



NOWA FRIGO 10 L

WM 0713887

Order number: 0713887

Version 2.2

Revision Date 28.06.2018

Print Date 31.07.2019

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

1.1 Product identifier

Trade name : NOWA FRIGO 10 L
Identification number : 61868

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

Use of the Substance/Mixture : Cleaning agent
Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : tana Chemie GmbH
Rheinallee 96
55120 Mainz
Telephone : +49613196403
Telefax : +4961319642414
E-mail address : Produktsicherheit@werner-mertz.com
Responsible/issuing person :
Contact person : Product development / product safety

1.4 Emergency telephone number

+49(0)6131-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2 H225: Highly flammable liquid and vapour.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Specific target organ toxicity - single exposure, Category 3, Central nervous system H336: May cause drowsiness or dizziness.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger



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Hazard statements	: H225 H319 H336	Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.
Precautionary statements	: P102 Prevention: P210 P260 Response: P305 + P351 + P338 P337 + P313 Disposal: P501	Keep out of reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe spray. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:
propan-2-ol

Safety data sheet available on request.

2.3 Other hazards

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.
No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Aqueous surfactant solution.
contains
Alcohol

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
propan-2-ol	67-63-0 200-661-7 01-2119457558-25	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	>= 20 - < 25



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ethanol	64-17-5 200-578-6 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319 SCL >= 50 % 2; H319	>= 20 - < 25
ethane-1,2-diol	107-21-1 203-473-3 01-2119456816-28	Acute Tox. 4; H302 STOT RE 2; H373	>= 2 - < 5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.
Consult a physician after significant exposure.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
If symptoms persist, call a physician.
- In case of eye contact : Protect unharmed eye.
If easy to do, remove contact lens, if worn.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Irritation
- Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : For specialist advice physicians should contact the Poisons Information Service.



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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam, Dry chemical

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

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

Further information : Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Beware of vapours accumulating to form explosive concentrations.
Vapours can accumulate in low areas.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.

6.3 Methods and materials for containment and cleaning up

Methods for 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

For personal protection see section 8., Treat recovered material as described in the section "Disposal considerations"., Refer to section 15 for specific national regulation.



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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Container may be opened only under exhaust ventilation hood. Open drum carefully as content may be under pressure.
- Advice on protection against fire and explosion : Use explosion-proof equipment. Avoid formation of aerosol. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Store in original container. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards. Store at room temperature in the original container.
- Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

- Specific use(s) : Cleaning agent

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
ethane-1,2-diol	107-21-1	TWA	20 ppm 52 mg/m ³	2009-12-19	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skinIndicative			
ethane-1,2-diol	107-21-1	STEL	40 ppm 104 mg/m ³	2009-12-19	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skinIndicative			



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DNEL

propan-2-ol
67-63-0:

: End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 888 mg/kg

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 500 mg/m³

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 319 mg/kg

End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Long-term systemic effects
Value: 26 mg/kg

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 89 mg/m³

ethanol
64-17-5:

: End Use: Workers
Exposure routes: Inhalation
Potential health effects: Acute local effects
Value: 1900 mg/m³

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 950 mg/m³

End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 343 mg/kg

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Acute local effects
Value: 950 mg/m³

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 206 mg/kg



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End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 114 mg/m³

End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Long-term systemic effects
Value: 87 mg/kg

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Acute local effects
Value: 950 mg/m³

ethane-1,2-diol
107-21-1:

: End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 106 mg/kg

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 35 mg/m³

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 53 mg/kg

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term local effects
Value: 7 mg/m³

PNEC

propan-2-ol
67-63-0:

: Fresh water
Value: 140,9 mg/l

Marine water
Value: 140,9 mg/l

Fresh water sediment
Value: 552 mg/kg

Marine sediment
Value: 552 mg/kg

Soil
Value: 28 mg/kg

intermittent release



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ethanol
64-17-5:

Value: 140,9 mg/l

STP
Value: 2251 mg/l

Oral
Value: 160 mg/kg

: Fresh water
Value: 0,96 mg/l

Marine water
Value: 0,79 mg/l

Fresh water sediment
Value: 3,6 mg/kg

Soil
Value: 0,63 mg/kg

STP
Value: 580 mg/l

intermittent release
Value: 2,75 mg/l

ethane-1,2-diol
107-21-1:

: Fresh water
Value: 10 mg/l

Marine water
Value: 1 mg/l

Fresh water sediment
Value: 20,9 mg/kg

Soil
Value: 1,53 mg/kg

STP
Value: 199,5 mg/l

intermittent release
Value: 10 mg/l

Fresh water sediment
Value: 37 mg/kg

Marine sediment
Value: 3,7 mg/kg

8.2 Exposure controls

Personal protective equipment

Eye protection : If splashes are likely to occur, wear:



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Tightly fitting safety goggles

Hand protection

Material : For prolonged or repeated contact use protective gloves.
Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374-1: 2003 (0,4 mm).

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Skin and body protection : not required under normal use

Respiratory protection : Not required; except in case of aerosol formation.
Recommended Filter type:
ABEK-P3-filter

Environmental exposure controls

General advice : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : blue

Odour : alcohol-like

Odour Threshold : No data available

pH : 7,8

Melting point/freezing point : -31 °C Method: ASTM D 1177

Boiling point/boiling range : No information available.

Flash point : ca. 22 °C

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Burning rate : No data available

Lower explosion limit : No data available

Upper explosion limit : No data available

Vapour pressure : No data available



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Relative vapour density	: No data available
Relative density	: No data available
Density	: ca. 0,929 g/cm ³
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions., No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions., No decomposition if used as directed.

Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

Hazardous decomposition products : No hazardous decomposition products are known.
Other information : No hazardous decomposition products are known.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product

- Acute oral toxicity : Acute toxicity estimate : > 2.000 mg/kg
Method: Calculation method
- Skin corrosion/irritation : May cause skin irritation in susceptible persons.
- Serious eye damage/eye irritation : Vapours may cause irritation to the eyes, respiratory system and the skin.
- Respiratory or skin sensitisation : No data available
- Further information : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

Components:

propan-2-ol

67-63-0:

- Acute oral toxicity : LD50 Oral Rat: 5.840 mg/kg
Method: OECD Test Guideline 401
- LD50 Oral Rat: 4.570 mg/kg
- Acute inhalation toxicity : LC50 Rat, female: 47,5 mg/l
Exposure time: 8 h
Method: OECD Test Guideline 403
- LC50 Rat: 72,6 mg/l
Exposure time: 4 h
- LC50 Mouse: 27,2 mg/l
Exposure time: 4 h
- LC50 Rat: 25 mg/l
Exposure time: 6 h
Method: OECD Test Guideline 403
- LC50 Rat: 30 mg/l
Exposure time: 4 h
- LC50 Rat: 10000 ppm
Exposure time: 6 h



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- Acute dermal toxicity : LD50 Rabbit: 12.800 mg/kg
Method: OECD Test Guideline 402
- LD50 Dermal Rabbit: 12.870 mg/kg
Method: OECD Test Guideline 402
- LD50 Dermal Rabbit: 13.900 mg/kg
Method: OECD Test Guideline 402
- LD50 Dermal Rabbit: 13.400 mg/kg
- Skin corrosion/irritation : Species: Rabbit
Result: No skin irritation
- Serious eye damage/eye irritation : Species: Rabbit
Result: irritating
- Respiratory or skin sensitisation : Test Method: Buehler Test
Species: Guinea pig
Result: Does not cause skin sensitisation.
- Germ cell mutagenicity
- Genotoxicity in vitro : Type: Ames test
Test species: Salmonella typhimurium
with and without metabolic activation
Result: negative
- ethanol**
64-17-5:
- Acute oral toxicity : LD50 Oral Rat: 10.470 mg/kg
Method: OECD Test Guideline 401
- LD50 Rat: 5.000 mg/kg
Method: OECD Test Guideline 401
- Acute inhalation toxicity : LC50 Rat: 51 mg/l
Exposure time: 4 h
- Acute dermal toxicity : LD50 Dermal Rabbit: > 2.000 mg/kg
Method: OECD Test Guideline 402
- LD50 Dermal Rabbit: > 10.000 mg/kg
Method: OECD Test Guideline 402



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Skin corrosion/irritation	: Species: Rabbit Result: No skin irritation Method: OECD Test Guideline 404
Serious eye damage/eye irritation	: Species: Rabbit Result: Mild eye irritation Method: OECD Test Guideline 405
Respiratory or skin sensitisation	: Species: Mouse Result: Does not cause skin sensitisation. Method: see user defined free text
Reproductive toxicity	: Species: Rat Application Route: Oral NOAEL: 5.200 mg/kg Species: Rat Application Route: Oral NOAEL: 13.800 mg/kg Species: Rat Application Route: Inhalation NOAEL: 30400 mg/m3
Repeated dose toxicity	: Rat, male: NOAEL: > 20 mg/kg Method: OECD Test Guideline 403 Rat, female: NOAEL: 1.730 mg/kg Method: OECD Test Guideline 408
ethane-1,2-diol 107-21-1: Acute oral toxicity	: LD50 Oral Rat: 5.840 mg/kg LD50 Rat: 7.712 mg/kg Acute toxicity estimate : 500 mg/kg Method: Converted acute toxicity point estimate
Acute inhalation toxicity	: LC50 Rat: 2,5 mg/l Exposure time: 6 h
Acute dermal toxicity	: LD50 Mouse: 3.500 mg/kg LD50 Dermal Rabbit: 9.530 mg/kg



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Skin corrosion/irritation	: Species: Rabbit Result: No skin irritation
Serious eye damage/eye irritation	: Species: Rabbit Result: No eye irritation
Respiratory or skin sensitisation	: Test Method: Maximisation Test Species: Guinea pig Result: Does not cause skin sensitisation.
Germ cell mutagenicity	
Genotoxicity in vitro	: Test species: Salmonella typhimurium Result: negative Method: OECD Test Guideline 471
	: Test species: mouse lymphoma cells Result: negative Method: OECD Test Guideline 476
	: Test species: Chinese hamster ovary cells Result: negative Method: OECD Test Guideline 473
Genotoxicity in vivo	: Test species: Rat (male and female)Result: negative
Reproductive toxicity	: Species: Rat Sex: male and female NOAEL: > 1.000 mg/kg
Teratogenicity	: Species: Rat Exposure time: 6 -15 d 150 mg/m ³
Repeated dose toxicity	: Rat, male and female: NOAEL: 200 mg/kg Application Route: Oral Method: OECD Test Guideline 407 Dog, males: NOAEL: 2.220 mg/kg Application Route: Dermal Method: OECD Test Guideline 410 Dog: NOAEL: 2 - 4 mg/kg Application Route: Oral Method: OECD Test Guideline 410



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SECTION 12: Ecological information

12.1 Toxicity

Components:

propan-2-ol
67-63-0:

Toxicity to fish

: LC50 (Lepomis macrochirus (Bluegill sunfish)): 1.400 mg/l
Exposure time: 96 h

LC50 (Pimephales promelas (fathead minnow)): 9.640 mg/l
Exposure time: 96 h

LC50 (Leuciscus idus (Golden orfe)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
GLP: no

Toxicity to daphnia and other
aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 13.299 mg/l
Exposure time: 48 h

EC50 (Daphnia magna (Water flea)): 9.714 mg/l
Exposure time: 24 h

EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
GLP: no

(Daphnia (water flea)): > 10.000 mg/l
Method: OECD Test Guideline 202

NOEC (Daphnia magna (Water flea)): 30 mg/l
Exposure time: 21 d

EC50 (Daphnia magna (Water flea)): 10.000 mg/l
Exposure time: 48 h

Toxicity to algae

: IC50 (Desmodesmus subspicatus (green algae)): > 1.000 mg/l
Exposure time: 72 h
Test Type: Growth inhibition

EC50 (Pseudokirchneriella subcapitata (microalgae)): > 100 mg/l
Exposure time: 72 h
Test Type: static test
GLP: no

ErC50 (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l
Exposure time: 72 h

EC50 (Scenedesmus subspicatus): > 100 mg/l
Exposure time: 72 h
Test Type: static test



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Toxicity to bacteria : EC50 (*Aliivibrio fischeri*): 17.700 mg/l
Exposure time: 5 min
GLP:

EC10 (*Pseudomonas putida*): 5.175 mg/l
Exposure time: 18 h
Method: DIN 38412
GLP:

ethanol 64-17-5:

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 13 g/l
Exposure time: 96 h
Method: OECD Test Guideline 203

LC50 (*Leuciscus idus* (Golden orfe)): 8.150 mg/l
Exposure time: 48 h

LC50 (*Pimephales promelas* (fathead minnow)): > 0,1 g/l
Exposure time: 96 h

LC50 (Fish): 11.200 mg/l

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 12.340 mg/l
Exposure time: 48 h

EC50 : 5.012 mg/l

Toxicity to algae : EC50 (*Chlorella vulgaris* (Fresh water algae)): 275 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

EC50 (*Scenedesmus capricornutum* (fresh water algae)): 12.900 mg/l
Exposure time: 48 h
Test Type: Growth inhibition
Method: No information available.

EC0 (*Scenedesmus quadricauda* (Green algae)): 5.000 mg/l
Exposure time: 168 h

EC50 : 4.432 mg/l

EC10 : 11,5 mg/l

EC10 : 280 mg/l

Toxicity to bacteria : EC50 (*Pseudomonas putida*): 11.800 mg/l
Exposure time: 16 h
Test Type: Cell multiplication inhibition test

ethane-1,2-diol 107-21-1:



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Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 72.860 mg/l Exposure time: 96 h LC50 (Leuciscus idus (Golden orfe)): > 500 mg/l Exposure time: 96 h LC50 (Oncorhynchus mykiss (rainbow trout)): 18.500 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae	: EC50 (Selenastrum capricornutum (green algae)): 6.500 - 13.000 mg/l Exposure time: 96 h EC50 (Pseudokirchneriella subcapitata (green algae)): 6.500 - 13.000 mg/l Exposure time: 96 h
Toxicity to bacteria	: EC50 (Pseudomonas putida): 10.000 mg/l Exposure time: 16 h EC20 (activated sludge): > 1.995 mg/l Exposure time: 30 min EC50 (activated sludge): 225 mg/l Exposure time: 30 h
Toxicity to fish (Chronic toxicity)	: NOEC: 15.380 mg/l Exposure time: 7 d Species: Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 8.590 mg/l Exposure time: 7 d Species: Ceriodaphnia (water flea)

12.2 Persistence and degradability

Product:

Biodegradability	: Remarks: The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.
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Components:

propan-2-ol
67-63-0:

Biodegradability	: Result: rapidly biodegradable Biodegradation: 95 % Exposure time: 21 d Method: OECD 301 E
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Inoculum: activated sludge
Result: rapidly biodegradable
Biodegradation: 53 %
Exposure time: 5 d

Result: rapidly biodegradable
Biodegradation: > 70 %
Exposure time: 10 d
GLP: no

Biodegradation: 99,9 %
Method: see user defined free text

Chemical Oxygen Demand
(COD) : 2,32 g/kg

ThOD : 2,40 g/g

ethanol
64-17-5:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 97 %
Method: OECD Test Guideline 301

ethane-1,2-diol
107-21-1:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 83 - 96 %
Exposure time: 14 d
Method: OECD Test Guideline 301

Biodegradation: 90 - 100 %
Related to: see user defined free text
Exposure time: 10 d
Method: OECD 301 A

Biochemical Oxygen Demand
(BOD) : 0,81 g/g

Chemical Oxygen Demand
(COD) : 1,29 g/g

BOD/COD : BOD/COD: 63 %

ThOD : 1,29 g/g

12.3 Bioaccumulative potential

Components:

propan-2-ol
67-63-0:

Bioaccumulation : Bioconcentration factor (BCF): 3



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Remarks: No bioaccumulation is to be expected (log Pow \leq 4).

Partition coefficient: n-octanol/water : log Pow: 0,05

ethanol

64-17-5:

Bioaccumulation : Concentration: 3,2 mg/l

Partition coefficient: n-octanol/water : log Pow: -0,32

ethane-1,2-diol

107-21-1:

Partition coefficient: n-octanol/water : log Pow: -1,36

12.4 Mobility in soil

Components:

propan-2-ol

67-63-0:

Distribution among environmental compartments : Koc: 25Remarks: Highly mobile in soils

ethanol

64-17-5:

Distribution among environmental compartments : Koc: 1Remarks: Highly mobile in soils

ethane-1,2-diol

107-21-1:

Distribution among environmental compartments : Medium:Soil
Koc: 1Remarks: Highly mobile in soils

12.5 Results of PBT and vPvB assessment

Product:

Assessment : 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..

Components:

propan-2-ol

67-63-0:

Assessment : This substance is not considered to be very persistent and very bioaccumulating (vPvB).. This substance is not considered to be persistent, bioaccumulating and toxic (PBT)..

12.6 Other adverse effects

Product:

Additional ecological information : There is no data available for this product.



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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	: Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.
Waste Code	European Waste Catalogue 200129 According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

14.1 UN number

ADR	: 1987
IMDG	: 1987
IATA	: 1987

14.2 Proper shipping name

ADR	: ALCOHOLS, N.O.S. (isopropanol, ethanol)
IMDG	: ALCOHOLS, N.O.S. (isopropanol, Ethanol)
IATA	: Alcohols, n.o.s. Not permitted for transport

14.3 Transport hazard class

ADR	: 3
IMDG	: 3
IATA	: 3

14.4 Packing group

ADR	
Classification Code	: F1
Packaging group	: II
Hazard Identification Number	: 33
Labels	: 3
Tunnel restriction code	: (D/E)
IMDG	
Packaging group	: II
Labels	: 3



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EmS Number : F-E, S-D
IATA
(Cargo) : Alcohols, n.o.s. Not permitted for transport
Packaging group : II
Labels : 3

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

IATA

Environmentally hazardous : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

For personal protection see section 8.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
P5c	FLAMMABLE LIQUIDS	5.000 000067	50.000 000067
34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils	2.500 000067	25.000 000067

TA Luft List (Germany) : Total dust: Not applicable
: Inorganic substances in powdered form: Not applicable
: Inorganic substances in vapour or gaseous form: Not applicable
: Organic Substances: Not applicable
: Carcinogenic substances: Not applicable
: Mutagenic: Not applicable
: Toxic to reproduction: Not applicable

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



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Volatile organic compounds (VOC) content	: Percent volatile: 43,34 % 778,49 g/l VOC content excluding water
Volatile organic compounds (VOC) content	: Percent volatile: 43,34 % 401,76 g/l VOC content valid only for coating materials used on wood surfaces
according to Detergents Regulation EC 648/2004	: <5% Anionic surfactants
GISBAU (D)	: GU 83

15.2 Chemical safety assessment

There is no data available for this product.

SECTION 16: Other information

Full text of H-Statements

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

Further information

Classification procedure:	H225	On basis of test data.
	H319	Calculation method
	H336	Calculation method

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC -

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No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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