

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

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

1.1 Product identifier

Trade name : NOWA FRIGO
UFI : RDN4-N0N7-100A-PKJA

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 : +4961319642526
E-mail address : Produktsicherheit@werner-mertz.com
Responsible/issuing person
Contact person : Product development / product safety

1.4 Emergency telephone

EU: 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapor.

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

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H226 Flammable liquid and vapor.
H319 Causes serious eye irritation.

Precautionary Statements : P102 Keep out of reach of children.
Prevention:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

P260 Do not breathe spray.
Response:
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
Disposal:
 P501 Dispose of container into the collection of recyclables only when it is completely empty.

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.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Aqueous surfactant solution.
contains
Alcohol

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319 specific concentration limit Eye Irrit. 2; H319 >= 50 %	>= 20 - < 25
propan-2-ol	67-63-0 200-661-7 603-117-00-0 01-2119457558-25	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous system)	>= 15 - < 20
ethane-1,2-diol	107-21-1 203-473-3 603-027-00-1	Acute Tox. 4; H302 STOT RE 2; H373 (Kidney)	>= 3 - < 5

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

	01-2119456816-28	Acute toxicity estimate	
		Acute oral toxicity: 500,0 mg/kg	

SECTION 4: First aid measures

4.1 Description of first-aid measures

- General advice : Move out of dangerous area.
Consult a physician.
Show this material 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.
Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

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

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

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

Special protective equipment for fire-fighters : 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 vapors accumulating to form explosive concentrations.
Vapors 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 material 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.

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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



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NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

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. Store in cool place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. Store at room temperature in the original container.

Further information on storage stability : 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

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
ethane-1,2-diol	Not Assigned	TWA	20 ppm 52 mg/m ³	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	40 ppm 104 mg/m ³	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Routes of exposure	Potential health effects	Value
ethanol	Workers	Inhalation	Acute local effects	1900 mg/m ³
	Workers	Inhalation	Long-term systemic effects	950 mg/m ³
	Workers	Skin contact	Long-term systemic effects	343 mg/kg

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

	Consumers	Inhalation	Acute local effects	950 mg/m3
	Consumers	Skin contact	Long-term systemic effects	206 mg/kg
	Consumers	Inhalation	Long-term systemic effects	114 mg/m3
	Consumers	Ingestion	Long-term systemic effects	87 mg/kg
	Consumers	Skin contact	Acute local effects	950 mg/m3
propan-2-ol	Workers	Skin contact	Long-term systemic effects	888 mg/kg
	Workers	Inhalation	Long-term systemic effects	500 mg/m3
	Consumers	Skin contact	Long-term systemic effects	319 mg/kg
	Consumers	Ingestion	Long-term systemic effects	26 mg/kg
	Consumers	Inhalation	Long-term systemic effects	89 mg/m3
ethane-1,2-diol	Workers	Skin contact	Long-term systemic effects	106 mg/kg
	Workers	Inhalation	Long-term local effects	35 mg/m3
	Consumers	Skin contact	Long-term systemic effects	53 mg/kg
	Consumers	Inhalation	Long-term local effects	7 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
ethanol	Fresh water	0,96 mg/l
	Sea water	0,79 mg/l
	Fresh water sediment	3,6 mg/kg
	Soil	0,63 mg/kg
	STP	580 mg/l
	intermittent release	2,75 mg/l
propan-2-ol	Fresh water	140,9 mg/l

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

	Sea water	140,9 mg/l
	Fresh water sediment	552 mg/kg
	Sea sediment	552 mg/kg
	Soil	28 mg/kg
	intermittent release	140,9 mg/l
	STP	2251 mg/l
	Oral	160 mg/kg
ethane-1,2-diol	Fresh water	10 mg/l
	Sea water	1 mg/l
	Fresh water sediment	20,9 mg/kg
	Soil	1,53 mg/kg
	STP	199,5 mg/l
	intermittent release	10 mg/l
	Fresh water sediment	37 mg/kg
	Sea sediment	3,7 mg/kg

8.2 Exposure controls

Personal protective equipment

Eye/face protection : If splashes are likely to occur, wear:
 Tightly fitting safety goggles

Hand protection

Material : For prolonged or repeated contact use protective gloves.

It is suggested the usage of chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

As alternative, a different type of gloves might be used if, accordingly to the recommendations of the producer, guarantee the same level of protection.

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: liquid
Color	: blue
Odor	: alcohol-like
Melting point/freezing point	: -31 °C Method: ASTM D 1177
Boiling point/boiling range	: No information available.
Flammability (solid, gas)	: No data available
Flammability (liquids)	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Flash point	: 25 °C
Ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: ca. 8, 100 % at 20 °C
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n- octanol/water	: No data available
Vapor pressure	: No data available
Density	: ca. 0,946 g/cm ³ at 20 °C

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

Relative density : No data available
Relative vapor density : No data available
Particle characteristics : 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.
Vapors 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

No hazardous decomposition products are known.

SECTION 11: Toxicological information

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

Our company is strongly against animal testing.
Our company does not place any orders for animal testing for the finished product or the ingredients.
However, as a result of EU legislation (REACH Regulation), the manufacturers of ingredients or EU importers are obliged to test ingredients with regard to their effects on human health and the environment before they are brought onto the market. Some of the tests made necessary by this took place decades ago.

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

Components:

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

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
- LD50 Oral (Rat): 5.045 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
- 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

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

ethane-1,2-diol

107-21-1:

Acute oral toxicity : LD50 (Rat): 7.712 mg/kg
Acute toxicity estimate: 500,0 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

Skin corrosion/irritation

Not classified due to lack of data.

Product:

Remarks : May cause skin irritation in susceptible persons.

Components:

ethanol

64-17-5:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

propan-2-ol

67-63-0:

Species : Rabbit
Result : No skin irritation

ethane-1,2-diol

107-21-1:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks : Vapors may cause irritation to the eyes, respiratory system and the skin.
Causes serious eye irritation.

Components:

ethanol

64-17-5:

Species : Rabbit
Method : OECD Test Guideline 405
Result : Mild eye irritation

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



Werner & Mertz
Professional

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

propan-2-ol

67-63-0:

Species : Rabbit
Result : irritating

ethane-1,2-diol

107-21-1:

Species : Rabbit
Result : No eye irritation

Respiratory or skin sensitization

Skin sensitization

Not classified due to lack of data.

Respiratory sensitization

Not classified due to lack of data.

Product:

Remarks : No data available

Components:

ethanol

64-17-5:

Result : Not a skin sensitizer.

propan-2-ol

67-63-0:

Test Type : Buehler Test
Species : Guinea pig
Result : Does not cause skin sensitization.

ethane-1,2-diol

107-21-1:

Test Type : Maximization Test
Species : Guinea pig
Result : Does not cause skin sensitization.

Germ cell mutagenicity

Not classified due to lack of data.

Germ cell mutagenicity : Not Rated

Components:

propan-2-ol

67-63-0:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

Result: negative

ethane-1,2-diol

107-21-1:

Genotoxicity in vitro : Test system: Salmonella typhimurium
Method: OECD Test Guideline 471
Result: negative

Test system: mouse lymphoma cells
Method: OECD Test Guideline 476
Result: negative

Test system: Chinese hamster ovary cells
Method: OECD Test Guideline 473
Result: negative

Genotoxicity in vivo : Species: Rat (male and female)
Remarks: negative

Carcinogenicity

Not classified due to lack of data.
Carcinogenicity : Not Rated

Reproductive toxicity

Not classified due to lack of data.
Reproductive toxicity : Not Rated

STOT-single exposure

Not classified due to lack of data.
STOT-single exposure : The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

Not classified due to lack of data.
STOT-repeated exposure : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

ethanol

64-17-5:

Species : Rat, male
NOAEL : > 20 mg/kg
Method : OECD Test Guideline 403

Species : Rat, female
NOAEL : 1.730 mg/kg
Method : OECD Test Guideline 408

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



Werner & Mertz
Professional

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

ethane-1,2-diol

107-21-1:

Species : Rat, male and female
NOAEL : 200 mg/kg
Application Route : Oral
Method : OECD Test Guideline 407

Species : Dog, males
NOAEL : 2.220 mg/kg
Application Route : Dermal
Method : OECD Test Guideline 410

Species : Dog
NOAEL : 2 - 4 mg/kg
Application Route : Oral
Method : OECD Test Guideline 410

Species : Rat
NOAEL : 150 mg/kg
Application Route : Oral
Method : OECD Test Guideline 452

Aspiration toxicity

Not classified due to lack of data.

Aspiration toxicity : Not Rated

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Further information

Product:

Remarks : 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.

SECTION 12: Ecological information

12.1 Toxicity

Components:

ethanol

64-17-5:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 13 g/l
Exposure time: 96 h

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

- 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/aquatic plants : 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 microorganisms : EC50 (Pseudomonas putida): 11.800 mg/l
Exposure time: 16 h
Test Type: Cell multiplication inhibition test
- 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
Test Type: Immobilization
Method: OECD Test Guideline 202
- EC50 (Daphnia magna (Water flea)): 9.714 mg/l
Exposure time: 24 h

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

- EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
GLP: no
- (Daphnia): > 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/aquatic plants : 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
- Toxicity to microorganisms : EC50 (Aliivibrio fischeri): 17.700 mg/l
Exposure time: 5 min
- EC10 (Pseudomonas putida): 5.175 mg/l
Exposure time: 18 h
Method: DIN 38412
- ethane-1,2-diol**
107-21-1:
- 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/aquatic plants : 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

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

- Toxicity to microorganisms : 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.

Components:

ethanol

64-17-5:

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

propan-2-ol

67-63-0:

- Biodegradability : Result: rapidly biodegradable
Biodegradation: 95 %
Exposure time: 21 d
Method: OECD 301 E
- 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

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

ethane-1,2-diol

107-21-1:

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

Result: rapidly biodegradable
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:

ethanol

64-17-5:

Bioaccumulation : Concentration: 3,2 mg/l

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

propan-2-ol

67-63-0:

Bioaccumulation : Bioconcentration factor (BCF): 3

Remarks: No bioaccumulation is to be expected (log Pow <= 4).

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

ethane-1,2-diol

107-21-1:

Bioaccumulation : Remarks: Does not bioaccumulate.

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: 25
Remarks: Highly mobile in soils

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

ethane-1,2-diol

107-21-1:

Distribution among environmental compartments : Medium: Soil
Koc: 1
Remarks: 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 : Not very persistent and very bioaccumulative (vPvB).. Not persistent, bioaccumulative, and toxic (PBT).

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

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

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.
In accordance with local and national regulations.

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 Catalog
20 01 29*
According to the European Waste Catalog, 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.

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

SECTION 14: Transport information

14.1 UN number or ID number

ADR : 1987
IMDG : 1987
IATA : 1987

14.2 UN proper shipping name

ADR : ALCOHOLS, N.O.S.
(isopropanol, ethanol)
IMDG : ALCOHOLS, N.O.S.
(isopropanol, ethanol)
IATA : Alcohols, n.o.s.

14.3 Transport hazard class(es)

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
EmS Number : F-E, S-D
IATA
(Cargo) : Alcohols, n.o.s.
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 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : See Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction

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

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

Volatile organic compounds (VOC) content : Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control)
Update: Percent volatile: 36,34 %

according to Detergents Regulation EC 648/2004 : <5% anionic surfactants

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 vapor.
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.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
STOT RE : Specific target organ toxicity - repeated exposure
STOT SE : Specific target organ toxicity - single exposure
2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
2000/39/EC / TWA : Limit Value - eight hours

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended



Werner & Mertz
Professional

NOWA FRIGO

WM 0713887

Order number: 0713887

Version 5.1

Revision Date 22.01.2026

Print Date 11.03.2026

2000/39/EC / STEL : Short term exposure limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; 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 Standardization; 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 Organization 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 - 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, Authorization 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; TECl - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:

Flam. Liq. 3 H226
Eye Irrit. 2 H319

Classification procedure:

Based on product data or assessment
Calculation method

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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