

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

1.1. Product identifier

Product form : Liquid
 Product name : Ceramic Dura Shield
 Product code : O37
 Type of product : Vehicle cleaning/vehicle care product
 Product group : Cleaning product

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

1.2.1. Relevant identified uses

Main use category : Professional use
 Use of the substance/mixture : See product bulletin for detailed information

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

CID LINES N.V.
 Waterpoortstraat, 2
 BE- B-8900 Ieper
 Belgique
 T + 32 57 21 78 77 - F +32 57 21 78 79
sds@cidlines.com - <http://www.cidlines.com>

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Australia	Poisons Information Centre		13 11 26	
New Zealand	The National Poisons Centre	University of Otago, 2nd Floor, Adams Building, 18 Frederick Street, 9016 Dunedin	0800 764 766 0800 POISON	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	
USA	American Association of Poison Control Centers		1-800-222-1222	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
 Serious eye damage/eye irritation, Category 1 H318
 Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger

Contains :

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts

Hazard statements (CLP) :

H315 - Causes skin irritation.
H318 - Causes serious eye damage.

Precautionary statements (CLP) :

P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
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.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
Decamethylcyclotrasiloxane (541-02-6)	This substance meets the PBT criteria of REACH regulation, annex XIII This substance meets the vPvB criteria of REACH regulation, annex XIII
Dodecamethylcyclohexasiloxane (540-97-6)	This substance meets the PBT criteria of REACH regulation, annex XIII This substance meets the vPvB criteria of REACH regulation, annex XIII

Component	
Decamethylcyclotrasiloxane(541-02-6)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
Dodecamethylcyclohexasiloxane(540-97-6)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-(2-butoxyethoxy)ethanol substance with a Community workplace exposure limit	CAS-No.: 112-34-5 EC-No.: 203-961-6 EC Index-No.: 603-096-00-8 REACH-no: 01-2119475104-44	15 – 30	Eye Irrit. 2, H319
1-Propanaminium, 2-hydroxy-N-(2-hydroxypropyl)-N,N-dimethyl-, diesters with vegetable-oil fatty acids, Me sulfates (salts)	CAS-No.: 95009-13-5 EC-No.: 305-741-6 REACH-no: Pre-registered	5 – 15	Skin Irrit. 2, H315 Eye Irrit. 2, H319
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts	CAS-No.: 147170-44-3 EC-No.: 931-333-8	5 – 15	Eye Dam. 1, H318 Aquatic Chronic 3, H412
Decamethylcyclopentasiloxane substance listed as REACH Candidate PBT substance; vPvB substance	CAS-No.: 541-02-6 EC-No.: 208-764-9 REACH-no: 01-2119511367-43	0.98 – 5.88	Aquatic Chronic 4, H413
Phenol, ethoxylated	CAS-No.: 9004-78-8 EC-No.: 500-013-6 REACH-no: Pre-registered	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319
acetic acid ... % substance with a Community workplace exposure limit	CAS-No.: 64-19-7 EC-No.: 200-580-7 EC Index-No.: 607-002-00-6 REACH-no: 01-2119475328-30	1 – 5	Flam. Liq. 3, H226 Skin Corr. 1A, H314
Dodecamethylcyclohexasiloxane substance listed as REACH Candidate PBT substance; vPvB substance	CAS-No.: 540-97-6 EC-No.: 208-762-8	0.07 – 0.44	Not classified

Specific concentration limits:

Name	Product identifier	Specific concentration limits
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts	CAS-No.: 147170-44-3 EC-No.: 931-333-8	(4 <C ≤ 10) Eye Irrit. 2, H319 (10 <C < 100) Eye Dam. 1, H318
acetic acid ... %	CAS-No.: 64-19-7 EC-No.: 200-580-7 EC Index-No.: 607-002-00-6 REACH-no: 01-2119475328-30	(10 ≤C < 25) Skin Irrit. 2, H315 (10 ≤C < 25) Eye Irrit. 2, H319 (25 ≤C < 90) Skin Corr. 1B, H314 (90 ≤C < 100) Skin Corr. 1A, H314

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Seek medical advice (show the label where possible).
First-aid measures after eye contact	: Rinse immediately with plenty of water. Seek medical attention immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting because of corrosive effects. Take to hospital.

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According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Redness, pain. Blurred vision. Tears. Serious damage to eyes.
Symptoms/effects after ingestion	: Burning sensation. Cough. Cramps. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry chemical. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Not combustible.
Explosion hazard	: Not expected to be a fire/explosion hazard under normal conditions of use.
Reactivity in case of fire	: At high temperature may liberate dangerous gases.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire	: Wear fire/flare resistant/retardant clothing. Eliminate all ignition sources if safe to do so.
Firefighting instructions	: Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Exercise caution when fighting any chemical fire. Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flare resistant/retardant clothing. Heat resistant gloves.
Other information	: On exposure to high temperature, may decompose, releasing toxic gases.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection. Stop leak if safe to do so. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.
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6.1.1. For non-emergency personnel

Protective equipment	: Avoid all unnecessary exposure. Wear suitable protective clothing. Ensure adequate ventilation. Do not breathe vapours.
Emergency procedures	: Do not touch or walk on the spilled product. Evacuate area. Do not breathe vapours. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Do not touch spilled material. Evacuate unnecessary personnel. Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Stop leak without risks if possible. Collect spillage. Use suitable disposal containers.
Methods for cleaning up	: Clean up any spills as soon as possible, using an absorbent material to collect it.

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According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : When handling product, avoid contact with skin and eyes. Wear personal protective equipment. Do not breathe vapour/aerosol. Provide good ventilation in process area to prevent formation of vapour.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool well ventilated place. Do not store in corrodable metal. Keep container closed when not in use. Protect from freezing.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

2-(2-butoxyethoxy)ethanol (112-34-5)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-(2-Butoxyethoxy)ethanol
IOEL TWA	67.5 mg/m ³
IOEL TWA [ppm]	10 ppm
IOEL STEL	101.2 mg/m ³
IOEL STEL [ppm]	15 ppm
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
United Kingdom - Occupational Exposure Limits	
Local name	2-(2-Butoxyethoxy)ethanol
WEL TWA (OEL TWA) [1]	67.5 mg/m ³
WEL TWA (OEL TWA) [2]	10 ppm
WEL STEL (OEL STEL)	101.2 mg/m ³
WEL STEL (OEL STEL) [ppm]	15 ppm
Regulatory reference	EH40/2005 (Third edition, 2018). HSE
acetic acid ... % (64-19-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Acetic acid
IOEL TWA	25 mg/m ³
IOEL TWA [ppm]	10 ppm
IOEL STEL	50 mg/m ³

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According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

acetic acid ... % (64-19-7)	
IOEL STEL [ppm]	20 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164
United Kingdom - Occupational Exposure Limits	
Local name	Acetic acid
WEL TWA (OEL TWA) [1]	25 mg/m ³
WEL TWA (OEL TWA) [2]	10 ppm
WEL STEL (OEL STEL)	37 mg/m ³
WEL STEL (OEL STEL) [ppm]	15 ppm
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

2-(2-butoxyethoxy)ethanol (112-34-5)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	101.2 mg/m ³
Long-term - systemic effects, dermal	83 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	67.5 mg/m ³
Long-term - local effects, inhalation	67.5 mg/m ³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	60.7 mg/m ³
Long-term - systemic effects, oral	5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	40.5 mg/m ³
Long-term - systemic effects, dermal	50 mg/kg bodyweight/day
Long-term - local effects, inhalation	40.5 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	1.1 mg/l
PNEC aqua (marine water)	0.11 mg/l
PNEC aqua (intermittent, freshwater)	11 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	4.4 mg/kg dwt
PNEC sediment (marine water)	0.44 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.32 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	56 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	200 mg/l

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1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts (147170-44-3)

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	12.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	44 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	7.5 mg/kg bodyweight/day
Long-term - systemic effects, dermal	7.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.0135 mg/l
PNEC aqua (marine water)	0.00135 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	1 mg/kg dwt
PNEC sediment (marine water)	0.1 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.8 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	3000 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Wear security glasses which protect from splashes. Safety glasses with side shields

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses, face protection	Droplet	clear, Plastic	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

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According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

Skin and body protection	
Type	Standard
protective clothing	EN14605:2005+A1:2009

Hand protection:

Wear suitable gloves resistant to chemical penetration

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.5	2 (< 1.5)	EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light yellow.
Appearance	: clear.
Odour	: Not available
Odour threshold	: The product has not been tested
Melting point	: The product has not been tested
Freezing point	: The product has not been tested
Softening point	: The product has not been tested
Boiling point	: The product has not been tested
Flammability	: Not applicable Not flammable
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing material according to EC criteria.
Explosive limits	: The product is not flammable
Lower explosion limit	: The product has not been tested
Upper explosion limit	: The product has not been tested
Flash point	: > 65 °C
Auto-ignition temperature	: The product has not been tested
Decomposition temperature	: The product has not been tested
SADT	: The product has not been tested
pH	: ≈ 4 (100%)
Viscosity, kinematic	: The product has not been tested
Viscosity, dynamic	: The product has not been tested
Solubility	: Water: 100 % Ethanol: The product has not been tested Ether: The product has not been tested Acetone: The product has not been tested Organic solvent: The product has not been tested
Partition coefficient n-octanol/water (Log Kow)	: The product has not been tested
Partition coefficient n-octanol/water (Log Pow)	: The product has not been tested
Vapour pressure	: The product has not been tested
Vapour pressure at 50 °C	: The product has not been tested

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According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

Critical pressure	: The product has not been tested
Saturation concentration	: The product has not been tested
Density	: 1.02 kg/l
Relative density	: The product has not been tested
Relative vapour density at 20 °C	: The product has not been tested
Relative density of saturated gas/air mixture	: The product has not been tested
Particle size	: The product has not been tested
Particle size distribution	: The product has not been tested
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: The product has not been tested
Particle agglomeration state	: The product has not been tested
Particle specific surface area	: The product has not been tested
Particle dustiness	: The product has not been tested

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Critical temperature : The product has not been tested

9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1) : The product has not been tested
Relative evaporation rate (ether=1) : The product has not been tested
Relative evaporation rate (water=1) : The product has not been tested
Relative evaporation rate (ethanol=1) : The product has not been tested
VOC content : 200 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

2-(2-butoxyethoxy)ethanol (112-34-5)

LD50 dermal rabbit	2764 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 2090 - 3645
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According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

acetic acid ... % (64-19-7)	
LD50 oral rat	3310 mg/kg bodyweight Animal: rat, Remarks on results: other:
LD50 oral	4960 mg/kg bodyweight Animal: mouse, Remarks on results: other:
Dodecamethylcyclohexasiloxane (540-97-6)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Decamethylcyclopentasiloxane (541-02-6)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	8.67 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EPA OTS 798.1150 (Acute inhalation toxicity), 95% CL: 7,3 - 10,32
Skin corrosion/irritation	: Causes skin irritation. pH: ≈ 4 (100%)
Serious eye damage/irritation	: Causes serious eye damage. pH: ≈ 4 (100%)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
2-(2-butoxyethoxy)ethanol (112-34-5)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
acetic acid ... % (64-19-7)	
NOAEL (oral, rat, 90 days)	290 mg/kg bodyweight Animal: rat, Animal sex: male
Dodecamethylcyclohexasiloxane (540-97-6)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Decamethylcyclopentasiloxane (541-02-6)	
LOAEL (dermal, rat/rabbit, 90 days)	≥ Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Aspiration hazard	: Not classified
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Viscosity, kinematic	The product has not been tested

11.2. Information on other hazards

No additional information available

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According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

2-(2-butoxyethoxy)ethanol (112-34-5)

LC50 - Fish [1]	1300 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

acetic acid ... % (64-19-7)

LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
LC50 - Fish [2]	> 300.82 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	> 300.82 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	> 300 mg/l
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Skeletonema costatum
EC50 72h - Algae [2]	> 300.82 mg/l Test organisms (species): Skeletonema costatum
ErC50 algae	> 300 mg/l

Decamethylcyclopentasiloxane (541-02-6)

LC50 - Fish [1]	> 16 µg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 2.9 µg/l Test organisms (species): Daphnia magna

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts (147170-44-3)

LC50 - Fish [1]	1.11 mg/l Test organisms (species): Pimephales promelas
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12.2. Persistence and degradability

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Persistence and degradability	The surfactant contained in this preparation complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.
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12.3. Bioaccumulative potential

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Partition coefficient n-octanol/water (Log Pow)	The product has not been tested
Partition coefficient n-octanol/water (Log Kow)	The product has not been tested

2-(2-butoxyethoxy)ethanol (112-34-5)

Partition coefficient n-octanol/water (Log Kow)	1
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According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

acetic acid ... % (64-19-7)

Partition coefficient n-octanol/water (Log Kow)	-0.17
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component

Decamethylcyclotrisiloxane (541-02-6)	This substance meets the PBT criteria of REACH regulation, annex XIII This substance meets the vPvB criteria of REACH regulation, annex XIII
Dodecamethylcyclohexasiloxane (540-97-6)	This substance meets the PBT criteria of REACH regulation, annex XIII This substance meets the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Dispose in a safe manner in accordance with local/national regulations. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Waste treatment methods	: Dispose of this material and its container at hazardous or special waste collection point. Hazardous waste due to toxicity. Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of in accordance with the European Directives on waste and hazardous waste. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads). When totally empty, containers are recyclable like any other packing. Avoid release to the environment.
Additional information	: Waste disposal according to Directive 2008/98/EC, covering waste and dangerous waste. The material can be re-used or recycled according to the regulations of Guideline EG 94/62. Act of 13 June 2013 on the management of packaging and packaging waste (J. o L. 2013, item 888 as amended; consolidated text J. o L. 2020, item 1114).
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 07 06 01* - aqueous washing liquids and mother liquors

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable

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14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: Clean up even minor leaks or spills, if possible, without unnecessary risk

14.6. Special precautions for user

Special transport precautions	: Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency, No naked flames, sparks, and do not smoke, Keep public away from danger area, NOTIFY POLICE AND FIRE BRIGADE IMMEDIATELY
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Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Ceramic Dura Shield is not on the REACH Candidate List

Contains a substance on the REACH candidate list: Dodecamethylcyclohexasiloxane (EC 208-762-8, CAS 540-97-6),

Decamethylcyclopentasiloxane (EC 208-764-9, CAS 541-02-6)

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

VOC content : 200 g/l

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:

CAS-No.	Chemical Abstract Service number
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EN	European Standard
EC50	Median effective concentration
ED	Endocrine disrupting properties
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
IOELV	Indicative Occupational Exposure Limit Value
LC50	Median lethal concentration
LD50	Median lethal dose

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Abbreviations and acronyms:	
LOAEL	Lowest Observed Adverse Effect Level
N.O.S.	Not Otherwise Specified
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
TRGS	Technical Rules for Hazardous Substances
ThOD	Theoretical oxygen demand (ThOD)
VOC	Volatile Organic Compounds
WGK	Water Hazard Class
vPvB	Very Persistent and Very Bioaccumulative

Data sources

: 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. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008. The skin and eye classification of this product was derived using bridging principles (such as dilution, interpolation within one hazard category or substantially similar mixtures; with or without expert judgement) following Article 9(3) and Article 9(4) of Regulation (EC) No 1272/2008.

Other information

: DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3

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Full text of H- and EUH-statements:	
H226	Flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2

SDSCLP3

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.