General notes: bio-degradable

**13 Disposal considerations**

- Product:  
· Recommendation: Dispose of in accordance with Local, State, and Federal Regulations.
- Uncleaned packaging:  
· Recommendation: Disposal must be made according to official regulations.

**14 Transport information**

- Land transport ADR/RID (cross-border)
- ADR/RID class: -
- Danger code (Kemler): -
- UN-Number:
- Packaging group: -

(Contd. on page 4)

GB

Printing date 07.06.2004

Reviewed on 07.06.2004

Trade name: Prenett B

(Contd. of page 3)

· Hazard label	-
· Maritime transport IMDG:	
· IMDG Class:	-
· UN Number:	-
· Label	-
· Packaging group:	-
· EMS Number:	-
· Marine pollutant:	No
· Air transport ICAO-TI and IATA-DGR:	
· ICAO/IATA Class:	-
· UN/ID Number:	-
· Label	-
· Packaging group:	-

**15 Regulatory information**

- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**  
Xi Irritant
- **Risk phrases:**  
38 Irritating to skin.  
41 Risk of serious damage to eyes.
- **Safety phrases:**  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
37/39 Wear suitable gloves and eye/face protection.

**16 Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Relevant R-phrases**  
22 Harmful if swallowed.  
38 Irritating to skin.  
41 Risk of serious damage to eyes.
- **Department issuing MSDS:**  
Abteilung TQM  
Herr Vogel  
0611/9271-175
- **Contact:** Herr Vogel
- \* Data compared to the previous version altered.

**1 Identification of the substance/preparation and of the company/undertaking**

- Product details
- Trade name: Prenett C
- Article number: 2228
- Application of the substance / the preparation  
Spotting and prespotting agent for drycleaning. For use with perc, hydrocarbon solvent and water
- Manufacturer/Supplier:  
Chemische Fabrik Kreussler & Co. GmbH  
Postfach 120454  
D-65082 Wiesbaden
- Further information obtainable from:  
Abteilung TQM  
Herr Vogel  
0611/9271-175

**2 Composition/information on ingredients**

- Chemical characterization
- Description:  
PRENETT A-B-C are soluble in water and solvents. They do not contain halogenated hydrocarbons. The surfactants used are biologically degradable.

## · Dangerous components:

	Aliphatic alcohol, C13-15, predominantly linear, ethoxylated Xn, N; R 22-41-50	24%
	2-Butoxy-ethylacetat Xn; R 20/21	10-20%
CAS: 108-93-0 EINECS: 203-630-6	cyclohexanol Xn; R 20/22-37/38	5.0-10%
	Sulfosuccinat-sodiumsalt Xi; R 38-41	5.0-10%

- Additional information: For the wording of the listed risk phrases refer to section 16.

**3 Hazards identification**

- Hazard description:  
Xn Harmful
- Information concerning particular hazards for human and environment:  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 22 Harmful if swallowed.  
R 41 Risk of serious damage to eyes.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**4 First-aid measures**

- General information:  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:  
Rinse opened eye for several minutes under running water. Then consult a doctor.

(Contd. on page 2)

Printing date 22.09.2004

Reviewed on 22.09.2004

Trade name: Prenett C

(Contd. of page 1)

### 5 Fire-fighting measures

- Suitable extinguishing agents:  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Protective equipment: No special measures required.

### 6 Accidental release measures

- Person-related safety precautions: Not required.
- Measures for environmental protection: Do not allow to penetrate the ground/soil.
- Measures for cleaning/collecting:  
Small spills - wash to sanitary sewer with plenty of water. Large spills - soak up with approved absorbent, shovel produkt into approved container for disposal. Wash area with plenty of water. Dispose contaminated material as waste according to item 13.

### 7 Handling and storage

- Handling:
- Information for safe handling: No special measures required.
- Information about fire - and explosion protection: No special measures required.
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.

### 8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:

#### 2-Butoxy-ethylacetat

OES	Short-term value: 50 ppm
	Long-term value: 20 ppm
	Sk

#### 108-93-0 cyclohexanol

OES	Long-term value: 208 mg/m <sup>3</sup> , 50 ppm
-----	---

- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.
- Respiratory protection: Not required.
- Protection of hands: Protective gloves  
Material of gloves  
PVC or PE gloves  
Recommended thickness of the material:  $\geq 0.4$  mm
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:  
PVC or PE gloves

(Contd. on page 3)

Printing date 22.09.2004

Reviewed on 22.09.2004

Trade name: Prenett C

Eye protection: Tightly sealed goggles

(Contd. of page 2)

**9 Physical and chemical properties**

## General Information

Form:	Fluid
Colour:	Light yellow
Odour:	Characteristic

## Change in condition

Melting point/Melting range: Undetermined.  
Boiling point/Boiling range: Undetermined.

Flash point: &gt; 100°C

Self-igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Density at 20°C: 0.95 g/cm<sup>3</sup>

Solubility in / Miscibility with water: Fully miscible.

pH-value at 20°C: 7.3

Solvent content:  
Organic solvents: 25 %**10 Stability and reactivity**

- Thermal decomposition / conditions to be avoided:  
No decomposition if used according to specifications.
- Dangerous reactions No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

**11 Toxicological information**

- Acute toxicity:
- LD/LC50 values relevant for classification:  
Acute oral toxicity: >2000mg/kg (Rats)  
calculated from data of constituent parts.
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Strong irritant with the danger of severe eye injury.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant

**12 Ecological information**

- General notes: bio-degradable



Printing date 22.09.2004

Reviewed on 22.09.2004

Trade name: Prenett C

(Contd. of page 3)

**13 Disposal considerations**

- **Product:**
- **Recommendation** Dispose of in accordance with Local, State, and Federal Regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

**14 Transport information**

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Danger code (Kemler):** -
- **UN-Number:** -
- **Packaging group:** -
- **Hazard label** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **UN Number:** -
- **Label** -
- **Packaging group:** -
- **EMS Number:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **UN/ID Number:** -
- **Label** -
- **Packaging group:** -

**15 Regulatory information**

- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**  
Xn Harmful
- **Risk phrases:**  
22 Harmful if swallowed.  
41 Risk of serious damage to eyes.
- **Safety phrases:**  
24/25 Avoid contact with skin and eyes.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
36 Wear suitable protective clothing.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**  
20/21 Harmful by inhalation and in contact with skin.  
20/22 Harmful by inhalation and if swallowed.  
22 Harmful if swallowed.  
37/38 Irritating to respiratory system and skin.

(Contd. on page 5)

Printing date 22.09.2004

Reviewed on 22.09.2004

Trade name: Prenett C

(Contd. of page 4)

- 38 Irritating to skin.
- 41 Risk of serious damage to eyes.
- 50 Very toxic to aquatic organisms.

## · Department issuing MSDS:

Abteilung TQM

Herr Vogel

0611/9271-175

· Contact: Herr Vogel

· \* Data compared to the previous version altered.

GB

Printing date 24.06.2004

Reviewed on 24.06.2004

**1 Identification of the substance/preparation and of the company/undertaking**

- Product details
- Trade name: **Prenett Max**
- Application of the substance / the preparation  
Highly effective and mild pre-spotting agent for textile cleaning, for spraying and brushing on
- Manufacturer/Supplier:  
Chemische Fabrik Kreussler & Co. GmbH  
Postfach 120454  
D-65082 Wiesbaden
- Further information obtainable from:  
Abteilung TQM  
Herr Vogel  
0611/9271-175

**2 Composition/information on ingredients**

- Chemical characterization
- Description: Anionic and non-ionic surfactants, soap, alkyl benzene, solubiliser, water

## Dangerous components:

CAS: 112-34-5 EINECS: 203-961-6	2-(2-butoxyethoxy)ethanol	Xi; R 36	10-20%
	Isotridecanoethoxylat, polymer	Xn; R 22-41	10-20%
CAS: 85711-69-9	sodium alkansulfonates	Xn; R 22	2.5-5.0%

- Additional information: For the wording of the listed risk phrases refer to section 16.

**3 Hazards identification**

- Hazard description:  
Xi Irritant
- Information concerning particular hazards for human and environment:  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 38 Irritating to skin.  
R 41 Risk of serious damage to eyes.
- Classification system:  
The classification is according to the latest editions of the EU-lists; and extended by company and literature data.

**4 First-aid measures**

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Rinse with warm water.
- After eye contact:  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.

**5 Fire-fighting measures**

- Suitable extinguishing agents:  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Protective equipment: No special measures required.

Trade name: Prenett Max

(Contd. of page 1)

**6 Accidental release measures**

- Person-related safety precautions: Not required.
- Measures for environmental protection: Dilute with plenty of water.
- Measures for cleaning/collecting:  
Small spills - wash to sanitary sewer with plenty of water. Large spills - soak up with approved absorbent, shovel produkt into approved container for disposal. Wash area with plenty of water.

**7 Handling and storage**

- Handling:  
· Information for safe handling: No special measures required.  
· Information about fire - and explosion protection: No special measures required.
- Storage:  
· Requirements to be met by storerooms and receptacles: No special requirements.  
· Information about storage in one common storage facility: Not required.  
· Further information about storage conditions: None.

**8 Exposure controls/personal protection**

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:  
· General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- Respiratory protection: Not required.
- Protection of hands: Protective gloves
- Material of gloves  
PVC or PE gloves  
Recommended thickness of the material:  $\geq 0.4$  mm
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:  
PVC or PE gloves
- Eye protection: Tightly sealed goggles

**9 Physical and chemical properties**

· General Information

Form:	Fluid
Colour:	Dark yellow
Odour:	Characteristic

· Change in condition

Melting point/Melting range: Undetermined.  
Boiling point/Boiling range:  $> 100^{\circ}\text{C}$

· Flash point: Not applicable.

(Contd. on page 3)

Printing date 24.06.2004

Reviewed on 24.06.2004

Trade name: Prenett Max

(Contd. of page 2)

· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Density at 20°C:	1.0 g/cm <sup>3</sup>
· Solubility in / Miscibility with water:	Fully miscible.
· pH-value at 20°C:	6.8
· Viscosity: Dynamic at 20°C:	65 mPas
· Solvent content: Organic solvents:	20.0 %

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**  
Acute oral toxicity : >2000mg/kg (Rats)  
calculated from data of constituent parts.
- **Primary irritant effect:**
- on the skin: Irritant to skin and mucous membranes.
- on the eye: Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

### 12 Ecological information

- **General notes:** bio-degradable

### 13 Disposal considerations

- **Product:**
- **Recommendation** Dispose of in accordance with Local, State, and Federal Regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- Land transport ADR/RID (cross-border)
- ADR/RID class: -

(Contd. on page 4)

Printing date 24.06.2004

Reviewed on 24.06.2004

Trade name: Prenett Max

(Contd of page 3)

- Danger code (Kemler): -
- UN-Number: -
- Packaging group: -
- Hazard label: -

- Maritime transport IMDG:
- IMDG Class: -
- UN Number: -
- Label: -
- Packaging group: -
- EMS Number: -
- Marine pollutant: No

- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: -
- UN/ID Number: -
- Label: -
- Packaging group: -

### 15 Regulatory information

- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**  
Xi Irritant
- **Risk phrases:**  
38 Irritating to skin.  
41 Risk of serious damage to eyes.
- **Safety phrases:**  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
37/39 Wear suitable gloves and eye/face protection.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**  
22 Harmful if swallowed.  
36 Irritating to eyes.  
41 Risk of serious damage to eyes.
- **Department issuing MSDS:**  
Abteilung TQM  
Herr Vogel  
0611/9271-175
- **Contact:** Herr Vogel

Printing date 26.03.2004

Reviewed on 26.03.2004

**1 Identification of the substance/preparation and of the company/undertaking**

- Product details
- Trade name: Vinoy Plus
- Article number: 2182
- Application of the substance / the preparation  
Water and oil repellent finishing agent for waterproofing and stain protective finishing of textiles in drycleaning machines. Free from halogenated solvents.
- Manufacturer/Supplier:  
Chemische Fabrik Kreussler & Co. GmbH  
Postfach 120454  
D-65082 Wiesbaden
- Further information obtainable from:  
Abteilung TQM  
Herr Vogel  
0611/9271-175

**2 Composition/information on ingredients**

- Chemical characterization
- Description: Highly active fluorocarbon resin dispersion, dissolved in isoparaffins
- Dangerous components:

isoparaffine C11-C13

Xn; R 65-66 | 50-100%

- Additional information: For the wording of the listed risk phrases refer to section 16.

**3 Hazards identification**

- Hazard description:  
Xn Harmful
- Information concerning particular hazards for human and environment:  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 65 Harmful: may cause lung damage if swallowed.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**4 First-aid measures**

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.

**5 Fire-fighting measures**

- Suitable extinguishing agents:  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Protective equipment: No special measures required.

**6 Accidental release measures**

- Person-related safety precautions: Not required.
- Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.

(Contd. on page 2)

Printing date 26.03.2004

Reviewed on 26.03.2004

Trade name: Vinoy Plus

Measures for cleaning/collecting: (Contd. of page 1)  
Small spills - wash to sanitary sewer with plenty of water. Large spills - soak up with approved absorbent, shovel produkt into approved container for disposal. Wash area with plenty of water. Dispose contaminated material as waste according to item 13.

**7 Handling and storage**

- Handling:
- Information for safe handling: No special measures required.
- Information about fire - and explosion protection: No special measures required.
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.

**8 Exposure controls/personal protection**

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.
- Respiratory protection: Not required.
- Protection of hands: Protective gloves
- Material of gloves  
PVC or PE gloves  
Recommended thickness of the material:  $\geq 0.4$  mm
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:  
PVC or PE gloves
- Eye protection: Goggles recommended during refilling

**9 Physical and chemical properties**

· General Information	
Form:	Fluid
Colour:	Colourless
Odour:	Characteristic
· Change in condition	
Melting point/Melting range: Undetermined.	
Boiling point/Boiling range: Undetermined.	
· Flash point:	62°C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Density at 20°C:	0.78 g/cm <sup>3</sup>

(Contd. on page 3)



Printing date 26.03.2004

Reviewed on 26.03.2004

Trade name: Vinoy Plus

(Contd. of page 2)	
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Viscosity: Dynamic at 20°C:	13 mPas
· Solvent content: Organic solvents:	98 %

**10 Stability and reactivity**

- Thermal decomposition / conditions to be avoided:  
No decomposition if used according to specifications.
- Dangerous reactions: No dangerous reactions known.
- Dangerous decomposition products: No dangerous decomposition products known.

**11 Toxicological information**

- Acute toxicity:
- Primary irritant effect:  
on the skin: No irritant effect.  
on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

**12 Ecological information**

- General notes: readily bio-degradable

**13 Disposal considerations**

- Product:
- Recommendation: Dispose of in accordance with Local, State, and Federal Regulations.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

**14 Transport information**

- Land transport ADR/RID (cross-border)  
ADR/RID class: -
- Maritime transport IMDG:  
IMDG Class: -  
Marine pollutant: No
- Air transport ICAO-TI and IATA-DGR:  
ICAO/IATA Class: -

Printing date 26.03.2004

Trade name: Vinoy Plus

Reviewed on 26.03.2004

**15 Regulatory information**

(Contd. of page 3)

- Labelling according to EU guidelines:  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- Code letter and hazard designation of product:  
Xn Harmful
- Risk phrases:  
65 Harmful: may cause lung damage if swallowed.
- Safety phrases:  
62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant R-phrases  
65 Harmful; may cause lung damage if swallowed.  
66 Repeated exposure may cause skin dryness or cracking.
- Department issuing MSDS:  
Abteilung TQM  
Herr Vogel  
0611/9271-175
- Contact: Herr Vogel