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

1.1. Product identifier

Product form : Mixture

Product name : Direct Injection Valve Cleaner (Aerosol)

Product code : W28879

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Internal cleaning of petrol fuel systems including fuel injectors.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Wynn's Belgium
Industriepark-West 46
9100 Sint-Niklaas - Belgium
T +32 3 766 60 20 - F +32 3 778 16 56
msds@wynns.eu - www.wynns.com

1.4. Emergency telephone number

Emergency number : BIG: +32(0)14/58.45.45 (NL FR EN DE)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aerosol 1	H222;H229
Skin Irrit. 2	H315
Eye Dam. 1	H318
STOT SE 3	H336
Aquatic Chronic 2	H411

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS05 GHS07 GHS09

Signal word (CLP) : Danger

Hazardous ingredients : Hydrocarbons, C10, aromatics, <1% naphthalene; Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl); (Poly(oxy-1,2-ethanediyl),a-(2-propylheptyl)-w-hydroxy-)

Hazard statements (CLP) : H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.

EUH-statements : EUH208 - Contains isomeric mixture; 2,2'-[[(4or5-methyl-1H-benzotriazol-1-yl)-methyl]imino]bisethanol. May produce an allergic reaction.

Precautionary statements (CLP) : P261 - Avoid breathing vapours, spray.
P280 - Wear eye protection, protective gloves.
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, a doctor.
P102 - Keep out of reach of children.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	% w	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C10, aromatics, <1% naphthalene	(EC-No.) 918-811-1 (REACH-no) 01-2119463583-34	25 - 50	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hydrocarbons, C3-4-rich, petroleum distillate	(CAS-No.) 68512-91-4 (EC-No.) 270-990-9 (REACH-no) 01-2119485926-20	10 - 25	Flam. Gas 1, H220
2-butoxyethanol	(CAS-No.) 111-76-2 (EC-No.) 203-905-0 (EC Index-No.) 603-014-00-0 (REACH-no) 01-2119475108-36	5 - 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
(2-methoxymethylethoxy)propanol substance with a Community workplace exposure limit	(CAS-No.) 34590-94-8 (EC-No.) 252-104-2 (REACH-no) 01-2119450011-60	5 - 10	Not classified
2-(2-butoxyethoxy)ethanol	(CAS-No.) 112-34-5 (EC-No.) 203-961-6 (EC Index-No.) 603-096-00-8 (REACH-no) 01-2119475104-44	2,5 - 5	Eye Irrit. 2, H319
(Poly(oxy-1,2-ethanediyl),a-(2-propylheptyl)-w-hydroxy-)	(CAS-No.) 160875-66-1 (EC-No.) Polymer	2,5 - 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	(EC-No.) 931-329-6 (REACH-no) 01-2119490100-53	1 - 2,5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl)	(CAS-No.) 68603-38-3 (EC-No.) 271-653-9 (REACH-no) 01-2119951823-33	1 - 2,5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
Ammonium hydroxide	(CAS-No.) 1336-21-6 (EC-No.) 215-647-6 (EC Index-No.) 007-001-01-2	0,1 - 1	Skin Corr. 1B, H314 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
isomeric mixture; 2,2'-[[(4or5-methyl-1H-benzotriazol-1-yl)-methyl]imino]bisethanol	(CAS-No.) 88488-37-6 (80584-88-9 + 80584-89-0) (EC-No.) 279-501-3 + 279-502-9	0,1 - 1	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Naphthalene	(CAS-No.) 91-20-3 (EC-No.) 202-049-5 (EC Index-No.) 601-052-00-2 (REACH-no) 01-2119561346-37	0,1 - 1	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	Specific concentration limits
Ammonium hydroxide	(CAS-No.) 1336-21-6 (EC-No.) 215-647-6 (EC Index-No.) 007-001-01-2	(5 =<C < 100) STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Check the vital functions. Keep victim at rest in half upright position. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Keep watching the victim. Give psychological aid. Prevent cooling by covering the victim (no warming up). Keep the victim calm, avoid physical strain. If necessary seek medical advice.

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Contact ophthalmologist immediately.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. As it is a spray can packaging it is most unlikely that large quantities will be swallowed.

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

Symptoms/effects after inhalation	: Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination. Nausea. May cause respiratory irritation.
Symptoms/effects after skin contact	: skin irritation and erythema. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Causes serious eye damage.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. AFFF foam. ABC-powder.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Extremely flammable aerosol. Heating may cause a fire or explosion.
Explosion hazard	: No direct explosion hazard. Pressurised container: May burst if heated.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear suitable gloves and eye/face protection. protective clothing. Large spills/in enclosed spaces: compressed air apparatus.
Emergency procedures	: Mark the danger area. Close doors and windows of adjacent premises. Prevent flow to low areas. Stop engines and no smoking. No naked flames, sparks, and do not smoke. Large spills/in confined spaces: consider evacuation. Use spark-/explosionproof appliances and lighting system. Take off contaminated clothing. Stay upwind.

6.1.2. For emergency responders

Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Clean with detergents. Avoid solvent cleaners. Wash clothing and equipment after handling. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Do not pierce or burn, even after use. Avoid contact with skin and eyes.
Precautions for safe handling	:	Meet the legal requirements. Keep away from sources of ignition - No smoking. Keep away from naked flames/heat. Use spark-/explosionproof appliances and lighting system. Provide good ventilation in process area to prevent formation of vapour. Presents no particular risk when handled in accordance with good occupational hygiene practice.
Hygiene measures	:	Use good personal hygiene practices. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Storage temperature	:	≤ 45 °C
Heat and ignition sources	:	Keep away from sources of ignition - No smoking.
Information on mixed storage	:	Keep away from strong acids and strong oxidizers.
Storage area	:	Fireproof storeroom. Meet the legal requirements. Store in a dry place. Store in a well-ventilated place. Protect from heat and direct sunlight. Ventilation along the floor.
Special rules on packaging	:	Labelling according to. Meet the legal requirements.
Packaging materials	:	Pressurised small gas containers (aerosol cans).

7.3. Specific end use(s)

See product bulletin for detailed information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrocarbons, C10, aromatics, <1% naphthalene

Belgium	Limit value (mg/m³)	200 mg/m³

2-butoxyethanol (111-76-2)

EU	IOELV TWA (mg/m³)	98 mg/m³
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m³)	246 mg/m³
EU	IOELV STEL (ppm)	50 ppm
EU	Notes	Skin
Belgium	Limit value (mg/m³)	98 mg/m³
Belgium	Limit value (ppm)	20 ppm
Belgium	Short time value (mg/m³)	246 mg/m³
Belgium	Short time value (ppm)	50 ppm
France	VLE (mg/m³)	246 mg/m³
France	VLE (ppm)	50 ppm
France	VME (mg/m³)	49 mg/m³
France	VME (ppm)	10 ppm
Netherlands	Grenswaarde TGG 8H (mg/m³)	100 mg/m³
Netherlands	Grenswaarde TGG 8H (ppm)	20 ppm
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	246 mg/m³
Netherlands	Grenswaarde TGG 15MIN (ppm)	50 ppm
Hungary	AK-érték	98 mg/m³
Hungary	CK-érték	246 mg/m³

(2-methoxymethylethoxy)propanol (34590-94-8)

EU	IOELV TWA (mg/m³)	308 mg/m³
EU	IOELV TWA (ppm)	50 ppm
Belgium	Limit value (mg/m³)	308 mg/m³
Belgium	Limit value (ppm)	50 ppm
Belgium	Remark (BE)	D
Hungary	AK-érték	308 mg/m³

(2-methoxymethylethoxy)propanol (34590-94-8)

Hungary	CK-érték	308 mg/m³

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

EU	IOELV TWA (mg/m³)	67,5 mg/m³
EU	IOELV TWA (ppm)	10 ppm
EU	IOELV STEL (mg/m³)	101,2 mg/m³
EU	IOELV STEL (ppm)	15 ppm
Belgium	Limit value (mg/m³)	67,5 mg/m³
Belgium	Limit value (ppm)	10 ppm
Belgium	Short time value (mg/m³)	101,2 mg/m³
Belgium	Short time value (ppm)	15 ppm
France	VLE (mg/m³)	67,5 mg/m³
France	VLE (ppm)	10 ppm
France	VME (mg/m³)	101,2 mg/m³
France	VME (ppm)	15 ppm
Hungary	AK-érték	67,5 mg/m³
Hungary	CK-érték	101,2 mg/m³

Ammonium hydroxide (1336-21-6)

EU	IOELV TWA (mg/m³)	14 mg/m³
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m³)	36 mg/m³
EU	IOELV STEL (ppm)	50 ppm
Belgium	Limit value (mg/m³)	14 mg/m³
Belgium	Limit value (ppm)	20 ppm
Belgium	Short time value (mg/m³)	36 mg/m³
Belgium	Short time value (ppm)	50 ppm
Netherlands	Grenswaarde TGG 8H (mg/m³)	14 mg/m³
Netherlands	Grenswaarde TGG 8H (ppm)	20 ppm
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	36 mg/m³
Netherlands	Grenswaarde TGG 15MIN (ppm)	50 ppm

Naphthalene (91-20-3)

EU	IOELV TWA (mg/m³)	50 mg/m³
EU	IOELV TWA (ppm)	10 ppm
Belgium	Limit value (mg/m³)	53 mg/m³
Belgium	Limit value (ppm)	10 ppm
Belgium	Short time value (mg/m³)	80 mg/m³
Belgium	Short time value (ppm)	15 ppm
Belgium	Remark (BE)	D
Hungary	AK-érték	50 mg/m³

Hydrocarbons, C10, aromatics, <1% naphthalene

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	12,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	151 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	7,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	32 mg/m³
Long-term - systemic effects, dermal	7,5 mg/kg bodyweight/day

2-butoxyethanol (111-76-2)

DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	89 mg/kg bodyweight/day
Acute - systemic effects, inhalation	1091 mg/m³
Long-term - systemic effects, dermal	125 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	98 mg/m³
Long-term - local effects, inhalation	246 mg/m³
DNEL/DMEL (General population)	

2-butoxyethanol (111-76-2)

Acute - systemic effects, dermal	89 mg/kg bodyweight
Acute - systemic effects, inhalation	426 mg/m³
Acute - systemic effects, oral	26,7 mg/kg bodyweight
Long-term - systemic effects,oral	6,3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	59 mg/m³
Long-term - systemic effects, dermal	75 mg/kg bodyweight/day
Long-term - local effects, inhalation	147 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	8,8 mg/l
PNEC aqua (marine water)	0,88 mg/l
PNEC aqua (intermittent, freshwater)	9,1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	34,6 mg/kg dwt
PNEC sediment (marine water)	3,46 mg/kg dwt
PNEC (Soil)	
PNEC soil	2,33 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	463 mg/l

(2-methoxymethylethoxy)propanol (34590-94-8)

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	283 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	308 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	36 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	37,2 mg/m³
Long-term - systemic effects, dermal	121 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	19 mg/l
PNEC aqua (marine water)	1,9 mg/l
PNEC aqua (intermittent, freshwater)	190 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	70,2 mg/kg dwt
PNEC sediment (marine water)	7,02 mg/kg dwt
PNEC (Soil)	
PNEC soil	2,74 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	4168 mg/l

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

DNEL/DMEL (Workers)	
Acute - local effects, inhalation	101,2 mg/m³
Long-term - systemic effects, dermal	83 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	67,5 mg/m³
Long-term - local effects, inhalation	67,5 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	60,7 mg/m³
Long-term - systemic effects,oral	5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	40,5 mg/m³
Long-term - systemic effects, dermal	50 mg/kg bodyweight/day
Long-term - local effects, inhalation	40,5 mg/m³
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

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

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

Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	4,16 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	73,4 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	6,25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	21,73 mg/m³
Long-term - systemic effects, dermal	2,5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,007 mg/l
PNEC aqua (marine water)	0,0007 mg/l
PNEC aqua (intermittent, freshwater)	0,024 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,195 mg/kg dwt
PNEC sediment (marine water)	0,0195 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,0348 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	830 mg/l

Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) (68603-38-3)

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	4,16 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	73,44 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	6,25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	21,73 mg/m³
Long-term - systemic effects, dermal	2,5 mg/kg bodyweight/day
PNEC (STP)	
PNEC sewage treatment plant	0,83 mg/l

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Does not require any specific or particular technical measures.

Personal protective equipment : Safety glasses. Gloves.

Hand protection : Neoprene. Nitrile rubber. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Time of penetration is to be checked with the glove producer.

Other information : Thickness of the glove material >0.1 mm. Breakthrough time : >30'.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Aerosol.

Colour : No data available

Odour : characteristic.

Odour threshold : No data available

pH	:
Relative evaporation rate (butylacetate=1)	: No data available
refraction index	:
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 3 - 4 bar
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density @20°C	: 850 kg/m³
Solubility	: Partially soluble.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic @40°C	: No data available
Viscosity, dynamic @40°C	: No data available
Viscosity	:
Viscosity Index	:
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: 61,35 %
Additional information	: Physical and chemical properties of the active product without gas. The physical and chemical data in this section are typical values for this product and are not intended as product specifications.

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Extremely flammable aerosol. Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Keep away from strong acids and strong oxidizers.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

On burning: release of harmful/irritant gases/vapours. Carbon monoxide. Carbon dioxide. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Hydrocarbons, C10, aromatics, <1% naphthalene

LD50 oral rat	6318 mg/kg bodyweight Crl:CDBR
LD50 dermal rabbit	> 2000 mg/kg bodyweight New Zealand White
LC50 inhalation rat (mg/l)	> 4,688 mg/l/4h Sprague-Dawley
ATE CLP (oral)	6318 mg/kg bodyweight

2-butoxyethanol (111-76-2)

LD50 oral rat	1746 mg/kg bodyweight COBS, CD, BR
LD50 dermal rat	> 2000 mg/kg bodyweight Sprague-Dawley
LD50 dermal rabbit	24h 435 mg/kg bodyweight New Zealand White
LC50 inhalation rat (mg/l)	2,2 mg/l/4h Fischer 344
ATE CLP (oral)	1746 mg/kg bodyweight
ATE CLP (dermal)	1100 mg/kg bodyweight
ATE CLP (vapours)	2,2 mg/l/4h
ATE CLP (dust,mist)	2,2 mg/l/4h

(2-methoxymethylethoxy)propanol (34590-94-8)

LD50 oral rat	> 5000 mg/kg bodyweight Sprague-Dawley
LD50 dermal rabbit	> 2000 mg/kg bodyweight New Zealand White

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

LD50 oral rat	7291 mg/kg bodyweight COBS, CD, BR
LD50 dermal rabbit	2764 mg/kg bodyweight New Zealand White
LC50 inhalation rat (ppm)	> 29 ppm @2h
ATE CLP (oral)	7291 mg/kg bodyweight
ATE CLP (dermal)	2764 mg/kg bodyweight

(Poly(oxy-1,2-ethanediyl),a-(2-propylheptyl)-w-hydroxy-) (160875-66-1)

LD50 oral rat	> 300 (≤ 2000) mg/kg bodyweight
ATE CLP (oral)	2000 mg/kg bodyweight

Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) (68603-38-3)

LD50 oral rat	> 3000 mg/kg bodyweight

isomeric mixture; 2,2'-[[(4or5-methyl-1H-benzotriazol-1-yl)-methyl]imino]bisethanol (88488-37-6 (80584-88-9 + 80584-89-0))

ATE CLP (oral)	500 mg/kg bodyweight

Naphthalene (91-20-3)

LD50 oral rat	> 2000 mg/kg bodyweight Sprague-Dawley
LD50 dermal rat	> 2500 mg/kg bodyweight Sherman
ATE CLP (oral)	500 mg/kg bodyweight

Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/irritation	:	Causes serious eye damage.
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	May cause drowsiness or dizziness.
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	This product contains hazardous components for the aquatic environment.
Ecology - water	:	Toxic to aquatic life with long lasting effects.

Hydrocarbons, C10, aromatics, <1% naphthalene

LC50 fish 1	96h 2 - 5 mg/l Oncorhynchus mykiss
EC50 Daphnia 1	48h 10 mg/l Daphnia magna
EC50 other aquatic organisms 1	72h 1 - 3 mg/l Pseudokirchneriella subcapitata

2-butoxyethanol (111-76-2)

LC50 fish 1	96h 1464 mg/l Oncorhynchus mykiss
EC50 Daphnia 1	48h 1800 mg/l Daphnia magna
EC50 other aquatic organisms 1	72h 911 mg/l Pseudokirchneriella subcapitata
NOEC (acute)	72h 88 mg/l Pseudokirchneriella subcapitata

(2-methoxymethylethoxy)propanol (34590-94-8)

LC50 fish 1	> 1930 mg/l @96h Cyprinodon variegatus
EC50 other aquatic organisms 1	48h 1930 mg/l Acartia tonsa
EC50 other aquatic organisms 2	72h 7935 mg/l Skeletonema grethae
LOEC (acute)	48h 2200 mg/l Acartia tonsa
NOEC (acute)	96h 1930 mg/l Cyprinodon variegatus

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

LC50 fish 1	96h 1300 mg/l Lepomis macrochirus
EC50 Daphnia 1	24h 2850 mg/l Daphnia magna
EC50 other aquatic organisms 1	72h 1101 mg/l Pseudokirchnerella subcapitata

(Poly(oxy-1,2-ethanediyl),a-(2-propylheptyl)-w-hydroxy-) (160875-66-1)

EC50 Daphnia 1	> 10 (≤ 100) mg/l @48h Daphnia magna
EC50 other aquatic organisms 1	> 10 (≤ 100) mg/l @72h Scenedesmus subspicatus
NOEC (chronic)	> 1 mg/l

Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)

LC50 fish 1	96h 2,4 mg/l Oncorhynchus mykiss
EC50 Daphnia 1	48h 3,2 mg/l Daphnia magna

Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) (68603-38-3)

LC50 fish 1	96h 1,2 mg/l oncorhynchus mykiss
NOEC (acute)	72h 2 mg/l Desmodesmus subspicatus
NOEC (chronic)	> 0,01 (≤ 0,1) mg/l @21d daphnia magna

Ammonium hydroxide (1336-21-6)

EC50 Daphnia 1	48h 101 mg/l daphnia magna
EC50 other aquatic organisms 1	18d 2700 mg/l chlorella vulgaris
NOEC (chronic)	96h 0,79 mg/l daphnia magna

Naphthalene (91-20-3)

LC50 fish 1	96h 1,6 mg/l Oncorhynchus mykiss
EC50 Daphnia 1	48h 2,16 mg/l Daphnia magna

12.2. Persistence and degradability

2-butoxyethanol (111-76-2)

Persistence and degradability	Readily biodegradable.

(Poly(oxy-1,2-ethanediyl),a-(2-propylheptyl)-w-hydroxy-) (160875-66-1)

Persistence and degradability	Readily biodegradable.

Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) (68603-38-3)

Persistence and degradability	biodegradable.

12.3. Bioaccumulative potential

2-butoxyethanol (111-76-2)

Bioaccumulative potential	Slightly bioaccumulative.

(2-methoxymethylethoxy)propanol (34590-94-8)

Log Pow	1,01

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

Log Pow	1

(Poly(oxy-1,2-ethanediyl),a-(2-propylheptyl)-w-hydroxy-) (160875-66-1)

Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

2-butoxyethanol (111-76-2)

Ecology - soil	Small adsorption.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not pierce or burn, even after use. Remove to an authorized waste treatment plant.

European List of Waste (LoW) code : 14 06 03* - other solvents and solvent mixtures
15 01 11* - metallic packaging containing a dangerous solid porous matrix (e.g. asbestos), including empty pressure containers

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : 1950

14.2. UN proper shipping name

Proper Shipping Name (ADR) : AEROSOLS

Transport document description (ADR) : UN 1950 AEROSOLS, 2.1, (D), ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

Class (ADR) : 2

Subsidiary risk (IMDG) : 2.1

Subsidiary hazard (IATA) : 2.1

Danger labels (ADR) : 2.1

14.4. Packing group

Not applicable

14.5. Environmental hazards

Dangerous for the environment :

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Classification code (ADR) : 5F

Special provisions (ADR) : 190, 327, 344, 625

Transport category (ADR) : 2

Tunnel restriction code (ADR) : D

Limited quantities (ADR) : 1l

14.6.2. Transport by sea

EmS-No. (1) : F-D, S-U

14.6.3. Air transport

Instruction "cargo" (ICAO) : 203

Instruction "passenger" (ICAO) : 203/Y203

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

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

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 61,35 %

15.1.2. National regulations

Water hazard class (WGK) : 2 - Significantly hazardous to water

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aerosol 1	Aerosol, Category 1
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1	Flammable gases, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains isomeric mixture; 2,2'-[[(4or5-methyl-1H-benzotriazol-1-yl)-methyl]imino]bisethanol. May produce an allergic reaction.

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.