Product	ALD22 Floor Degreaser Concentrate 06
Revision date	October 2020
Revision	2

Safety Data Sheet (SDS)

according to Regulation (EC) No. 1907/2006

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name	**ALD 22 Floor Degreaser Concentrate**
Product no.	**REAQUADEG**
Synonyms, Trade names	No information available.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Cleaning agent.
Uses advised against	Any other purpose.

1.3 Details of the supplier of the safety data sheet

Supplier	Manepa Hygenics 628B Jordanstown Avenue Greenogue Business Park Rathcoole Co. Dublin Tel: 014677600
Contact person	support@manepa.com

1.4 Emergency telephone number

Emergency telephone	Emergency Telephone Number: 086 0272033 08:30 – 17:00 Monday to Thursday 08:30 – 16:30 Friday

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and chemical hazards	Me. Corr 1 - H290
Human health	Skin Corr. 1B - H314, Eye Dam. 1 - H318
Environment	Not classified

2.2 Label elements

Contains	potassium hydroxide Sulfonic acids, C14-17-sec-alkane, sodium salts Bornan-2-one
Detergent labeling	≥5% <15% anionic surfactants <5% non-ionic surfactants

Label in accordance with (EC) no. 1272/2008

Signal word	Danger
Hazard statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.
Precautionary statements	**Prevention**

P260 Do not breathe dust/fume/ gas/mist/vapours/spray.
P280 Wear protective gloves/ protective clothing/eye protection/face protection.
Response
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.

2.3 Other hazards

None known.

Section 3: Composition/identification of ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Regulation (EC) No 1272/2008	%
potassium hydroxide	CAS-No.: 1310-58-3 EC No.: 215-181-3	Acute Tox 4 - H302, Skin Corr. 1A - H314	5-10%
sodium xylenesulphonate	CAS-No.: 1300-72-7 EC No.: 215-090-9 REACH Reg No.: 01-2119513350-56-0001	Eye Irrit.2A - H319	5-10%
propan-2-ol	CAS-No.: 67-63-0 EC No.: 200-661-7 REACH Reg No.: 01-2119457558-25-XXXX	Eye Irrit.2A - H319, Flam. Liq 2- H225, STOT SE 3 - H336	5-10%
Sulfonic acids, C14-17-sec-alkane, sodium salts	CAS-No.: 97489-15-1 EC No.: 307-055-2	Acute Tox 4 - H302, Skin Irrit.2 - H315, Eye Dam. 1 - H318, Aquatic Chronic 3 - H412	5-10%
Alcohols, C12-14, ethoxylated propoxylated	CAS-No.: 68439-51-0 EC No.:	Skin Irrit.2 - H315, Eye Irrit.2A - H319, Aquatic Chronic 3 - H412	1-5%
sodium carbonate	CAS-No.: 497-19-8 EC No.: 207-838-8 REACH Reg No.: 01-2119485498-19-XXXX	Eye Irrit.2A - H319	1-5%
2-butoxyethanol	CAS-No.: 111-76-2 EC No.: 203-905-0 REACH Reg No.: 01-2119475108-36-XXXX	Acute Tox 4 - H302, Acute Tox 4 - H312, Acute Tox 4 - H332, Skin Irrit.2 - H315, Eye Irrit.2A - H319	1-5%
Bornan-2-one	CAS-No.: 76-22-2 EC No.: 200-945-0	Acute Tox 4 - H302, Acute Tox 4 - H332, Skin Irrit.2 - H315, Eye Dam. 1 - H318, STOT SE 2 - H371, Flam. Sol 2- H228, Aquatic Chronic 2 - H411	<0.1%

The full text for all hazard statements are displayed in section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

Section 4: First aid measures

4.1 Description of first aid measures

General information As a general rule, in case of doubt or if symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless how minor they may seem. First aid personnel must be aware of own risk during rescue. Provide general first aid, rest, warmth and fresh air.

Inhalation Move the exposed person to fresh air at once. If breathing is difficult, oxygen should be administered by qualified personnel. If not breathing, give artificial respiration. Get prompt medical attention.

Ingestion Get medical attention immediately. Do not induce vomiting. Provided the patient is fully conscious, rinse mouth with water and give plenty of water to drink. Never give anything by mouth to an unconscious person. Artificial respiration and/or oxygen may be necessary.

Skin contact Take off contaminated clothing and shoes immediately. Promptly flush contaminated skin

	with water. Continue to rinse for at least 15 minutes. Seek medical attention immediately.
Eye contact	SPEED IS ESSENTIAL. Avoid contaminating unaffected eye. Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open. Remove contact lenses if present and easy to do so. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependant of the concentration and the length of exposure.
Inhalation	Irritating to respiratory system.
Ingestion	May cause chemical burns in mouth and throat. May cause severe internal injury.
Skin contact	Corrosive! Can cause redness, pain, and severe skin burns.
Eye contact	Causes severe eye damage. Symptoms: Extreme irritation of eyes and mucous membranes, including burning and tearing.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician	Treat symptomatically.

Section 5: Fire-fighting measures

5.1 Extinguishing media

Extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray. Water fog. Foam. Dry powder. Carbon dioxide. Dry chemical.
Unsuitable extinguishing media	High volume water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic or irritating gases or vapours.
Unusual fire & explosion hazards	Irritating or corrosive vapors may be emitted during a fire. Do NOT breathe fumes. Contain run-off. In contact with metals generates hydrogen gas, which together with air can form explosive mixtures.
Specific hazards	During fire, gases hazardous to health may be formed. In the event of damage to packaging, floors may become slippery, avoid falls. Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

5.3 Advice for firefighters

Special fire fighting procedures	If possible, fight fire from protected position. Ventilate closed spaces before entering them. Keep up-wind to avoid fumes. Containers close to fire should be removed immediately or cooled with water.
Protective equipment for firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Do not mix with other chemicals. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection. Eliminate all sources of ignition.
For emergency responders	Follow safe handling advice and personal protective equipment recommendations for normal use of product.

6.2 Environmental precautions

Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Protection Agency or local authority.

6.3 Methods and material for containment and cleaning up

Spill clean up methods

Ventilate and evacuate the area. Eliminate all ignition sources. Wear necessary protective equipment DO NOT touch spilled material! Stop leak if possible without risk. Use non - metallic tools/containers for clean up. In case of spills, beware of slippery floors and surfaces.
Absorb spillage with inert, damp, non-combustible material or use a liquid binding material. Place waste material into suitable labelled sealed containers for disposal. Remove waste promptly to a safe area. Flush with plenty of water to clean spillage area.

6.4 Reference to other sections

Reference to other sections

See section 1 for emergency contact. For personal protection, see section 8. For waste disposal, see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handling

Read and follow manufacturer's recommendations. Use personal protective equipment, see Section 8. Avoid contact with skin and eyes. Do not handle broken packages without protective equipment. Ensure adequate ventilation. If necessary, use local exhaust ventilation.
Use only equipment and materials which are compatible with the product. Always wash hands after handling.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions

Keep locked up and out of reach of children. Store in tightly closed original container in a cool, dry and well-ventilated place. Avoid contact with metals. Keep away from incompatible materials (see section 10).

Storage class

Corrosive storage

7.3 Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Usage description

Use only according to directions.

Section 8: Exposure controls/Personal protection

8.1 Control parameters

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
potassium hydroxide	OEL				2 mg/m³	
potassium hydroxide	WEL				2 mg/m³	
propan-2-ol	OEL	200 ppm		400 ppm		Sk
propan-2-ol	WEL	400 ppm	999 mg/m³	500 ppm	1250 mg/m³	
2-butoxyethanol	OEL	20 ppm	98 mg/m³	50 ppm	246 mg/m³	Sk, IOELV
2-butoxyethanol	WEL	25 ppm	123 mg/m³	50 ppm	246 mg/m³	Sk, BMGV
Bornan-2-one	OEL	2 ppm	12 mg/m³	3 ppm	18 mg/m³	

Ingredient comments

Ireland, Occupational Exposure Limits 2020.
WEL - Workplace Exposure Limits - EH40/2005 Workplace exposure limits.

8.2 Exposure Controls

Protective equipment

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use respirators and components tested and approved under appropriate government standards such as CEN (EU). If the respirator is the sole means of protection, use a full-face supplied air respirator. Self-contained breathing apparatus (EN 133). Respirator with a vapour filter (EN 141). ABEK (EN 14387). Use respiratory protection as specified by an industrial hygienist or other qualified professional.
Hand protection	Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374) is recommended. (EU Directive 89/686/EEC). Selection of the glove material depends on consideration of the penetration times, rates of diffusion and degradation, and concentration specific to the workplace. Gloves must be inspected prior to use. Suggested material: Butyl-rubber. Neoprene. Minimum layer thickness: 0.11 mm. Break through time: 480 min. Gloves must be inspected prior to use. Consult manufacturer for specific advice on material. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.
Eye protection	Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU).
Other protection	Wear appropriate clothing to prevent any possibility of skin contact. The selected clothing must satisfy the European norm standard EN 943. Protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Hygiene measures	DO NOT SMOKE IN WORK AREA! Wash hands after handling. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.
Process conditions	Keep container tightly sealed when not in use. Ensure that eye flushing systems and safety showers are located close by in the work place.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Clear. Blue.
Odour	Characteristic odour.
Odour threshold - lower	No information available as testing has not been completed.
Odour threshold - upper	No information available as testing has not been completed.
pH-Value, Conc. Solution	>13
pH-Value, Diluted solution	Not applicable as the product is a concentrated solution.
Melting point	No information available as testing has not been completed.
Initial boiling point and boiling range	No information available as testing has not been completed.
Flash point	Non-Flammable
Evaporation rate	No information available as testing has not been completed.
Flammability state	Does not apply, product is not flammable.
Flammability limit - lower(%)	Does not apply, product is not flammable.
Flammability limit - upper(%)	Does not apply, product is not flammable.
Vapour pressure	No information available as testing has not been completed.
Vapour density (air=1)	No information available as testing has not been completed.
Relative density	1.06 - 1.08 kg/l (at 20°C)
Bulk density	Not applicable as the product is a liquid.
Solubility	Soluble in water.
Decomposition temperature	No information available as testing has not been completed.

Partition coefficient; n-Octanol/Water	No information available as testing has not been completed.
Auto ignition temperature (°C)	Does not apply, product is not flammable.
Viscosity	No information available as testing has not been completed.
Explosive properties	Not classified as explosive.
Oxidising properties	The product does not meet the criteria to be classified as oxidising.

9.2 Other information

Molecular weight	Not applicable as the product is a mixture.
Volatile organic compound	No information available as testing has not been completed.
Other information	None noted.

Section 10: Stability and reactivity

10.1 Reactivity

Reactivity	Corrosive to metals. Reaction with acids. Ammonium salts. Halogens.

10.2 Chemical stability

Stability	Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

Hazardous reactions	Attacks metals liberating flammable hydrogen gas. Exothermic reaction with: Acids.
Hazardous polymerisation	Unknown.
Polymerisation description	Not applicable.

10.4 Conditions to Avoid

Conditions to avoid	Heat, sparks, open flames, temperature extremes and direct sunlight. Avoid freezing.

10.5 Incompatible materials

Materials to avoid	Halogens. Metals, Salts of metals, Acids, Organic materials. Ammonium salts.

10.6 Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicological information	No toxicological information for the overall finished product.
Acute toxicity (Oral LD50)	No information available as testing has not been completed.
Acute toxicity (Dermal LD50)	No information available as testing has not been completed.
Acute toxicity (Inhalation LD50)	No information available as testing has not been completed.
Serious eye damage/irritation	Causes severe skin burns and eye damage.
Skin corrosion/irritation	The product is classified as a skin corrosion/irritation hazard.
Respiratory sensitisation	The product is not classified as a respiratory hazard.
Skin sensitisation	The product is not classified as a skin sensitisation hazard.
Germ cell mutagenicity	The product is not classified as a mutagen.

Carcinogenicity The product is not classified as a carcinogen hazard.

Specific target organ toxicity - Single exposure:
STOT - Single exposure The product is not classified as a single exposure specific target organ toxin.
Specific target organ toxicity - Repeated exposure:
STOT - Repeated exposure The product is not classified as a repeat exposure specific target organ toxin.

Inhalation Irritating to respiratory system.
Ingestion May cause chemical burns in mouth and throat. May cause severe internal injury.
Skin contact Corrosive! Can cause redness, pain, and severe skin burns.
Eye contact Causes severe eye damage. Symptoms: Extreme irritation of eyes and mucous membranes, including burning and tearing.
Waste management Dispose of in accordance with local and national regulations. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

Routes of entry Eyes, skin, ingestion or inhalation.
Target organs Eyes, skin, digestive system, respiratory system.

Aspiration hazards: The product is not classified as an aspiration hazard.
Reproductive toxicity: The product is not classified as a reproductive hazard.

Name	LD50 oral	LD50 dermal	LD50 inhalation
Alcohols, C12-14, ethoxylated propoxylated	<5000.00mg/kg Rat		
2-butoxyethanol	1300.00mg/kg Rat		
propan-2-ol	5045.00mg/kg Rat		
Sulfonic acids, C14-17-sec-alkane, sodium salts	>500.00mg/kg Rat	>2000.00mg/kg Mouse	
sodium carbonate	2800.00mg/kg Rat	2000.00mg/kg Rat	
sodium xylenesulphonate	7000.00mg/kg Rat	2000.00mg/kg Rabbit	

Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish No information available as testing has not been completed.
Acute toxicity - Aquatic invertebrates No information available as testing has not been completed.
Acute toxicity - Aquatic plants No information available as testing has not been completed.
Acute toxicity - Microorganisms No information available as testing has not been completed.
Chronic toxicity - Fish No information available as testing has not been completed.
Chronic toxicity - Aquatic invertebrates No information available as testing has not been completed.
Chronic toxicity - Aquatic plants No information available as testing has not been completed.
Chronic toxicity - Microorganisms No information available as testing has not been completed.
Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
Eco toxilogical information No ecological toxicity available on the overall finished product.

12.2 Persistence and degradability

Degradability The degradability of the product has not been stated.
Biological oxygen demand No information available as testing has not been completed.
Chemical oxygen demand No information available as testing has not been completed.

12.3 Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.
Bioaccumulation factor No information available as testing has not been completed.
Partition coefficient; n-Octanol/Water No information available as testing has not been completed.

12.4 Mobility in soil

Mobility Soluble in water.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Product is not identified as PBT or vPvB.

12.6 Other adverse effects

Other adverse effects None known.

Name	Acute toxicity (Fish)	Acute toxicity (Aquatic invertebrates)	Acute toxicity (Aquatic plants)
2-butoxyethanol	LC50 96 Hours 1474.00mg/l Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours 1550.00mg/l Daphnia magna	EC50 72 Hours 1840.00mg/l Selenastrum Capricornutum
Sulfonic acids, C14-17-s-c-alkane, sodium salts	LC50 96 Hours 1.00mg/l Brachydanio rerio (Zebra Fish)	EC50 48 Hours 9.81mg/l Daphnia magna	
sodium carbonate	LC50 96 Hours 300.00mg/l Lepomis macrochirus (Bluegill)	EC50 48 Hours 265.00mg/l Daphnia magna	

Section 13: Disposal considerations

Waste management Dispose of in accordance with local and national regulations. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1 Waste treatment methods

Disposal methods Dispose in a safe manner in accordance with local/national regulations.

Section 14: Transport information

14.1 UN number

UN no. (ADR) UN1814
UN no. (IMDG) UN1814
UN no. (IATA) UN1814

14.2 UN proper shipping name

ADR proper shipping name POTASSIUM HYDROXIDE SOLUTION
IMDG proper shipping name POTASSIUM HYDROXIDE SOLUTION
IATA proper shipping name POTASSIUM HYDROXIDE SOLUTION

14.3 Transport hazard class(es)

ADR class 8
IMDG class 8
IATA class 8

Transport labels

14.4 Packing group

ADR/RID/ADN packing group II
IMDG packing group II
IATA packing group II

14.5 Environmental hazards

ADR No
IMDG No
IATA No

14.6 Special precautions for user

EMS F-A, S-B

Emergency action code	A3 A803
Hazard no. (ADR)	80
Tunnel restriction code	(E)

14.7 Transport in bulk according to annex II of MARPOL73/78 and the IBC code

Not applicable.

Section 15: Regulatory information

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

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Commission Regulation (EU) 2019/1691 of 9 October 2019 amending Annex V to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
Approved code of practice	Workplace Exposure Limits Guidance Note EH40/2005. 2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)
Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16: Other information

General information	This Safety Data Sheet is in accordance with Reach Regulation (EC) No 453/2010
Revision comments	This is a second issue. [1]Information updated. [3]Information updated. [5]Information updated. [8]Information updated. [9]Information updated. [11]Information updated. [12]Information updated. [15]Information updated.
Revision date	06 October 2020
Revision	2
Safety data sheet status	Approved.

Hazard statements in full

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H225	Highly flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H410	Very toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
H228	Flammable solid.
H371	May cause damage to organs .
H400	Very toxic to aquatic life.
H361	Suspected of damaging fertility or the unborn child .
H290	May be corrosive to metals.