Safety Data Sheet
according to WHS Regulations

Printing date 07.11.2026 Version number 14 Revision: 07.11.2026

* 1 Identification

· **Product identifier**

· **Trade name: Derval Solo**

· **Article number:** 2284
· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture**
Liquid one-shot detergent concentrate for white and coloured cottons and mixed fibres.

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
· **Manufacturer**
Chemische Fabrik Kreussler & Co. GmbH
Rheingaustraße 87-93, D-65203 Wiesbaden
Tel. +49 (0) 611 9271-0
· **Supplier**
Spencer Systems
2/142 Riverstone Parade
Riverstone NSW 2765
Australia

· **Further information obtainable from:**
Spencer Systems
Daniel Hays
2/142 Riverstone Pde
Riverstone, NSW, 2765
Australia
· **Emergency telephone number:**
+61 (0) 2 9679 1244 (9am – 5pm AEDT)
Poisons information centre – 13 11 26 from anywhere in Australia

* 2 Hazard(s) Identification

· **Classification of the substance or mixture**

Met. Corr.1	H290 May be corrosive to metals.
Skin Corr. 1A	H314 Causes severe skin burns and eye damage.
Eye Dam. 1	H318 Causes serious eye damage.

· **Label elements**
· **GHS label elements**
The product is classified and labelled according to the Globally Harmonised System (GHS).
· **Hazard pictograms**



GHS05

· **Signal word** Danger
· **Hazard statements**
May be corrosive to metals.
Causes severe skin burns and eye damage.
· **Precautionary statements**
Wear protective gloves / eye protection.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Store away from metals.

(Contd. on page 2)

Safety Data Sheet
according to WHS Regulations

(Contd. of page 1)

· **Other hazards**
The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

*
3 Composition and Information on Ingredients

· **Chemical characterisation: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**		
1310-73-2	sodium hydroxide Met. Corr.1, H290; Skin Corr. 1A, H314	5-15%
157627-86-6	Alcohols C13-C15 branched and linear,ethoxylated Eye Dam. 1, H318; Acute Tox. 4, H302; Aquatic Chronic 3, H412	1-5%
29329-71-3	1-Hydroxyethane-1,1-diphosphonic acid, sodium salt Acute Tox. 4, H302; Serious eye damage/irritation – Category 2A, H319	1-5%

· **Ingredients according to detergent regulation EC 648/2004**	
non-ionic surfactants	≥5 - <15%
phosphonates, amphoteric surfactants, optical brighteners, perfumes	<5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

· **General information:** Immediately remove any clothing soiled by the product.
· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:**
If skin irritation continues, consult a doctor.
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:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **Hazards** Danger of gastric perforation.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire Fighting Measures

· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
· **Special hazards arising from the substance or mixture** Product itself does not burn.
· **Protective equipment:** Wear fully protective suit.
· **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental Release Measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

(Contd. on page 3)

Safety Data Sheet
according to WHS Regulations

(Contd. of page 2)

Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and Storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:** The product is not flammable.
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Suitable material for receptacles and pipes: Stainless steel.
Unsuitable material for receptacle: aluminium.
· **Information about storage in one common storage facility:** Do not store together with acids.
· **Further information about storage conditions:**
Keep container tightly sealed.
Store under lock and key and with access restricted to technical experts or their assistants only.
· **Storage class:** 8 B
· **Specific end use(s)** No further relevant information available.

* 8 Exposure controls and 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:**	
1310-73-2 sodium hydroxide (5-15%)	
WES	Peak limitation: 2 mg/m³

· **DNELs**		
1310-73-2 sodium hydroxide		
Inhalative	long term/local effects	1 mg/m³ (Consumers) 1 mg/m³ (Workers)
29329-71-3 1-Hydroxyethane-1,1-diphosphonic acid, sodium salt		
Oral	long term/systemic effects	6.5 mg/kg (Consumers) 13 mg/kg (Workers)

· **PNECs**	
29329-71-3 1-Hydroxyethane-1,1-diphosphonic acid, sodium salt	
Aqua	20 mg/l (Sewage treatment plant) 0.0136 mg/l (Marine water) 0.136 mg/l (Freshwater)
Sediment	96 mg/kg (Soil) 5.9 mg/kg (Marine water) 59 mg/kg (Freshwater)

· **Additional information:** The lists valid during the making were used as basis.
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Do not eat, drink, smoke or sniff while working.
Ensure that washing facilities are available at the work place.
Keep away from foodstuffs, beverages and food.
Immediately remove all soiled and contaminated clothing

(Contd. on page 4)

Safety Data Sheet
according to WHS Regulations

(Contd. of page 3)

Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**
PVC or PE gloves
Recommended thickness of the material: ≥ 0.4 mm
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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.

· **Not suitable are gloves made of the following materials:**
Rubber gloves
Leather gloves

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Alkaline resistant protective clothing

*
9 Physical and Chemical Properties

· **General Information**	
· **Appearance:**	
· **Form:**	Fluid
· **Colour:**	Light yellow
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value at 20 °C:**	13.5
· **Change in condition**	
· **Melting point/freezing point:**	Undetermined.
· **Initial boiling point and boiling range:**	Undetermined.
· **Flash point:**	Not applicable.
· **Flammability (solid, gas):**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **Auto-ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
· **Lower:**	Not determined.
· **Upper:**	Not determined.
· **Vapour pressure:**	Not determined.
· **Density at 20 °C:**	1.17 g/cm³

(Contd. on page 5)

Safety Data Sheet
according to WHS Regulations

(Contd. of page 4)

· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
· **water:**	Fully miscible.
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
· **Dynamic at 20 °C:**	75 mPas
· **Kinematic:**	Not determined.
· **Solvent content:**	
· **Organic solvents:**	0.0 %
· **Other information**	No further relevant information available.

* 10 Stability and Reactivity

· **Reactivity** No further relevant information available.
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
No decomposition if used and stored according to specifications.
· **Possibility of hazardous reactions**
Reacts with acids.
Reacts with light alloys to form hydrogen.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** aluminum
· **Hazardous decomposition products:** No dangerous decomposition products known.

* 11 Toxicological Information

· **Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
ATE (Acute Toxicity Estimates)		
Oral	LD-50	12,111 mg/kg (rat)

1310-73-2 sodium hydroxide		
Oral	LD-50	2,000 mg/kg (rat)
Dermal	LD-50	1,350 mg/kg (rabbit)
157627-86-6 Alcohols C13-C15 branched and linear,ethoxylated		
Oral	LD-50	1,150 mg/kg (rat)
29329-71-3 1-Hydroxyethane-1,1-diphosphonic acid, sodium salt		
Oral	LD-50	1,100 mg/kg (rat)

· **Skin corrosion/irritation** Causes severe skin burns and eye damage.
· **Serious eye damage/irritation** Causes serious eye damage.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

(Contd. on page 6)

Safety Data Sheet
according to WHS Regulations

(Contd. of page 5)

* 12 Ecological Information

· **Toxicity**

· **Aquatic toxicity:**	
1310-73-2 sodium hydroxide	
LC-50 24 h	145 mg/L (Poecilia reticulata)
EC-50 15 min	22 mg/l (Photobacterium phosphoreum)
EC-50 48h	40.4 mg/l (Ceriodaphnia sp.)
	40 mg/l (Daphnia magna)
EC-50 24h	76 mg/l (Daphnia magna)
LC-50 96h	45.4 mg/l (Oncorhynchus mykiss)
	125 mg/l (gam)
157627-86-6 Alcohols C13-C15 branched and linear,ethoxylated	
EC-10	>1,000 mg/L (Belebtschlamm)
EC-50 48h	1-10 mg/l (Daphnia magna) (Literaturangabe)
EC-50 72h	1-10 mg/l (Scenedesmus subspicatus) (Literaturangabe)
LC-50 96h	1-10 mg/l (Brachydanio rerio)
29329-71-3 1-Hydroxyethane-1,1-diphosphonic acid, sodium salt	
EC-50 96h	>170 mg/l (Daphnia magna)
LC-50 96h	>100 mg/l (Oncorhynchus mykiss)

· **Persistence and degradability** No further relevant information available.
· **Other information:** The product is biodegradable.
· **Behaviour in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
The product may not be released into the environment without control.
Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **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.

(Contd. on page 7)

Safety Data Sheet
according to WHS Regulations

Printing date 07.11.2026 Version number 14 Revision: 07.11.2026

Trade name: Derval Solo

(Contd. of page 6)

* 14 Transport information

· **UN-Number**	
· **ADG, IMDG, IATA**	UN1719
· **UN proper shipping name**	
· **ADG**	1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE)
· **IMDG, IATA**	CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE)
· **Transport hazard class(es)**	
· **ADG, IMDG, IATA**	
· **Class**	8 Corrosive substances.
· **Label**	8
· **Packing group**	
· **ADG, IMDG, IATA**	II
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Warning: Corrosive substances.
· **Hazard identification number (Kemler code):**	80
· **EMS Number:**	F-A,S-B
· **Segregation groups**	(SGG18) Alkalis
· **Stowage Category**	A
· **Segregation Code**	SG22 Stow "away from" ammonium salts SG35 Stow "separated from" SGG1-acids
· **Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **Transport category**	2
· **Tunnel restriction code**	E
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **UN "Model Regulation":**	UN 1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE), 8, II

* 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Australian Inventory of Industrial Chemicals**

All ingredients are listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

1310-73-2	sodium hydroxide	S5, S6, S10
68-12-2	N,N-dimethylformamide	S5, S6
106-24-1	geraniol	S6

(Contd. on page 8)

Safety Data Sheet
according to WHS Regulations

Printing date 07.11.2026 Version number 14 Revision: 07.11.2026

Trade name: Derval Solo

(Contd. of page 7)

5392-40-5	Citral	S5

· **GHS label elements**
The product is classified and labelled according to the Globally Harmonised System (GHS).
· **Hazard pictograms**



GHS05

· **Signal word** Danger
· **Hazard statements**
May be corrosive to metals.
Causes severe skin burns and eye damage.
· **Precautionary statements**
Wear protective gloves / eye protection.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Store away from metals.

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

* 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.
The information of Items 4 through 8 and 10 through 12 partially refers not to the use and the proper application of the product (see Directions for Use/Product Information) but to the release of larger quantities in the case of accidents and irregularities.
The information exclusively describes the safety requirements of the product(s) and is based on the present state of our experience.
Non-ionic tensides can have varying characteristics and classifications despite same CAS-No.

· **Relevant phrases**
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.
· **Contact:**
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Met. Corr.1: Corrosive to metals – Category 1
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1A: Skin corrosion/irritation – Category 1A

(Contd. on page 9)

Safety Data Sheet
according to WHS Regulations

Trade name: Derval Solo

(Contd. of page 8)

Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Serious eye damage/irritation – Category 2A: Serious eye damage/eye irritation – Category 2A
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**