

Safety Data Sheet

according to UK REACH Regulation

KÖSTER Injection Gel G4 B

Revision date: 19.03.2024

Product code: IN_290_B

Page 1 of 9

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

1.1. Product identifier

KÖSTER Injection Gel G4 B

UFI: M3SC-VMHR-XSNE-NKX2

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

1.3. Details of the supplier of the safety data sheet

Company name: KÖSTER BAUCHEMIE AG
Street: Dieselstrasse 1 - 10
Place: D-26607 Aurich
Telephone: +49-4941-9709-0 Telefax: +49-4941-9709-40
e-mail: info@koester.eu
Contact person: Forschung & Entwicklung
e-mail: produktsicherheit@koester.eu
Internet: www.koester.eu

1.4. Emergency telephone number: +49-551-19240 (24 h, Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Ox. Sol. 3; H272
Acute Tox. 4; H302
Skin Irrit. 2; H315
Eye Irrit. 2; H319
Resp. Sens. 1; H334
Skin Sens. 1; H317
STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Disodiumperoxodisulphate

Signal word: Danger

Pictograms:



Hazard statements

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

Safety Data Sheet

according to UK REACH Regulation

KÖSTER Injection Gel G4 B

Revision date: 19.03.2024

Product code: IN_290_B

Page 2 of 9

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P220 Keep away from clothing and other combustible materials.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- P370+P378 In case of fire: Use Water spray jet to extinguish.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Peroxides

Hazardous components

CAS No	Chemical name	Quantity
	EC No Index No REACH No	
	Classification (GB CLP Regulation)	
7775-27-1	Disodiumperoxodisulphate	50 - 100 %
	231-892-1	
	Ox. Sol. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3; H272 H302 H315 H319 H334 H317 H335	

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	
7775-27-1	231-892-1	Disodiumperoxodisulphate	50 - 100 %
		inhalation: LC50 = 5,1 mg/l (dusts or mists); dermal: LD50 = 10000 mg/kg; oral: LD50 = 920 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Move victim out of danger zone. First aider: Pay attention to self-protection!

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Medical treatment necessary.

Safety Data Sheet

according to UK REACH Regulation

KÖSTER Injection Gel G4 B

Revision date: 19.03.2024

Product code: IN_290_B

Page 3 of 9

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Provide adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid dust formation. Do not breathe dust.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Further information on handling

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Safety Data Sheet

according to UK REACH Regulation

KÖSTER Injection Gel G4 B

Revision date: 19.03.2024

Product code: IN_290_B

Page 4 of 9

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Keep away from combustible material.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear chemical resistant suit.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid	
Colour:	white	
Odour:	odourless	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		not determined not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		not applicable
Decomposition temperature:		not determined

Safety Data Sheet

according to UK REACH Regulation

KÖSTER Injection Gel G4 B

Revision date: 19.03.2024

Product code: IN_290_B

Page 5 of 9

pH-Value (at 20 °C):	4,3 (250 g/l)
Water solubility:	250 g/L
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	not determined
Relative vapour density:	not determined

9.2. Other information**Information with regard to physical hazard classes**

Self-ignition temperature

Solid:

not determined

Gas:

not applicable

Oxidizing properties

The product is: oxidising, Oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solid content:

100,00 %

SECTION 10: Stability and reactivity**10.1. Reactivity**

oxidising, Oxidising.

10.2. Chemical stability

Decomposition with: Acid, Base, Combustible substance. Thermal decomposition.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Combustible substance, Alkali metals, Alkaline earth metal, Heavy metals, Metal powder, Acid, Base.

10.4. Conditions to avoid

Risk of explosion by shock, friction, fire or other sources of ignition. Remove all sources of ignition. Keep away from heat. Ignition hazard.

10.5. Incompatible materials

Keep away from combustible material.

10.6. Hazardous decomposition products

Formation of: Oxygen.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

Harmful if swallowed.

ATEmix calculated

ATE (oral) 920,0 mg/kg

Safety Data Sheet

according to UK REACH Regulation

KÖSTER Injection Gel G4 B

Revision date: 19.03.2024

Product code: IN_290_B

Page 6 of 9

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7775-27-1	Disodiumperoxodisulphate				
	oral	LD50 920 mg/kg	Rat	literature value	
	dermal	LD50 10000 mg/kg	Rabbit		
	inhalation (4 h) dust/mist	LC50 5,1 mg/l	Rat	literature value	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Disodiumperoxodisulphate)

May cause an allergic skin reaction. (Disodiumperoxodisulphate)

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause respiratory irritation. (Disodiumperoxodisulphate)

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.

Additional information on tests

Classification according to Regulation (EC) No 1272/2008 [CLP]: Health hazard properties

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
7775-27-1	Disodiumperoxodisulphate					
	Acute fish toxicity	LC50 771 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute crustacea toxicity	EC50 133 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

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

The product has not been tested.

12.6. Endocrine disrupting properties

Safety Data Sheet

according to UK REACH Regulation

KÖSTER Injection Gel G4 B

Revision date: 19.03.2024

Product code: IN_290_B

Page 7 of 9

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

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160303 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; inorganic wastes containing hazardous substances; hazardous waste

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 1505
14.2. UN proper shipping name: SODIUM PERSULPHATE
14.3. Transport hazard class(es): 5.1
14.4. Packing group: III
 Hazard label: 5.1



Classification code: O2
 Limited quantity: 5 kg
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 50
 Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1505
14.2. UN proper shipping name: SODIUM PERSULPHATE
14.3. Transport hazard class(es): 5.1
14.4. Packing group: III
 Hazard label: 5.1



Classification code: O2
 Limited quantity: 5 kg
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 1505
14.2. UN proper shipping name: SODIUM PERSULPHATE

Safety Data Sheet

according to UK REACH Regulation

KÖSTER Injection Gel G4 B

Revision date: 19.03.2024

Product code: IN_290_B

Page 8 of 9

14.3. Transport hazard class(es): 5.1

14.4. Packing group: III

Hazard label: 5.1



Special Provisions: -
 Limited quantity: 5 kg
 Excepted quantity: E1
 EmS: F-A, S-Q
 Segregation group: peroxides

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1505
14.2. UN proper shipping name: SODIUM PERSULPHATE
14.3. Transport hazard class(es): 5.1
14.4. Packing group: III
 Hazard label: 5.1



Special Provisions: A803
 Limited quantity Passenger: 10 kg
 Passenger LQ: Y546
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 559
 IATA-max. quantity - Passenger: 25 kg
 IATA-packing instructions - Cargo: 563
 IATA-max. quantity - Cargo: 100 kg

14.6. Special precautions for user

Warning: Oxidising substances.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
 Water hazard class (D): 1 - slightly hazardous to water
 Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,13.

Safety Data Sheet

according to UK REACH Regulation

KÖSTER Injection Gel G4 B

Revision date: 19.03.2024

Product code: IN_290_B

Page 9 of 9

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%

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Ox. Sol. 3; H272	On basis of test data
Acute Tox. 4; H302	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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