Screen Wash (Concentrate)

Product Reference code:S1611908980

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 10/12/2021 Revision date: 4/28/2022 Supersedes version of: 1/13/2022 Version: 2.02

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

1.1. Product identifier

Product form	: Mixture
Name	: Screen Wash (Concentrate)
UFI	: JFWH-7GMH-Y50D-QPFR
Product code	: S1611908980
Type of product	: Detergent
Synonyms	: Scheibenreiniger (Konzentrat) / Agent nettoyant pour pare-brises (Concentré) / Screen Wash (Concentrate)
Product group	: Others

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

1.2.1. Relevant identified uses

Intended for general public

Main use category	: Professional use
Use of the substance/mixture	: Used in the automobile industry
Function or use category	: Cleaning/washing agents and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Name	PSA Automobiles SA
	2-10 bd de l'Europe
	78300 Poissy
E-mail	OPEL-helpdesk@ifz-berlin.de

Inquiry office

	IFZ Ingenieurbüro und Consulting GmbH
Telephone:	+49 30 / 2904897-10

1.4. Emergency telephone number

Emergency number	+49 61 31 19240 United Kingdom +44 870 600 626 / 0870 600 6266

Further information
Apply safety data sheet to the following products:

Part-No.	Catalogue-No.	amount
1611908680	-	250 ml
1637755180	-	250 ml
1656160380	-	250 ml
1611908780	-	1 L
1637755280	-	1 L
1611908880	-	60 L
1611908980	-	210 L
1611910480	-	210 L

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 2	H225
Serious eye damage/eye irritation, Category 2	H319

Full text of H- and EUH-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 GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.
H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of Contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) 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 at a concentration equal to or greater than 0.1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethanol; ethyl alcohol substance with national workplace exposure limit(s) (GB)	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2119457610-43	50 – 60	Flam. Liq. 2, H225 Eye Irrit. 2, H319
ethanediol; ethylene glycol substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816-28	0.1 – 1	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
butanone; ethyl methyl ketone substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 78-93-3 EC-No.: 201-159-0 EC Index-No.: 606-002-00-3 REACH-no: 01-2119457290-43	0.1 – 1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
propan-2-ol; isopropyl alcohol; isopropanol substance with national workplace exposure limit(s) (GB)	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0 REACH-no: 01-2119457558-25	0.1 – 1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
2-ethylhexan-1-ol substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 104-76-7 EC-No.: 203-234-3 REACH-no: 01-2119487289-20	< 0.1	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits**
ethanol; ethyl alcohol	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2119457610-43	(50 ≤C < 100) Eye Irrit. 2, H319

Comments : Contents (648/2004/EC): <5 % anionic surfactants, perfumes

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 general : If medical advice is needed, have product container or label at hand. In case of feeling unwell: Obtain medical attention. Show this safety data sheet to the doctor in attendance. If unconscious, place the person in the recovery position and seek medical advice immediately. Never give anything by mouth to an unconscious person. Protection is needed for the First Aider (Protective gloves, chemical-resistant; Safety glasses). In the case of long or repeated exposure, use protective clothing. See section 8. Wash contaminated clothing before reuse. Eye wash fountains and safety showers must be easily accessible.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Lay the affected person down, and keep her or him warm and calm. In case of irregular breathing or respiratory arrest: Give oxygen or artificial respiration if necessary. Consult a physician for severe cases.

First-aid measures after skin contact : Take off contaminated clothing. Wash affected skin with water or mild detergent. If skin irritation persists, call a physician.

First-aid measures after eye contact : Rinse the eyes with the lids open for several minutes under running water. Keep eye wide open while rinsing. Remove contact lenses after the first 1 - 2 minutes and continue flushing. If irritation persists, consult an eye specialist immediately.

First-aid measures after ingestion : Do not induce vomiting. Immediately call a POISON CENTER/doctor. Never give anything by mouth to an unconscious person. If swallowed or in the event of vomiting, risk of product entering the lungs. In the event of spontaneous nausea and unconsciousness, keep the head back and bring the patient into the recovery position.

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

Symptoms/effects after inhalation : Inhalation of vapours in high concentration may cause irritation of respiratory tract. May cause: cough, lachrymation.

Symptoms/effects after skin contact : Prolonged skin contact can lead to defatting of the skin or to irritation. Drying out of the skin due to defatting. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Causes serious eye irritation. Main symptoms: Redness, pain.

Symptoms/effects after ingestion : Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache).

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

Symptomatic treatment (decontamination and vital functions). If necessary, contact poison centre. Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours. Victim to lie down in the recovery position, cover and keep him warm. Ethylene glycol is metabolized to oxalic acid. Symptoms of poisoning can be delayed by administering ethanol (in the form of a 5% solution in a physiological salt solution, to maintain a blood level of 1 - 2 mg/ml). This treatment is only effective when it is begun within 6 hours after exposure. In the case of emergency the effect of the simultaneously administered dosis of ethandiol and ethanol must be checked according to each individual case.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, or water spray or regular foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : Vapours may form explosive mixture with air.

Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

5.3. Advice for firefighters

Precautionary measures fire : Secure the danger area. For safety reasons in case of fire, cans should be stored separately in closed containments.

Firefighting instructions : Exercise caution when fighting any chemical fire. Remove intact containers immediately from the dangerous area and/or cool them with water. Water mist may be used to cool closed containers.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. In the event of fire, wear self-contained breathing apparatus. Complete protection suit and compressed air breathing apparatus. Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. Clothing for firefighters which comply with the European norm EN 469 (including helmet, protective boots, protective gloves) provide a basic protection for accident with chemicals. In closed premises : Positive pressure self-contained breathing apparatus (SCBA) and structural fire-fighters protective clothing.

Other information : Prevent extinguishing water used by the fire department, or any other forms of the diluted product, from ending up in surface water or drinking water reservoirs. Prevent liquid from entering sewers, watercourses, underground or low areas. Contaminated extinguishing water and soil must be disposed of in accordance with official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Eliminate every possible source of ignition. Do not smoke. Ensure adequate ventilation, especially in confined areas. Keep public away from danger area. Avoid contact with skin and eyes. Do not breathe in vapours and mist. Equip cleanup crew with proper protection. Slipping hazard due to leakage.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Dike for recovery or absorb with appropriate material. Prevent entry to sewers and public waters. Avoid escape in basement or enclosed areas. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Prevent further leakage or spillage if safe to do so. Recover the product with absorbent material.

Methods for cleaning up : Location of spill or leak: Ventilate well. Contain the product immediately by taking suitable action. Keep away from sources of ignition - No smoking. Spilled or leaking material is to be soaked up with non-flammable absorbent materials (sand, soil, diatomaceous earth) and put in containers. In the event of large-scale leakage, pump into suitable and properly labeled containers. Do not use unlabelled containers. Use a spark-free tool. Dispose of the material collected according to regulations.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Keep product and empty container away from heat and sources of ignition. Do not smoke. Emtied containers can contain residues of product. Empty containers can contain flammable and explosive vapours. Do not burn, or use a cutting torch on the empty drum. Vapours are heavier than air and may spread along floors. Flash back possible over considerable distance.

Precautions for safe handling	: Provide adequate ventilation and/or exaust ventilation. Keep away from open flames, hot surfaces, and sources of ignition. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep container tightly closed. Do not breathe in vapours. Wear personal protective equipment. See information supplied by the manufacturer. Take notice of the directions of use on the label.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink, or smoke. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Preventive skin protection by skin protection cream. Remove and wash contaminated clothing before re-use. Eye wash fountains and safety showers must be easily accessible.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Provide local exhaust or general room ventilation.
Storage conditions	: Store in compliance with the local regulations. Store in a closed container. Protect from freezing. Keep away from naked flames/heat. Keep away from sources of ignition - No smoking. Store in a dry place. Store in a well-ventilated place. Avoid contamination with incompatible materials.
Information on mixed storage	: Keep away from food and drink.
Storage area	: Smoking in the storage rooms is forbidden. Prevent unauthorised access.
Special rules on packaging	: Only store product in original container.

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

ethanol; ethyl alcohol (64-17-5)	
United Kingdom - Occupational Exposure Limits	
Local name	Ethanol
WEL TWA (OEL TWA) [1]	1920 mg/m³
WEL TWA (OEL TWA) [2]	1000 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

ethanediol; ethylene glycol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylene glycol
IOEL TWA	52 mg/m³
IOEL TWA [ppm]	20 ppm
IOEL STEL	104 mg/m³
IOEL STEL [ppm]	40 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom - Occupational Exposure Limits	
Local name	Ethane-1,2-diol
WEL TWA (OEL TWA) [1]	10 mg/m³ particulate 52 mg/m³ vapour
WEL TWA (OEL TWA) [2]	20 ppm vapour
WEL STEL (OEL STEL)	104 mg/m³ vapour
WEL STEL (OEL STEL) [ppm]	40 ppm vapour
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

butanone; ethyl methyl ketone (78-93-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Butanone
IOEL TWA [ppm]	200 ppm
IOEL STEL	900 mg/m³
IOEL STEL [ppm]	300 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom - Occupational Exposure Limits	
Local name	Butan-2-one (methyl ethyl ketone)
WEL TWA (OEL TWA) [1]	600 mg/m³
WEL TWA (OEL TWA) [2]	200 ppm
WEL STEL (OEL STEL)	899 mg/m³
WEL STEL (OEL STEL) [ppm]	300 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
United Kingdom - Biological limit values	
Local name	Butan-2-one (methyl ethyl ketone)
BMGV	70 µmol/l Parameter: butan-2-one - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
United Kingdom - Occupational Exposure Limits	
Local name	Propan-2-ol
WEL TWA (OEL TWA) [1]	999 mg/m³
WEL TWA (OEL TWA) [2]	400 ppm
WEL STEL (OEL STEL)	1250 mg/m³
WEL STEL (OEL STEL) [ppm]	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

2-ethylhexan-1-ol (104-76-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-ethylhexan-1-ol
IOEL TWA	5.4 mg/m³
IOEL TWA [ppm]	1 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164
United Kingdom - Occupational Exposure Limits	
Local name	2-ethylhexan-1-ol
WEL TWA (OEL TWA) [1]	5.4 mg/m³
WEL TWA (OEL TWA) [2]	1 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). 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

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Good ventilation of the workplace required. This can be achieved by local or space exhaust. If this is not sufficient, in order to hold the solvent vapour concentration lower than the occupational exposure limit an approved respiratory protection apparatus must be worn. Electrical equipment should be protected to the appropriate standard.

Personal protective equipment:

Personal protection equipment should comply with the relevant standards, be suitable for purpose, in good condition and maintained as specified. Eye wash fountains and safety showers must be easily accessible.

Hand protection:

In case of repeated or prolonged contact wear gloves. Chemically resistant protective gloves (DIN EN 374). Safety gloves should be selected for the actual conditions of use and in accordance with the instructions for use provided by the manufacturer. Please note that the daily use of a chemical glove in practice may be considerably shorter than the permeation time calculated in EN 374 as a result of many different factors (for example temperature). Protective gloves should be replaced immediately if damaged or in case of signs of wear. Protection cream can help to protect the skin surface. It should be applied before use.

Eye protection:

Protective goggles (EN 166)

Skin and body protection:

Wear suitable protective clothing. Contaminated work clothing should not be allowed out of the workplace.

Respiratory protection:

Not required when area is well ventilated. In case of insufficient ventilation, wear suitable respiratory equipment. Do not inhale vapour

Personal protective equipment symbol(s):

Environmental exposure controls:

Do not discharge the product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Appearance	: clear.
Odour	: Fruity.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: -40 °C
Boiling point	: > 35 °C
Flammability	: Not available
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 21 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 7.5
Viscosity, kinematic	: Not available

Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: 0.9015 g/cm³ (at 20 °C)
Relative density	: Not available
Relative vapour density at 20 °C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under proper storage and handling.

10.3. Possibility of hazardous reactions

No dangerous reactions occur under normal storage conditions and in normal use.

10.4. Conditions to avoid

Keep away from sources of ignition - No smoking. Keep away from naked flames/heat. Avoid sparks. Protect from moisture. Protect from freezing.

10.5. Incompatible materials

Keep away from : Water, humidity.

10.6. Hazardous decomposition products

Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

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

2,6-dimethyloct-7-en-2-ol; dihydromyrcenol (18479-58-8)	
LD50 oral rat	3020 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg bodyweight

ethanol; ethyl alcohol (64-17-5)	
LD50 oral rat	10470 mg/kg bodyweight (OECD 401 method)
LC50 Inhalation - Rat	124.7 mg/l/4h (OECD 403 method)

ethanediol; ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg (male/female)
LD50 dermal rat	3500 mg/kg (male/female)
LC50 Inhalation - Rat	> 2.5 mg/l /6h - (male/female)

butanone; ethyl methyl ketone (78-93-3)	
LD50 oral rat	2391 mg/kg bodyweight (OECD 423 method)
LD50 dermal rabbit	> 10 mg/kg (OECD 402 method)
alcohols, C11-15, secondary, ethoxylated (68131-40-8)	
LD50 oral rat	≥ 2000 mg/kg bodyweight female - (OECD 423 method) - Test method EU B.1 - EPA OPPTS 870.1100
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method) - Test method EU B.2
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LD50 oral rat	5840 mg/kg (OECD 401 method)
LD50 dermal rabbit	16.4 ml/kg (OECD 402 method)
LC50 Inhalation - Rat [ppm]	> 10000 ppm (6 h) - (OECD 403 method)
2-ethylhexan-1-ol (104-76-7)	
LD50 oral rat	≈ 2047 mg/kg bodyweight (OECD 401 method)
LD50 dermal rat	> 3000 mg/kg bodyweight (OECD 402 method)
LC50 Inhalation - Rat	0.89 – 5.3 mg/l air (OECD 403 method)
tartrazine (1934-21-0)	
LD50 oral	> 1000 mg/kg bodyweight (mouse)
3,7-dimethylnona-2,6-dienenitrile (61792-11-8)	
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)
2,6-dimethyloctan-2-ol (18479-57-7)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rabbit	> 5000 mg/kg bodyweight (OECD 402 method)

Skin corrosion/irritation : Not classified
pH: 7.5

Serious eye damage/irritation : Causes serious eye irritation.
pH: 7.5

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

ethanol; ethyl alcohol (64-17-5)	
NOAEL (chronic, oral, animal/male, 2 years)	> 4250 mg/kg bodyweight (EPA OPPTS 870.4200)
NOAEL (chronic, oral, animal/female, 2 years)	> 4400 mg/kg bodyweight (EPA OPPTS 870.4200)
ethanediol; ethylene glycol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1000 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	1000 mg/kg bodyweight
tartrazine (1934-21-0)	
NOAEL (chronic, oral, animal/male, 2 years)	2641 mg/kg bodyweight (OECD 453 method)
NOAEL (chronic, oral, animal/female, 2 years)	3348 mg/kg bodyweight (OECD 453 method)

Reproductive toxicity : Not classified

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
NOAEL (animal/male, F0/P)	500 mg/kg bodyweight (OECD 416 method)
NOAEL (animal/female, F0/P)	500 mg/kg bodyweight (OECD 416 method)
NOAEL (animal/male, F1)	1000 mg/kg bodyweight (OECD 416 method)
NOAEL (animal/female, F1)	1000 mg/kg bodyweight (OECD 416 method)

STOT-single exposure : Not classified

2,6-dimethyloct-7-en-2-ol; dihydromyrcenol (18479-58-8)	
STOT-single exposure	May cause drowsiness or dizziness.

butanone; ethyl methyl ketone (78-93-3)	
STOT-single exposure	May cause drowsiness or dizziness.

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.

2-ethylhexan-1-ol (104-76-7)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

ethanol; ethyl alcohol (64-17-5)	
LOAEL (oral, rat, 90 days)	3200 mg/kg bodyweight male - (OECD 408 method)
NOAEL (oral, rat, 90 days)	1730 mg/kg bodyweight male - (OECD 408 method)

ethanediol; ethylene glycol (107-21-1)	
NOAEL (subchronic, oral, animal/male, 90 days)	150 mg/kg bodyweight (OECD 408 method)
STOT-repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure.

butanone; ethyl methyl ketone (78-93-3)	
NOAEC (inhalation, rat, vapour, 90 days)	14870 mg/l/6h/day (OECD 413 method)

2-ethylhexan-1-ol (104-76-7)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight (OECD 408 method)
NOAEC (inhalation, rat, gas, 90 days)	120 ppm (OECD 413 method)

Aspiration hazard : Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms :

Toxicokinetics, metabolism and distribution : Ethanol : The substance penetrates the blood-brain barrier and placenta. Ethylene glycol is metabolized to oxalic acid.

Experience with humans : Ethanediol (CAS 107-21-1): This substance is suspected to induce renal toxicity. LDlo (oral, human): approx. 100 ml. (Deadly dose)

Other information : No more data.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No known adverse effects on the functioning of water treatment plants under normal use conditions as recommended.

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

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

2,6-dimethyloct-7-en-2-ol; dihydromyrcenol (18479-58-8)	
LC50 - Fish [1]	27.8 mg/l Oncorhynchus mykiss (Rainbow trout) - (OECD 203 method)
EC50 - Crustacea [1]	38 mg/l Daphnia magna (Water flea) - (OECD 202 method)
EC50 72h - Algae [2]	65 mg/l Desmodesmus subspicatus - (OECD 201 method)
ErC50 algae	80 mg/l Desmodesmus subspicatus - (OECD 201 method)
NOEC (chronic)	9.5 mg/l Daphnia magna (Water flea) - (OECD 211 method)

2,6-dimethyloct-7-en-2-ol; dihydromyrcenol (18479-58-8)	
NOEC chronic algae	25 mg/l Desmodesmus subspicatus - (OECD 201 method)
ethanol; ethyl alcohol (64-17-5)	
LC50 - Fish [1]	14200 mg/l Pimephales promelas - (EPA E03-05)
LC50 - Fish [2]	15300 mg/l Pimephales promelas - (EPA E03-05)
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna (Water flea) - (DIN 38412-11)
EC50 - Crustacea [2]	5012 mg/l Daphnia magna (Water flea) - (ASTM E729-80)
EC50 72h - Algae [1]	275 mg/l Pseudokirchneriella subcapitata - (OECD 201 method)
NOEC (chronic)	9.6 mg/l 9 d - Daphnia magna (Water flea) - (semi-static test)
NOEC chronic fish	250 mg/l Danio rerio (zebra-fish) - (OECD 212 method)
NOEC chronic algae	11.5 mg/l Pseudokirchneriella subcapitata - (OECD 201 method)
ethanediol; ethylene glycol (107-21-1)	
LC50 - Fish [1]	72860 mg/l (EPA 600/4-90/027)
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna (Water flea) - (OECD 402 method)
EC50 72h - Algae [1]	6500 – 13000 mg/l Pseudokirchneriella subcapitata - (EPA 600/9-78-018)
NOEC chronic fish	15380 mg/l Pimephales promelas - (EPA 600/4-89/001)
NOEC chronic crustacea	8590 mg/l Daphnia magna (Water flea) - (EPA 600/4-89/001)
NOEC chronic algae	> 100 mg/l Pseudokirchneriella subcapitata - (OECD 201 method)
butanone; ethyl methyl ketone (78-93-3)	
LC50 - Fish [1]	2973 mg/l Pimephales promelas - (OECD 203 method)
EC50 - Crustacea [1]	308 mg/l Daphnia magna (Water flea) - (OECD 202 method)
EC50 - Other aquatic organisms [1]	1150 mg/l Pseudomonas putida - (DIN 38412-8)
EC50 72h - Algae [1]	1220 mg/l Pseudokirchneriella subcapitata - static test - (OECD 201 method) - inhibition of growth
EC50 96h - Algae [1]	1240 mg/l Pseudokirchneriella subcapitata - static test - 96 h/(OECD 201 method) - inhibition of growth
NOEC chronic algae	1050 mg/l Pseudokirchneriella subcapitata - static test - 72 h/(OECD 201 method) - inhibition of growth
alcohols, C11-15, secondary, ethoxylated (68131-40-8)	
LC50 - Fish [1]	1.53 mg/l Oncorhynchus mykiss (Rainbow trout) - (OECD 203 method) - Test method EU C.1
EC50 - Crustacea [1]	5.66 mg/l Daphnia magna (Water flea) - (OECD 202 method) - Test method EU C.2
EC50 72h - Algae [1]	2.01 mg/l Pseudokirchneriella subcapitata - (OECD 201 method) - Test method EU C.3
NOEC (chronic)	0.2 mg/l 21 d - (Quantitative structure-activity relationship (QSAR)
NOEC chronic fish	0.87 mg/l (Quantitative structure-activity relationship (QSAR)
NOEC chronic algae	0.305 mg/l Pseudokirchneriella subcapitata - (OECD 201 method) - Test method EU C.3
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LC50 - Fish [1]	9640 mg/l Pimephales promelas - (OECD 203 method)
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna (Water flea) - (OECD 202 method)
NOEC chronic algae	1800 mg/l Scenedesmus quadricauda
2-ethylhexan-1-ol (104-76-7)	
LC50 - Fish [1]	17.1 mg/l Carp (Leuciscus idus melanotus) - Test method EU C.1
LC50 - Fish [2]	28.2 mg/l Pimephales promelas - (OECD 203 method)
EC50 - Crustacea [1]	39 mg/l Daphnia magna (Water flea) - Test method EU C.2

2-ethylhexan-1-ol (104-76-7)	
EC50 72h - Algae [1]	11.5 mg/l Desmodesmus subspicatus - (Test method EU C.3)
EC50 72h - Algae [2]	16.6 mg/l Desmodesmus subspicatus - (Test method EU C.3)
NOEC chronic algae	5.3 mg/l Desmodesmus subspicatus - (Test method EU C.3)

tartrazine (1934-21-0)	
LC50 - Fish [1]	> 120 mg/l Danio rerio (zebra-fish) - (OECD 203 method)
EC50 - Crustacea [1]	> 125 mg/l Daphnia magna (Water flea) - (OECD 202 method)
EC50 72h - Algae [1]	> 125 mg/l Desmodesmus subspicatus - (OECD 201 method)

3,7-dimethylnona-2,6-dienenitrile (61792-11-8)	
LC50 - Fish [1]	2.4 mg/l
EC50 - Crustacea [1]	2.7 mg/l Daphnia magna (Water flea)
EC50 72h - Algae [1]	3.6 mg/l Pseudokirchneriella subcapitata
EC50 96h - Algae [1]	3.6 mg/l Pseudokirchneriella subcapitata

2,6-dimethyloctan-2-ol (18479-57-7)	
LC50 - Fish [1]	4.73 mg/l
EC50 72h - Algae [1]	80 mg/l Desmodesmus subspicatus
EC50 72h - Algae [2]	65 mg/l Desmodesmus subspicatus

12.2. Persistence and degradability

2,6-dimethyloct-7-en-2-ol; dihydromyrcenol (18479-58-8)	
Persistence and degradability	Readily biodegradable.
Biodegradation	72 % (OECD 301B method)

ethanol; ethyl alcohol (64-17-5)	
Persistence and degradability	Readily biodegradable.
Biodegradation	84 % (20 days)

ethanediol; ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	> 90 % 10 d - (OECD 301A method)

butanone; ethyl methyl ketone (78-93-3)	
Persistence and degradability	Highly biodegradable.
Biodegradation	98 % 28 d - (OECD 301D method)

alcohols, C11-15, secondary, ethoxylated (68131-40-8)	
Persistence and degradability	Readily biodegradable.
Biodegradation	> 98 % 28 d - (OECD 301C method)

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Persistence and degradability	Readily biodegradable (BOD5/ThOD ≥ 0.5). (Test method EU C.5).

2-ethylhexan-1-ol (104-76-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	100 % (OECD 301C method)

12.3. Bioaccumulative potential

2,6-dimethyloct-7-en-2-ol; dihydromyrcenol (18479-58-8)	
Bioconcentration factor (BCF REACH)	64.8 Quantitative structure-activity relationship (QSAR)
Partition coefficient n-octanol/water (Log Pow)	3.25 (OECD 117 method)

ethanol; ethyl alcohol (64-17-5)	
BCF - Fish [1]	1 – 4.5 (72 h) - Cyprinus carpio (Common carp)
Partition coefficient n-octanol/water (Log Pow)	-0.35 (OECD 107 method)

ethanediol; ethylene glycol (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Quantitative structure-activity relationship (QSAR))

butanone; ethyl methyl ketone (78-93-3)	
Partition coefficient n-octanol/water (Log Pow)	0.3 (OECD 117 method)

alcohols, C11-15, secondary, ethoxylated (68131-40-8)	
Bioconcentration factor (BCF REACH)	3010 Quantitative structure-activity relationship (QSAR)
Partition coefficient n-octanol/water (Log Pow)	7.1
Bioaccumulative potential	Bioaccumulative. vB: None.

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Partition coefficient n-octanol/water (Log Pow)	0.05 (at 25 °C) - (Quantitative structure-activity relationship (QSAR)
Bioaccumulative potential	Low bioaccumulation potential.

2-ethylhexan-1-ol (104-76-7)	
Bioconcentration factor (BCF REACH)	38.06 (Quantitative structure-activity relationship (QSAR))/(BCFBAF v.3.01)
Partition coefficient n-octanol/water (Log Pow)	2.9 (OECD 117 method)

12.4. Mobility in soil

ethanol; ethyl alcohol (64-17-5)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.2 (Quantitative structure-activity relationship (QSAR))

ethanediol; ethylene glycol (107-21-1)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (Quantitative structure-activity relationship (QSAR))/(PCKOCWIN v 1.66)

butanone; ethyl methyl ketone (78-93-3)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.2 (Quantitative structure-activity relationship (QSAR))

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects :

Additional information : Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Avoid subsoil penetration

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Do not discharge the product into the environment. May not end up in waste water or open waters.

Product/Packaging disposal recommendations : Dispose of this material and its container to hazardous or special waste collection point. Collect all waste in suitable and labelled containers and dispose according to local legislation. Recovery or recycling, if possible. Packaging material: Disposal must be done according to official regulations. Empty the packaging completely prior to disposal. Do not re-use empty containers. Emtied containers can contain residues of product. Empty containers can contain flammable and explosive vapours. Handle and open container with care. Keep away from heat and sources of ignition.

Additional information : Waste code numbers are a recommendation, since the intended use by the consumer allows a final assignment.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 20 01 29* - detergents containing dangerous substances
15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

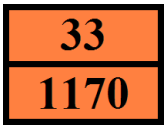
In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1170	1170	1170	1170	1170
14.2. UN proper shipping name				
ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Ethanol solution	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Transport document description				
UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II, (D/E)	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II	UN 1170 Ethanol solution, 3, II	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1
Special provisions (ADR) : 144, 601
Limited quantities (ADR) : 1l
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001, IBC02, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1
Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage - Operation (ADR) : S2, S20
Hazard identification number (Kemler No.) : 33
Orange plates :



Tunnel restriction code (ADR) : D/E
EAC code : •2Y

Transport by sea

Special provisions (IMDG) : 144

Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Colourless, volatile liquids.Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19% Miscible with water.

Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3, A58, A180
ERG code (IATA)	: 3L

Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 144, 601
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1

Rail transport

Classification code (RID)	: F1
Special provisions (RID)	: 144, 601
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 33

14.7. Maritime transport in bulk according to IMO instruments

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

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
3(a)	Screen Wash (Concentrate) ; ethanol; ethyl alcohol ; butanone; ethyl methyl ketone ; propan-2-ol; isopropyl alcohol; isopropanol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	Screen Wash (Concentrate) ; 2,6-dimethyloct-7-en-2-ol; dihydromyrcenol ; ethanol; ethyl alcohol ; ethanediol; ethylene glycol ; butanone; ethyl methyl ketone ; alcohols, C11-15, secondary, ethoxylated ; propan-2-ol; isopropyl alcohol; isopropanol ; 2-ethylhexan-1-ol ; 2,6-dimethyloctan-2-ol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	alcohols, C11-15, secondary, ethoxylated ; 3,7-dimethylnona-2,6-dienenitrile	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	ethanol; ethyl alcohol ; butanone; ethyl methyl ketone ; propan-2-ol; isopropyl alcohol; isopropanol	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

Contains no substance on the REACH candidate list

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 : 59.32 % DIRECTIVE 2004/42/CE Annex II
535 g/l DIRECTIVE 2004/42/CE Annex II

Other information, restriction and prohibition regulations : Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Detergent Regulation (648/2004/EC): Ingredient data sheet:		
Component	**CAS-No.**	**%**
ALCOHOL	64-17-5	≥10%
GLYCOL	107-21-1	0.1 - 1%
MEK	78-93-3	0.1 - 1%
ISOPROPYL ALCOHOL	67-63-0	0.1 - 1%
Tartrazine	1934-21-0	<0.1%
ETHYLHEXANOL	104-76-7	<0.1%
Parfum		<0.1%
C11-15 SEC-PARETH-12	68131-40-8	<0.1%

Detergent Regulation : Labelling of contents::	
Component	**%**
perfumes	

Directive 2012/18/EU (SEVESO III)

Seveso Additional information : FLAMMABLE LIQUIDS
Flammable liquids, Categories 2 or 3 not covered by P5a and P5b

15.1.2. National regulations

The national regulations have to be complied with as necessary.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier.

SECTION 16: Other information

Indication of changes:

All chapters have been modified since the previous version.

Abbreviations and acronyms:

ATE = Acute Toxicity Estimate
DNEL = Derived No Effect Level
PNEC = Predicted No-Effect Concentration
NOEL = No Observed Effect Level
NOEC = No-Observed-Effect-Concentration
NOAEL = No Observed Adverse Effect Level
LOAEL = Lowest Observed Adverse Effect Level
SADT = Self-Accelerating decomposition temperature
SVHC = substance of very high concern
VOC = Volatile organic compounds
IUCLID = International Uniform Chemical Information Database
OECD = Organization for Economic Co-operation and Development
RTECS = Registry of Toxic Effects of Chemical Substances
RTECS = Registry of Toxic Effects of Chemical Substances
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
CLP = Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EINECS = European Inventory of Existing Commercial Chemical Substances

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

Full text of H- and EUH-statements:	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

The classification complies with : ATP 12

Other information :

The information is based on present levels of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The product is to be used exclusively for the applications named in the technical data sheet or in the processing instructions. Existing laws and regulations are the responsibility of the recipient of our products. The data of the hazardous ingredients were taken from the last relevant safety data sheet of the subcontractor.