

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

HEATSAVR / ECOSAVR

Version 3.1

Print Date 2016/08/04

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MSDS code: MAAE484

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name : HEATSAVR / ECOSAVR

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

Use of the Substance/Mixture : Water treatment for swimming pools and spas. Evaporation inhibitor.

Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : Brenntag UK & Ireland
Albion House, Rawdon Park
GB LS19 7XX Leeds Yeadon

Telephone : +44 (0) 113 3879 200
Telefax : +44 (0) 113 3879 280
E-mail address : msds@brenntag.co.uk

1.4. Emergency telephone numberEmergency telephone number : Emergency only telephone number (open 24 hours):
+44 (0) 1865 407333 (N.C.E.C. Culham)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	Hazard category	Target Organs	Hazard statements
Flammable liquids	Category 2	---	H225
Eye irritation	Category 2	---	H319
Specific target organ toxicity - single exposure	Category 3	---	H336



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For the full text of the H-Statements mentioned in this Section, see Section 16.

Most important adverse effects

Human Health	:	See section 11 for toxicological information.
Physical and chemical hazards	:	See section 9 for physicochemical information.
Potential environmental effects	:	See section 12 for environmental information.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008**

Hazard symbols	:	 
Signal word	:	Danger
Hazard statements	:	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statements		
Prevention	:	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P243 Take precautionary measures against static discharge. P260 Do not breathe vapours.
Response	:	P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. P308 + P313 IF exposed or concerned: Get medical advice/ attention.
Storage	:	P403 + P233 + P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.

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	P405	Store locked up.
Disposal	: P501	Dispose of contents/ container in accordance with the local/regional/international regulations.

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
ethanol			
Index-No. : 603-002-00-5	> 80 - < 85	Flam. Liq.2	H225
CAS-No. : 64-17-5		Eye Irrit.2	H319
EC-No. : 200-578-6			
propan-2-ol			
Index-No. : 603-117-00-0	> 4 - < 5	Flam. Liq.2	H225
CAS-No. : 67-63-0		Eye Irrit.2	H319
EC-No. : 200-661-7		STOT SE3	H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	: Remove from exposure, lie down. Take off all contaminated clothing immediately. Remove contaminated clothing immediately.
If inhaled	: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position. Call a poison center or doctor if exposed or you feel unwell.
In case of skin contact	: Wash off immediately with plenty of water. If skin irritation persists, call a physician.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately.

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Go to an ophthalmic hospital if possible.

If swallowed : Rinse mouth with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Call a physician or poison control centre immediately.

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

Symptoms : Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. See Section 11 for more detailed information on health effects and symptoms.

Effects : See Section 11 for more detailed information on health effects and symptoms.

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

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry powder, Carbon dioxide (CO₂), Alcohol-resistant foam

Unsuitable extinguishing media : High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : The vapour may be invisible, heavier than air and spread along ground. Vapours may form explosive mixtures with air. Flash back possible over considerable distance.

Hazardous combustion products : Carbon monoxide, Carbon dioxide (CO₂)

5.3. Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Wear personal protective equipment.

Further advice : Cool closed containers exposed to fire with water spray. Heating will cause a pressure rise - with risk of bursting. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Personal precautions : Keep away from heat and sources of ignition. Use personal protective equipment. Keep away unprotected persons. Provide adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapours or spray mist.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep in an area equipped with solvent resistant flooring.

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking. The vapour may be invisible, heavier than air and spread along ground. Vapours may form explosive mixtures with air. Take measures to prevent the build up of electrostatic charge. Use only in an area containing explosion proof equipment.

Further information on storage conditions : Keep tightly closed in a dry and cool place. Keep away from direct sunlight. Keep in a well-ventilated place.

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Advice on common storage : Incompatible with strong acids and oxidizing agents. Alkali metals Do not store together with oxidizing and self-igniting products. Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Component:	ethanol	CAS-No. 64-17-5
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Other Occupational Exposure Limit Values

UK. EH40 Workplace Exposure Limits (WELs), Time Weighted Average (TWA):
1,000 ppm, 1,920 mg/m³

ELV (IE), Short Term Exposure Limit (STEL):
1,000 ppm

Component:	propan-2-ol	CAS-No. 67-63-0
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Other Occupational Exposure Limit Values

UK. EH40 Workplace Exposure Limits (WELs), Short Term Exposure Limit (STEL):
500 ppm, 1,250 mg/m³

UK. EH40 Workplace Exposure Limits (WELs), Time Weighted Average (TWA):
400 ppm, 999 mg/m³

ELV (IE), Skin designation:
Can be absorbed through the skin.

ELV (IE), Time Weighted Average (TWA):
200 ppm

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection

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Advice : In case of insufficient ventilation, wear suitable respiratory equipment.
Respiratory protection complying with EN 141.
In the case of vapour formation use a respirator with an approved filter.

Filter Type : Recommended Filter type:AX
Organic gas and low boiling vapour type

Hand protection

Advice : Protective gloves complying with EN 374.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.
Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Protective gloves should be replaced at first signs of wear.

Advice : The following materials are suitable:
butyl-rubber
Viton (R)
Neoprene gloves

Advice : Unsuitable materials:
natural rubber
Polyvinyl alcohol
PVC gloves

Eye protection

Advice : Safety goggles

Skin and body protection

Advice : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Wear appropriate chemical resistant clothing and boots.
Solvent resistant protective clothing

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

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Form	:	Liquid
Colour	:	light blue
Odour	:	alcohol-like
Odour Threshold	:	no data available
pH	:	no data available
Melting point/range	:	ca. -100 °C
Boiling point/boiling range	:	78 - 83 °C
Flash point	:	13 °C (Tag closed cup)
Evaporation rate	:	1.7 (Butyl Acetate = 1)
Flammability (solid, gas)	:	Highly flammable.
Upper explosion limit	:	12 - 19 %(V)
Lower explosion limit	:	ca. 2.5 - 3.3 %(V)
Vapour pressure	:	44 - 59 hPa (20 °C)
Relative vapour density	:	1.61 (Air = 1.0)
Relative density	:	0.7882 (20 °C)
Water solubility	:	soluble
Solubility in other solvents	:	(Diethylether) soluble (Acetone) soluble (Benzene) soluble (Chloroform) soluble (methanol) soluble (organic solvent) soluble
Partition coefficient: n-octanol/water	:	no data available

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Auto-ignition temperature	:	370 °C
Thermal decomposition	:	no data available
Viscosity, dynamic	:	ca. 1.35 mPa.s (20 °C)
Explosivity	:	Formation of explosive air/vapour mixtures is possible. Product is not explosive.
Oxidizing properties	:	not oxidising

9.2. Other information

No further information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Incompatible products

10.4. Conditions to avoid

Conditions to avoid : Keep away from heat and sources of ignition.Heat, flames and sparks.Keep away from direct sunlight.

10.5. Incompatible materials

Materials to avoid : Strong oxidizing agents, Strong acids, Alkali metals

10.6. Hazardous decomposition products

Hazardous decomposition products : Carbon oxides, Formaldehyde, Alcohols

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Data for the product

Acute toxicity

Oral

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no data available

Inhalation

no data available

Dermal

no data available

Irritation**Skin**

no data available

Eyes

Result : Causes serious eye irritation.

Sensitisation

no data available

CMR effects**CMR Properties**

Carcinogenicity : no data available

Mutagenicity : no data available

Reproductive toxicity : no data available

Specific Target Organ Toxicity**Single exposure**

no data available

Repeated exposure

no data available

Other toxic properties**Repeated dose toxicity**

no data available

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no data available

Component: ethanol CAS-No. 64-17-5**Acute toxicity****Oral**

LD50 : 5000 mg/kg (Rat)

Inhalation

LC50 : > 1800 mg/l (Rat; 4 h) (OECD Test Guideline 403)

Dermal

LD50 : > 10000 mg/kg (Rabbit)

Irritation**Skin**

Result : No skin irritation (Rabbit) (OECD Test Guideline 404)

Eyes

Result : Moderate eye irritation (Rabbit) (OECD Test Guideline 405)

SensitisationResult : not sensitizing (Guinea pig) (Maximisation Test)
not sensitizing (Inhalation; Rat)**CMR effects****CMR Properties**

Carcinogenicity : Not expected to be carcinogenic.

Mutagenicity : Not mutagenic in Ames Test
It is not considered mutagenic.

Teratogenicity : no data available

Reproductive toxicity : No toxicity to reproduction

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Result : negative (Bacterial Reverse Mutation Test; Salmonella typhimurium; with and without metabolic activation) (OECD Test Guideline 471)

negative (In vitro gene mutation study in mammalian cells; Mouse Lymphoma Cells; with and without metabolic activation) (OECD Test Guideline 476)

Genotoxicity in vivo

Result : Positive as well as negative results were obtained. (Dominant lethal assay; Mouse, male) (Oral; 5 days) (OECD Test Guideline 478)

negative (Chromosome aberration test in vivo; Hamster, male and female) (Oral;) (OECD Test Guideline 475)

Teratogenicity

LOAEL Develop. : 8,200 mg/kg bw/day
(Rat, Sprague-Dawley)
(6 Weeks)
(No guideline followed)
Reduced skeletal ossification.

NOAEL Develop. : 5,200 mg/kg bw/day
(Rat, Sprague-Dawley)
(6 Weeks)
(No guideline followed)

NOAEL Maternal : >= 20,000 ppm

NOAEL Teratog. : 16,000 ppm
(Rat, Sprague-Dawley)
(Inhalation; 10,000, 16,000, 20,000 ppm; 7 hours/day)
(OECD Test Guideline 414)
Reduced maternal food consumption

Reproductive toxicity

NOAEL Parent : 21.5 mg/kg bw/day
(Mouse, male and female)
(OECD Test Guideline 416)
No negative effects.

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NOAEL : 13.8 mg/kg bw/day
F1
(Mouse, male and female)
(OECD Test Guideline 416)
Reduction in sperm motility.

Specific Target Organ Toxicity**Single exposure**

Remark : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remark : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties**Aspiration hazard**

No aspiration toxicity classification,

Further information

Other relevant toxicity information : Exposure to ethanol vapors may result in irritation of the eyes and nose, drowsiness and headache. Other symptoms may include stupor, nausea, mental excitement or depression, vomiting, flushing and coma. It can cause irritation of the respiratory tract, intra ocular tension, ataxia, sleepiness, narcosis, impaired perception and incoordination. It can also cause lowered inhibitions, dizziness, shallow respiration, unconsciousness and death.

Chronic symptoms of ingestion and/or vapor exposure may include weight loss, cirrhosis of the liver, gastroenteritis, anorexia, diarrhea, polyneuritis with pain, motor and sensory loss in the extremities, optic atrophy and loss or impairment of other abilities, excitement, acute and chronic gastritis, malabsorption syndrome, acute and chronic pancreatitis, anemia due to acute or chronic blood myopathy, alcoholic cardiomyopathy, lactic acidosis, hypomagnesemia, hypouricemia, hyperlipidemia, pulmonary aspiration and respiratory infections. Chronic exposure may also result in serious neurological and mental disorders (e.g. brain damage, memory loss, sleep disturbances, and psychoses). Other symptoms include mucous membrane irritation, central nervous system depression, giddiness, jaundice, pain in upper abdomen on the right side and staggering gait. It may cause liver, kidney and heart damage. The pupils are sometimes widely dilated and unreactive to light. The liquid can defat the skin, producing a dermatitis characterized by drying and fissuring. It rarely causes temporary blindness. Ingestion of this compound can enhance the

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effects of coumarin, anticoagulants, antihistamines, hypnotics, sedatives, tranquilizers, insulin, monoamine oxidase inhibitors, and antidepressants. Can cause reproductive and teratogenic effects

Experience with human exposure : Repeated and prolonged exposure to solvents may cause brain and nervous system damage.,

Component:	propan-2-ol	CAS-No. 67-63-0
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Acute toxicity**Oral**

LD50 : 5280 mg/kg (Rat)

Inhalation

LC50 : 72.6 mg/l (Rat; 4 h)

LC50 : 47.5 mg/l (Rat, female; 8 h)

Dermal

LD50 : 12800 mg/kg (Rabbit)

Irritation**Skin**

Result : No skin irritation (Rabbit)

Eyes

Result : Irritating to eyes. (Rabbit)

Sensitisation

Result : not sensitizing (Guinea pig) (Buehler Test)

CMR effects**CMR Properties**

Carcinogenicity : It is not considered carcinogenic.

Mutagenicity : It is not considered mutagenic.

Teratogenicity : It is not considered teratogenic.

Reproductive toxicity : It is not considered toxic for reproduction.

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Specific Target Organ Toxicity

Single exposure

Remark : Target Organs: Central nervous system
May cause drowsiness or dizziness.

Repeated exposure

Remark : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Aspiration hazard

No aspiration toxicity classification,

Further information

Other relevant toxicity information : Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Risk of product entering the lungs on vomiting after ingestion.
Liver injury may occur.

SECTION 12: Ecological information

12.1. Toxicity

Component:	ethanol	CAS-No. 64-17-5
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Acute toxicity

Fish

LC50 : > 2000 mg/l (Leuciscus idus melanotus; 96 h) (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

LC50 : 5012 mg/l (Ceriodaphnia dubia (water flea); 48 h) (static test; ASTM E 729-80)
Fresh water

algae

IC50 : > 100 mg/l (Scenedesmus subspicatus; 72 h) (OECD Test Guideline 201)

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Chronic toxicity

Fish

NOEC : 250 mg/l (Danio rerio (zebra fish); 120 h) (semi-static test; OECD Test Guideline 212)

Aquatic invertebrates

NOEC : 9.6 mg/l (Ceriodaphnia dubia (water flea); 10 d) (semi-static test; End point: Reproduction; No guideline followed)

Component: **propan-2-ol** **CAS-No. 67-63-0**

Acute toxicity

Fish

LC50 : 9640 mg/l (Pimephales promelas; 96 h)

Toxicity to daphnia and other aquatic invertebrates

EC50 : 13299 mg/l (Daphnia magna; 48 h)

algae

EC50 : > 1000 mg/l (Desmodesmus subspicatus (green algae); 72 h)

Bacteria

EC10 : 5175 mg/l (Pseudomonas putida; 18 h) (DIN 38412)

EC50 : > 1000 mg/l (activated sludge)
Respiration inhibition of activated sludge

12.2. Persistence and degradability

Data for the product

Persistence and degradability

Persistence

Result : The product is insoluble and floats on water.
The product evaporates easily from water surface.

Component: **ethanol** **CAS-No. 64-17-5**

Persistence and degradability

Persistence

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Result : no data available

Biodegradability

Result : > 70 % (Exposure Time: 5 d)(OECD Test Guideline 301D)
Readily biodegradable

Component:	propan-2-ol	CAS-No. 67-63-0
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Persistence and degradability

Persistence

Result : no data available

Biodegradability

Result : 95 % (Exposure Time: 21 d)(OECD Test Guideline 301E)
Readily biodegradable

Result : 99.9 % (Coupled Units Test ; OECD 303 A)

12.3. Bioaccumulative potential

Component:	ethanol	CAS-No. 64-17-5
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Bioaccumulation

Result : log Kow -0.35 (24 °C; pH 7.4) (OECD Test Guideline 107)
Does not bioaccumulate.

Component:	propan-2-ol	CAS-No. 67-63-0
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Bioaccumulation

Result : log Kow 0.05
Does not bioaccumulate.

12.4. Mobility in soil

Component:	ethanol	CAS-No. 64-17-5
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Mobility

Water : The product is water soluble.

Air : The product evaporates readily.

Soil : Not expected to adsorb on soil.

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Component:	propan-2-ol	CAS-No. 67-63-0
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Mobility

: The product is mobile in water environment.

12.5. Results of PBT and vPvB assessment

Data for the product

Results of PBT and vPvB assessment

Result : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Component:	ethanol	CAS-No. 64-17-5
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Results of PBT and vPvB assessment

Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Component:	propan-2-ol	CAS-No. 67-63-0
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Results of PBT and vPvB assessment

Result : no data available

12.6. Other adverse effects

Data for the product

Additional ecological information

Result : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Component:	ethanol	CAS-No. 64-17-5
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Biochemical Oxygen Demand (BOD)

Result : 100 mg/g

Chemical Oxygen Demand (COD)

Result : 1900 mg/g

Additional ecological information

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Result : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

Component:	propan-2-ol	CAS-No. 67-63-0
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Additional ecological information

Result : The product should not be allowed to enter drains, water courses or the soil.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

- Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.
- Contaminated packaging : Dispose of contaminated packaging in the same way as the product. In accordance with local and national regulations. Do not burn, or use a cutting torch on, the empty drum. Risk of explosion.
- European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information**14.1. UN number**

1987

14.2. UN proper shipping name

- ADR : ALCOHOLS, N.O.S.
(Ethanol, Isopropanol)
- RID : ALCOHOLS, N.O.S.
Special Provision 640D
(Ethanol, Isopropanol)
- IMDG : ALCOHOLS, N.O.S.
Special Provision 640D
(Ethanol, Isopropanol)

14.3. Transport hazard class(es)

ADR-Class : 3

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(Labels; Classification Code; Hazard identification No; Tunnel restriction code)	3; F1; 33; (D/E)
RID-Class	: 3
(Labels; Classification Code; Hazard identification No)	3; F1; 33
IMDG-Class	: 3
(Labels; EmS)	3; F-E, S-D

14.4. Packaging group

ADR	: II
RID	: II
IMDG	: II

14.5. Environmental hazards

Environmentally hazardous according to ADR	: no
Environmentally hazardous according to RID	: no
Marine Pollutant according to IMDG-Code	: no

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

SECTION 15: Regulatory information

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

Data for the product

Other regulations : Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

Component:	ethanol	CAS-No. 64-17-5
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EU. REACH, Annex XVII, : Point Nos.: , 40; Listed
Marketing and Use
Restrictions (Regulation
1907/2006/EC)

EU. Regulation No : EC Number: , 200-578-6; Listed
1451/2007 [Biocides],
Annex I, OJ (L 325)

EU. Directive : Lower-tier requirements: 10 tonnes; Part 1: Categories of
2012/18/EU (SEVESO dangerous substances; P5a: Flammable liquids; Category 1,
III) Annex I part of Category 2 or 3

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Upper-tier requirements: 50 tonnes; Part 1: Categories of dangerous substances; P5a: Flammable liquids; Category 1, part of Category 2 or 3

WGK (DE) : WGK 1: slightly water endangering: 96; Classification source is Annex 2.

Component:	propan-2-ol	CAS-No. 67-63-0
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EU. REACH, Annex XVII, : Point Nos.: , 40; Listed
Marketing and Use
Restrictions (Regulation
1907/2006/EC)

EU. Regulation No : EC Number: , 200-661-7; Listed
1451/2007 [Biocides],
Annex I, OJ (L 325)

EU. Directive : Lower-tier requirements: 10 tonnes; Part 1: Categories of
2012/18/EU (SEVESO dangerous substances; P5a: Flammable liquids; Category 1,
III) Annex I part of Category 2 or 3
Upper-tier requirements: 50 tonnes; Part 1: Categories of
dangerous substances; P5a: Flammable liquids; Category 1,
part of Category 2 or 3

WGK (DE) : WGK 1: slightly water endangering: 135; Classification source
is Annex 2.

15.2. Chemical safety assessment

no data available

SECTION 16: Other information**Full text of H-Statements referred to under sections 2 and 3.**

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Further information

Key literature references : Supplier information and data from the "Database of registered
and sources for data substances" of the European Chemicals Agency (ECHA) were
used to create this safety data sheet.

Other information : The information provided in this Safety Data Sheet is correct to
our knowledge at the date of its revision. The information given
only describes the products with regard to safety arrangements
and is not to be considered as a warranty or quality
specification and does not constitute a legal relationship.
The information contained in this Safety Data Sheet relates

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only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

|| Indicates updated section.