according to regulation 1907/2006 (REACH) + 2020/878 (EU)

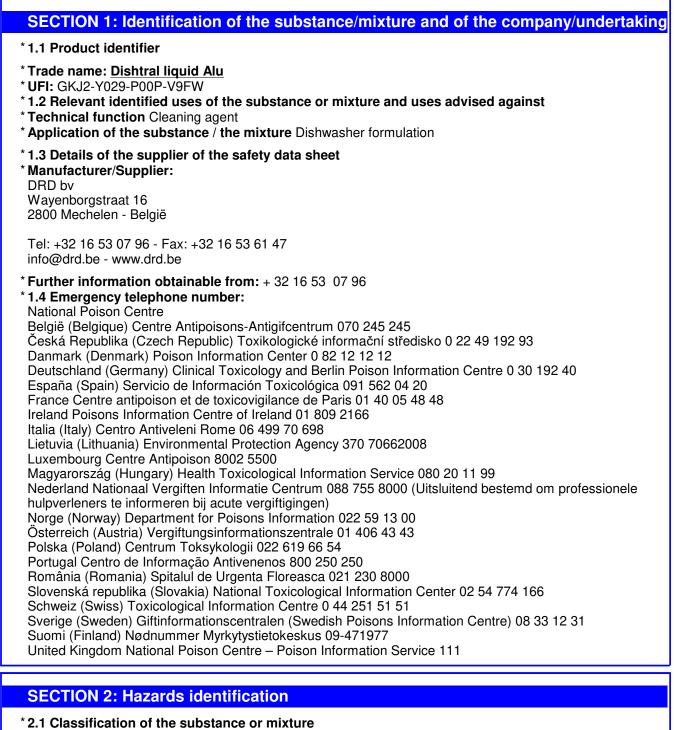
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* Classification according to Regulation (EC) No 1272/2008

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.

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	(Contd. of page 1)
	ing to Regulation (EC) No 1272/2008 ssified and labelled according to the CLP regulation.
GHS05	
* Signal word Dan	ger
SODIUM METASI POTASSIUM HYE * Hazard statemen H290 May be corr H314 Causes sev * Precautionary st P261 P280 P303+P361+P353	DROXIDE ts rosive to metals. ere skin burns and eye damage. atements Avoid breathing mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. B IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. B IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Store locked up. Store in a corrosion resistant container / container with a resistant inner liner. Dispose of contents/container in accordance with local/regional/national/international regulations.
	ind vPvB assessment ble.

SECTION 3: Composition/information on ingredients

- * 3.2 Mixtures
- * **Description:** Mixture of substances listed below with nonhazardous additions.

* Dangerous components:		
CAS: 10213-79-3 SC	ODIUM METASILICATE	5-15%
EINECS: 229-912-9	Met. Corr.1, H290; Skin Corr. 1B, H314; 🕐 STOT SE 3, H335	
Index number: 014-010-00-8 Sr	pecific concentration limit: Met. Corr.1; H290: $C \ge 3 \%$	
Reg.nr.: 01-2119449811-37		
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CAS: 497-19-8	SODIUM CARBONATE	1-5%
EINECS: 207-838-8		
Index number: 011-005-00-2		
Reg.nr.: 01-2119485498-19		
CAS: 111-76-2	2-butoxyethanol	1-5%
EINECS: 203-905-0	Acute Tox. 3, H331; () Acute Tox. 4, H302; Skin Irrit. 2, H315;	
Index number: 603-014-00-0	Eye Irrit. 2, H319	
Reg.nr.: 01-2119475108-36		0.5.00/
CAS: 1310-58-3	POTASSIUM HYDROXIDE	0.5-2%
EINECS: 215-181-3 Index number: 019-002-00-8	♦ Met. Corr.1, H290; Skin Corr. 1A, H314; ♦ Acute Tox. 4, H302 Specific concentration limits: Skin Corr. 1A; H314: $C \ge 5 \%$	
Reg.nr.: 01-2119487136-33	Skin Corr. 1B; H314: $2 \% \le C < 5 \%$	
neg.m. 01-211940/100-00	Skin Cont. 10, 11514. 2 % ≤ C < 3 %	
	Eye Irrit. 2; H319: 0.5 % ≤ C < 2 %	
	Met. Corr.1; H290: C ≥ 2.5 %	
CAS: 67953-76-8	TETRAPOTASSIUM ETIDRONATE	5%
EINECS: 267-956-0	♦ Met. Corr.1, H290; ♦ Acute Tox. 4, H302; Eye Irrit. 2, H319	0,0
Reg.nr.: Exempted [1]		
* Additional information:		

Additional information:

For the wording of the listed risk phrases refer to section 16. Product compositional ranges are shown for health, safety and environmental use and are not intended to form any part of a specification.

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.

[3] Exempted: Annex V of Regulation (EC) No 1907/2006.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

SECTION 4: First aid measures

- * 4.1 Description of first aid measures
- * General information: Immediately remove any clothing soiled by the product.
- * After inhalation: Supply fresh air; consult doctor in case of complaints.
- * After skin contact: Immediately wash with water and soap and rinse thoroughly. Immediately rinse with water.
- * After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- * After swallowing:

Do not induce vomiting; call for medical help immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

- * **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- * **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

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SECTION 5: Firefighting measures

- * 5.1 Extinguishing media
- * Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

- * 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- * 5.3 Advice for firefighters

* Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- * 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- * 6.2 Environmental precautions: Dilute with plenty of water.
- Do not allow to enter sewers/ surface or ground water. * 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent. Dispose contaminated material as waste according to section 13. Ensure adequate ventilation. * 6.4 Reference to other sections
- See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: Handling and storage

*7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

When diluting always pour product into water and not vice versa.

- * Information about fire and explosion protection: No special measures required.
- *7.2 Conditions for safe storage, including any incompatibilities
- * Storage:
- * Requirements to be met by storerooms and receptacles: No special requirements.
- * Information about storage in one common storage facility: Do not store together with acids.
- * Further information about storage conditions:

Protect from frost.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

- * Storage class: 8 B
- *7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

Long-term exposure - systemic effects

Long-term exposure - systemic effects

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*8.1 Control parameters

Skin

* DNELs

Oral

Dermal

111-76-2 2-butoxyethanol

111-76-2 2-butoxyethanol

IOELV Short-term value: 246 mg/m³, 50 ppm Long-term value: 98 mg/m³, 20 ppm

* Ingredients with limit values that require monitoring at the workplace: 3.2 mg/kg bw/day (Consumer) Acute/short term exposure - systemic effects 13.4 mg/kg bw/day (Consumer) 38 mg/kg bw/day (Consumer) 75 ma/ka bw/day (Markar)

Inhalative	Acute/short term exposure - systemic effects Long-term exposure - systemic effects Acute/short term exposure - local effects		75 mg/kg bw/day (Worker) 44.5 mg/kg bw/day (Consumer) 89 mg/kg bw/day (Worker) 49 mg/m ³ (Consumer) 98 mg/m ³ (Worker) 123 mg/m ³ (Consumer)	
			246 mg/m ³ (Worker)	
	Acute/short term exposure - systemic effects		426 mg/m³ (Consumer)	
			663 mg/m³ (Worker)	
* PNECs				
111-76-2 2-butoxyethanol				
Freshwate	er	8.8 mg/l		
Marinewater		0.88 mg/l		
Sewage treatment plant		463 mg/l		
Sediment (freshwater)		34.6 mg/kg dw		
Sediment (marinewater)		3.46 mg/kg dw		
* Additional information: The lists valid during the making were used as basis.				
 * 8.2 Exposure controls * Appropriate engineering controls No further data; see section 7. * Individual protection measures, such as 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 necessary if room is well-ventilated.

* Hand protection



Preventive skin protection by use of gloves is recommended.



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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

* Material of gloves



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. Suitability (penetration time, material thickness) for a specific workplace

should be discussed with the manufacturer of the protective gloves.

* Penetration time of glove material

The exact break through 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:
- Nitrile rubber: Breakthrough time >480 min Recommended thickness: 0.35 mm
- * For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Nitrile rubber. Penetration time 30 min - Recommended thickness: 0,13 mm

* As protection from splashes gloves made of the following materials are suitable: PVC (EN374)

Nitrile rubber: 0.11 mm (EN374)

* Eye/face protection



Tightly sealed goggles

* Body protection:



Alkaline resistant protective clothing

SECTION 9: Physical and chemical properties

- *9.1 Information on basic physical and chemical properties
- * General Information
- * Physical state
- * Colour:
- * Odour:
- * Odour threshold:
- * Melting point/freezing point:
- * Boiling point or initial boiling point and boiling range
- * Flammability
- * Lower and upper explosion limit
- * Lower:
- * Upper:

Fluid Colourless/Light yellow Characteristic Not determined. Undetermined.

100 °C (7732-18-5 water, distilled, conductivity or of similar purity) Not applicable.

Not determined. Not determined.

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* Flash point (CCMP):	Not applicable.
* Decomposition temperature:	Not determined.
* pH at 20 °C	13.5
* Viscosity:	
* Kinematic viscosity	Not determined.
* Dynamic at 20 °C:	10 mPas
* Solubility	
*water:	Fully miscible.
* Partition coefficient n-octanol/water (log value)	Not determined.
* Vapour pressure at 20 °C:	23 hPa (7732-18-5 water, distilled, conductivity or of
* Density and/or relative density	similar purity)
* Density at 20 °C:	1.185 g/cm ³
* Relative density	Not determined.
* Vapour density	Not determined.
*9.2 Other information	Product compositional ranges are shown for health,
	safety and environmental use and are not intended to form any part of a specification.
* Appearance:	form any part of a specification.
* Form:	Liquid
* Important information on protection of health and	
environment, and on safety.	
* Ignition temperature:	Product is not selfigniting.
* Explosive properties:	Product does not present an explosion hazard.
* Change in condition	
* Evaporation rate	Not determined.
* Information with regard to physical hazard	
classes	
* Explosives	Void
* Flammable gases	Void
* Aerosols	Void
* Oxidising gases * Gases under pressure	Void Void
* Flammable liquids	Void
* Flammable solids	Void
* Self-reactive substances and mixtures	Void
* Pyrophoric liquids	Void
* Pyrophoric solids	Void
* Self-heating substances and mixtures	Void
* Substances and mixtures, which emit flammable	
gases in contact with water	Void
*Oxidising liquids	Void
* Oxidising solids	Void
* Organic peroxides	Void
* Corrosive to metals	May be corrosive to metals.
* Desensitised explosives	Void
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SECTION 10: Stability and reactivity

- * **10.1 Reactivity** No further relevant information available.
- * 10.2 Chemical stability
- * Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- * 10.3 Possibility of hazardous reactions
- Reacts with various metals.

Corrosive action on metals.

Reacts with strong acids.

Reacts with oxidising agents.

- *10.4 Conditions to avoid No further relevant information available.
- * **10.5 Incompatible materials:** Don't mix with acids.
- * 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- *11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- * Acute toxicity Based on available data, the classification criteria are not met.

* LD/LC50 values relevant for classification:

111-76-2 2-butoxyethanol

Oral LD50 1,300 mg/kg bw (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.
- * 11.2 Information on other hazards

* Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- * 12.1 Toxicity
- * Aquatic toxicity:

111-76-2 2-butoxyethanol

EC50/24h >1,500 mg/l (Daphnia Magna) EC50/48h 1,880 mg/l (Ide (Leuciscus Idus))

LC/EC/IC50 1,700 mg/l (Carassius auratus)

* 12.2 Persistence and degradability

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.

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- * 12.3 Bioaccumulative potential No further relevant information available.
- * **12.4 Mobility in soil** No further relevant information available.
- *12.5 Results of PBT and vPvB assessment
- * **PBT:** Not applicable.
- * **vPvB**: Not applicable.
- * 12.6 Endocrine disrupting properties
- The product does not contain substances with endocrine disrupting properties.
- * 12.7 Other adverse effects
- * Additional ecological information:

* General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

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.

SECTION 13: Disposal considerations

* 13.1 Waste treatment methods

* Recommendation



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

* European waste catalogue

The EC waste catalog number (EAC) can only be determined after the type of use by the end-user is known for this product.

- * Uncleaned packaging:
- * Recommendation: Disposal must be made according to official regulations.
- * Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information	
* 14.1 UN number or ID number * ADR/RID/ADN, IMDG, IATA	UN1719
* 14.2 UN proper shipping name * ADR/RID/ADN * IMDG, IATA	1719 CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM HYDROXIDE, DISODIUM TRIOXOSILICATE) CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM HYDROXIDE, DISODIUM TRIOXOSILICATE)
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* 14.3 Transport hazard class(es)	
* ADR/RID/ADN, IMDG, IATA	
* Class	8 Corrosive substances.
* Label * ADN/R Class:	8 8 Corrosive substances.
* 14.4 Packing group * ADR/RID/ADN, IMDG, IATA	III
* 14.5 Environmental hazards:	Not applicable.
* 14.6 Special precautions for user * Hazard identification number (Kemler code): * EMS Number: * Segregation groups * Stowage Category * Segregation Code	Warning: Corrosive substances. 80 F-A,S-B (SGG18) Alkalis A SG22 Stow "away from" ammonium salts SG35 Stow "separated from" SGG1-acids
* 14.7 Maritime transport in bulk according to IM instruments	O Not applicable.
* Transport/Additional information:	
* ADR/RID/ADN * Limited quantities (LQ) * Excepted quantities (EQ) * Transport category * Tunnel restriction code	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 E
*IMDG	
* Limited quantities (LQ) * Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
* UN "Model Regulation":	UN 1719 CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM HYDROXIDE, DISODIUM TRIOXOSILICATE), 8, III

SECTION 15: Regulatory information

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

* Directive 2012/18/EU

* Named dangerous substances - ANNEX I None of the ingredients is listed.

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* REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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<5%

* DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

* REGULATION (EU) 2019/1148

* Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

* Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

* Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

* Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

* Regulation (EC) No 648/2004 on detergents / Labelling for contents

polycarboxylates, phosphonates

preservation agents (DIMETHYL GLYCOL, OCTYLISOTHIAZOLINONE)

* 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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. This Safety Data Sheet is exclusively meant for industrial/professional use.

* Relevant phrases

H290 May be corrosive to metals.

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.

H335 May cause respiratory irritation.

- * Department issuing SDS: Product safety department.
- * Date of previous version: 23.02.2024
- * 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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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 (RÈACH)

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

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(Contd. of page 11) Met. Corr.1: Corrosive to metals – Category 1 Acute Tox. 4: Acute toxicity – Category 4 Acute Tox. 3: Acute toxicity – Category 3 Skin Corr. 1A: Skin corrosion/irritation – Category 1A Skin Corr. 1B: Skin corrosion/irritation – Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 2 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 * **Sources** The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No.1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. ** Data compared to the previous version altered.