

Safety Data Sheet

according to UK REACH Regulation

Frigosan

Revision date: 12.12.2022

Product code: j5509_sd

Page 1 of 8

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

1.1. Product identifier

Frigosan

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

Use of the substance/mixture

Product for professional cleaning and maintenance

1.3. Details of the supplier of the safety data sheet

Company name: JOHANNES KIEHL KG
Street: Robert-Bosch-Str. 9
Place: D-85235 Odelzhausen
Telephone: +49 8134 9305-0 Telefax: +49 8134 6466
E-mail: info@kiehl-group.com
Contact person: Laboratory department
Internet: www.kiehl-group.com
Responsible Department: Notrufnummer für deutsch- und englischsprachige Länder: +49/89/19240
Vergiftungsinformationszentrale (VIZ) Österreich: +43 1 406 43 43
Nationale Notrufnummer für die Schweiz (Tox-Zentrum Zürich): 145
Numéro d'urgence France: INRS: +33 (0) 1 45 42 59 59
Numero d' emergenza Italia: Centro Antiveleni - 20162 Milano: 02/66101029
ETTSZ /Egészségügyi Toxikológiai Tájékoztató Szolgálat/, 1096 Budapest, Nagyvárad tér 2. Ügyeleti telefonszám: +36 80 201-199
Eesti: Häirekeskuse number: 112 / Mürgistusteabekeskuse number: 16662
Emergency telephone number for all other countries: +49/8134/9305-169

KIEHL Austria GmbH	Perfektastr. 57;	A-1230 Wien	Tel. +43 (0) 1 / 604 99 93
KIEHL FRANCE S.A.R.L.	5, rue de Londres;	F-67670 Mommenheim	Tél. +33 (0) 3.88.59.52.25
KIEHL Italia s.r.l.	Via San Rocco, 101;	I-16036 Recco (GE)	Tel. +39 / 0185 730 008
KIEHL Schweiz AG	St. Dionys-Str. 33;	CH-8645 Jona	Tel. +41 (0) 55 / 254 74 74
KIEHL Hungary Kft.	Felsőipari körút 3/ D	HU-2142 Nagytarcsa	Tel. +36 (0) 1 / 348-08 41
KIEHL Middle East LLC	A8-LIU 48/49 - KIZAD	Abu Dhabi, U.A.E.	Tel. +971 2 550 33 96

1.4. Emergency telephone number:

+49/89/19240 (germanophone and anglophone)
For Belgium: +32 70 245 245 (free, 24/7) or +32 2 264 96 30 (normal rate)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not required

2.2. Label elements

Additional advice on labelling

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

according to 648/2004/CE: nonionic surfactants <5%, water-soluble solvents, dyes

Safety Data Sheet

according to UK REACH Regulation

Frigosan

Revision date: 12.12.2022

Product code: j5509_sd

Page 2 of 8

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
64-17-5	ethanol; ethyl alcohol			10 - < 15 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2; H225			
69011-36-5	i-C13-Fatty alcohol polyglycol ethers 5-12 EO			1 - < 5 %
	931-138-8			
	Acute Tox. 4, Eye Dam. 1; H302 H318			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
69011-36-5	931-138-8	i-C13-Fatty alcohol polyglycol ethers 5-12 EO	1 - < 5 %
	oral: ATE = 500 mg/kg Eye Dam. 1; H318: >= 10 - 100 Eye Irrit. 2; H319: >= 6 - < 10		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No hazards which require special first aid measures.

After inhalation

not hazardous by inhalation

After contact with skin

Wash off with plenty of water.

After contact with eyes

Rinse thoroughly with plenty of water, also under the eyelids.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Prevent vomiting if possible.

Consult a physician if necessary.

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

This information is not available.

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

Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Any extinguishing means and measures are acceptable.

5.2. Special hazards arising from the substance or mixture

This information is not available.

5.3. Advice for firefighters

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Safety Data Sheet

according to UK REACH Regulation

Frigosan

Revision date: 12.12.2022

Product code: j5509_sd

Page 3 of 8

General advice

Not required.

For non-emergency personnel

No special measures are necessary.

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Do not flush into surface water.

6.3. Methods and material for containment and cleaning up

For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Wipe up with absorbent material (e.g. cloth, fleece).

Clean contaminated articles and floor according to the environmental legislation.

Other information

Never return spills in original containers for re-use.

6.4. Reference to other sections

Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special precautions required.

Advice on protection against fire and explosion

When using do not smoke. Keep away from open flames, hot surfaces and sources of ignition.

Advice on general occupational hygiene

General industrial hygiene practice. No special protective equipment required.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store at room temperature in the original container. Keep away from direct sunlight. Store in a place accessible by authorized persons only.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep away from heat and sources of ignition.

Keep container tightly closed.

Never return unused material to storage receptacle.

7.3. Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

8.2. Exposure controls

Safety Data Sheet

according to UK REACH Regulation

Frigosan

Revision date: 12.12.2022

Product code: j5509_sd

Page 4 of 8

Appropriate engineering controls

Not required.

Individual protection measures, such as personal protective equipment

Skin protection

Not required

Respiratory protection

Not required

Environmental exposure controls

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: blue
Odour: alcoholic

Test method

Melting point/freezing point:	<-25 °C	
Boiling point or initial boiling point and boiling range:	>78 °C	
Flammability:	not applicable	
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Flash point:	42 °C	
Auto-ignition temperature:	not determined	
Decomposition temperature:	not determined	
pH-Value (at 20 °C):	approx. 8,0	K-QP1012C
Viscosity / kinematic:	not determined	
Water solubility: (at 20 °C)	completely miscible	
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	1,00 g/cm ³	K-QP1012E
Relative vapour density:	not determined	
Particle characteristics:	not applicable	

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

Not explosive

Sustaining combustion:

Not sustaining combustion

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

Not relevant

Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

Sublimation point:

not applicable

Softening point:

not applicable

Safety Data Sheet

according to UK REACH Regulation

Frigosan

Revision date: 12.12.2022

Product code: j5509_sd

Page 5 of 8

Pour point: not applicable
Viscosity / dynamic: not determined
Flow time: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

This information is not available.

10.2. Chemical stability

This information is not available.

10.3. Possibility of hazardous reactions

This information is not available.

10.4. Conditions to avoid

Do not expose to temperatures above 30 °C.

10.5. Incompatible materials

This information is not available.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

Further information

Do not mix with other detergents or chemicals.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
69011-36-5	i-C13-Fatty alcohol polyglycol ethers 5-12 EO				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Safety Data Sheet

according to UK REACH Regulation

Frigosan

Revision date: 12.12.2022

Product code: j5509_sd

Page 6 of 8

Endocrine disrupting properties

This information is not available.

Further information

Health injuries are not known or expected under normal use.

SECTION 12: Ecological information**12.1. Toxicity**

Based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. The surfactants in the product meet all requirements of the detergents regulation 648/2004/EC.

12.3. Bioaccumulative potential

This information is not available.

12.4. Mobility in soil

This information is not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

This information is not available.

Further informationChemical Oxygen Demand (COD) 1072mg O₂ / g**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Do not dispose of waste into sewer.

List of Wastes Code - residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

List of Wastes Code - used product

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

Contaminated packaging

Clean container with water. Return cleaned containers to the company for recycling.

Offer rinsed packaging material to local recycling facilities.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number or ID number:** not applicable**14.2. UN proper shipping name:** not applicable**14.3. Transport hazard class(es):** not applicable**14.4. Packing group:** not applicable**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Safety Data Sheet

according to UK REACH Regulation

Frigosan

Revision date: 12.12.2022

Product code: j5509_sd

Page 7 of 8

Not required

14.7. Maritime transport in bulk according to IMO instruments

not applicable

Other applicable information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 40

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 3 / 6 / 7 / 8 / 12

Safety Data Sheet

according to UK REACH Regulation

Frigosan

Revision date: 12.12.2022

Product code: j5509_sd

Page 8 of 8

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Flam. Liq: Flammable liquids

Acute Tox: Acute toxicity

Eye Dam: Eye damage

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H318	Causes serious eye damage.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)