

# Safety Data Sheet

## JAB



Safety Data Sheet dated 25/10/2021, version 5.0

This version cancels and substitutes any previous version

---

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

1.1. Product identifier

Mixture identification:

Trade name: JAB

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

Recommended use:

Evaporator and Plastic Cleaner

1.3. Details of the supplier of the safety data sheet

Company:

ERRECOM SPA

Via Industriale, 14

Corzano (BS) Italy

Tel. +39 030/9719096

Competent person responsible for the safety data sheet:

lab@errecom.it

1.4. Emergency telephone number

+39 02-6610-1029 Poison Control Center Niguarda Ca' Granda - Milano - ITALY

---

### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

None

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contains

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)-ethanone;

1,2-benzisothiazolin-3-one: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration  $\geq 0.1\%$

Other Hazards:

No other hazards

---

### SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

# Safety Data Sheet







## JAB



### 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 1% - < 2.5%	2-(2-butoxyethoxy)ethanol	Index number: 603-096-00-8 CAS: 112-34-5 EC: 203-961-6 REACH No.: 01-21194751 04-44-XXXX	3.3/2 Eye Irrit. 2 H319
>= 0.5% - < 1%	propan-2-ol	Index number: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 REACH No.: 01-21194575 58-25-XXXX	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336
>= 0.25% - < 0.5%	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	CAS: 68424-85-1 EC: 270-325-2 REACH No.: 01-21199651 80-41-XXXX	3.1/4/Oral Acute Tox. 4 H302 3.2/1B Skin Corr. 1B H314 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 M=10. 4.1/C1 Aquatic Chronic 1 H410 M=1.
>= 0.1% - < 0.25%	ethanol	Index number: 603-002-00-5 CAS: 64-17-5 EC: 200-578-6 REACH No.: 01-21194576 10-43-XXXX	2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319
>= 0.1% - < 0.25%	1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)-ethanol	CAS: 54464-57-2 EC: 259-174-3 REACH No.: 01-21194899 89-04-XXXX	3.2/2 Skin Irrit. 2 H315 3.4.2/1 Skin Sens. 1 H317 4.1/C1 Aquatic Chronic 1 H410 M=1.
>= 0.05% - < 0.1%	didecyldimethylammonium chloride	Index number: 612-131-00-6 CAS: 7173-51-5 EC: 230-525-2 REACH No.: 01-21199459 87-15-XXXX	3.1/3/Oral Acute Tox. 3 H301 3.2/1B Skin Corr. 1B H314 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 M=10. 4.1/C2 Aquatic Chronic 2 H411 M=1.
>= 0.01% - < 0.05%	1,2-benzisothiazolin-3-one	Index number: 613-088-00-6 CAS: 2634-33-5 EC: 220-120-9 REACH No.: 01-21207615 40-60-XXXX	3.4.2/1A Skin Sens. 1A H317 4.1/A1 Aquatic Acute 1 H400 3.1/4/Oral Acute Tox. 4 H302 Specific Concentration Limits: C >= 0,05%: Skin Sens. 1,1A,1B H317
>=	2,2'-iminodiethanol;	Index number: 603-071-00-1	3.9/2 STOT RE 2 H373

0.0001% - < 0.01%	diethanolamine	number: CAS: 111-42-2 EC: 203-868-0 REACH No.: 01-21194889 30-28-XXXX	4.1/C3 Aquatic Chronic 3 H412  3.2/2 Skin Irrit. 2 H315  3.3/1 Eye Dam. 1 H318  3.1/4/Oral Acute Tox. 4 H302
>= 0.0001% - < 0.01%	sodium hydroxide	Index number: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5 REACH No.: 01-21194578 92-27-XXXX	 2.16/1 Met. Corr. 1 H290  3.2/1A Skin Corr. 1A H314  3.3/1 Eye Dam. 1 H318 Specific Concentration Limits: C >= 5%: Skin Corr. 1A H314 2% <= C < 5%: Skin Corr. 1B H314 0,5% <= C < 2%: Skin Irrit. 2 H315 0,5% <= C < 2%: Eye Irrit. 2 H319

**SECTION 4: First aid measures**

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Treatment:

Treat symptomatically.

**SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

**SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

### 6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

### 6.4. Reference to other sections

See also section 8 and 13

---

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

### 7.2. Conditions for safe storage, including any incompatibilities

Store away from direct sunlight.

Store the product between + 0 °C / + 32 °F and + 40 °C / + 104 °F.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

### 7.3. Specific end use(s)

Information not available.

---

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

2-(2-butoxyethoxy)ethanol - CAS: 112-34-5

EU - TWA(8h): 67.5 mg/m<sup>3</sup>, 10 ppm - STEL: 101.2 mg/m<sup>3</sup>, 15 ppm

ACGIH - TWA(8h): 10 ppm - Notes: (IFV) - Hematologic, liver and kidney eff

propan-2-ol - CAS: 67-63-0

ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair

AGW - TWA(8h): 500 mg/m<sup>3</sup>, 200 ppm - STEL(15min): 1000 mg/m<sup>3</sup>, 400 ppm

MAK - TWA(8h): 500 mg/m<sup>3</sup>, 200 ppm - STEL(15min): 1000 mg/m<sup>3</sup>, 400 ppm

VLA - TWA(8h): 500 mg/m<sup>3</sup>, 200 ppm - STEL(15min): 1000 mg/m<sup>3</sup>, 400 ppm

VLEP - STEL(15min): 980 mg/m<sup>3</sup>, 400 ppm

WEL - TWA(8h): 999 mg/m<sup>3</sup>, 400 ppm - STEL(15min): 1250 mg/m<sup>3</sup>, 500 ppm

TLV - TWA(8h): 980 mg/m<sup>3</sup>, 400 ppm - STEL(15min): 1225 mg/m<sup>3</sup>, 500 ppm

NDS - TWA(8h): 900 mg/m<sup>3</sup> - STEL(15min): 1200 mg/m<sup>3</sup>

NPHV - TWA(8h): 500 mg/m<sup>3</sup>, 200 ppm - STEL(15min): 1000 mg/m<sup>3</sup>

MV - TWA(8h): 500 mg/m<sup>3</sup>, 200 ppm - STEL(15min): 2000 mg/m<sup>3</sup>, 800 ppm

GVI - TWA(8h): 999 mg/m<sup>3</sup>, 400 ppm - STEL(15min): 1250 mg/m<sup>3</sup>, 500 ppm

TLV (CZ) - TWA(8h): 500 mg/m<sup>3</sup>, 200 ppm - STEL(15min): 1000 mg/m<sup>3</sup>, 400 ppm

TLV (EST) - TWA(8h): 350 mg/m<sup>3</sup>, 150 ppm - STEL(15min): 600 mg/m<sup>3</sup>, 250 ppm  
 ethanol - CAS: 64-17-5  
 ACGIH - STEL: 1000 ppm - Notes: A3 - URT irr  
 AGW - TWA(8h): 380 mg/m<sup>3</sup>, 200 ppm - STEL(15min): 1520 mg/m<sup>3</sup>, 800 ppm  
 MAK - TWA(8h): 380 mg/m<sup>3</sup>, 200 ppm - STEL(15min): 1520 mg/m<sup>3</sup>, 800 ppm  
 VLA - STEL(15min): 1910 mg/m<sup>3</sup>, 1000 ppm  
 VLEP - TWA(8h): 1900 mg/m<sup>3</sup>, 1000 ppm - STEL(15min): 9500 mg/m<sup>3</sup>, 5000 ppm  
 WEL - TWA(8h): 1920 mg/m<sup>3</sup>, 1000 ppm  
 TLV (GR) - TWA(8h): 1900 mg/m<sup>3</sup>, 1000 ppm  
 GVI - TWA(8h): 1900 mg/m<sup>3</sup>, 1000 ppm  
 NDS - TWA(8h): 1900 mg/m<sup>3</sup>  
 NPHV - TWA(8h): 960 mg/m<sup>3</sup>, 500 ppm - STEL(15min): 1920 mg/m<sup>3</sup>  
 TLV - TWA(8h): 1000 mg/m<sup>3</sup>  
 TLV (CZ) - TWA(8h): 1000 mg/m<sup>3</sup>, 522 ppm - STEL(15min): 3000 mg/m<sup>3</sup>, 1566 ppm  
 TLV (EST) - TWA(8h): 1000 mg/m<sup>3</sup>, 500 ppm - STEL(15min): 1900 mg/m<sup>3</sup>, 1000 ppm  
 2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2  
 ACGIH - TWA(8h): 1 mg/m<sup>3</sup> - Notes: (IFV), Skin, A3 - Liver and kidney dam  
 sodium hydroxide - CAS: 1310-73-2  
 ACGIH - STEL: Ceiling 2 mg/m<sup>3</sup> - Notes: URT, eye, and skin irr  
 DNEL Exposure Limit Values  
 propan-2-ol - CAS: 67-63-0  
 Consumer: 26 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects  
 Worker Industry: 500 mg/m<sup>3</sup> - Consumer: 89 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects  
 Worker Industry: 888 mg/kg - Consumer: 319 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects  
 Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - CAS: 68424-85-1  
 Worker Professional: 3.96 mg/m<sup>3</sup> - Consumer: 1.64 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects  
 Worker Professional: 5.7 mg/kg - Consumer: 3.4 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects  
 ethanol - CAS: 64-17-5  
 Worker Industry: 1900 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, local effects  
 Worker Industry: 950 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects  
 Worker Industry: 343 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects  
 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)-ethanone - CAS: 54464-57-2  
 Worker Professional: 1.73 mg/kg - Consumer: 0.86 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects  
 Worker Professional: 1.76 mg/m<sup>3</sup> - Consumer: 0.43 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects  
 Consumer: 0.25 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects  
 Worker Professional: 0.101 mg/cm<sup>2</sup> - Consumer: 0.0506 mg/cm<sup>2</sup> - Exposure: Human Dermal - Frequency: Long Term, local effects  
 didecyldimethylammonium chloride - CAS: 7173-51-5  
 Worker Professional: 5.39 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects  
 Worker Professional: 5.39 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

# Safety Data Sheet

JAB



Worker Professional: 1.55 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Professional: 1.55 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects

1,2-benzisothiazolin-3-one - CAS: 2634-33-5

Worker Professional: 1 mg/m<sup>3</sup> - Consumer: 1 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

Worker Professional: 0.75 mg/m<sup>3</sup> - Consumer: 0.25 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 0.5 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Professional: 0.13 mg/kg - Consumer: 0.07 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Consumer: 0.06 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

sodium hydroxide - CAS: 1310-73-2

Worker Professional: 1 mg/m<sup>3</sup> - Consumer: 1 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term (repeated)

## PNEC Exposure Limit Values

propan-2-ol - CAS: 67-63-0

Target: Fresh Water - Value: 140.9 mg/l

Target: Marine water - Value: 140.9 mg/l

Target: Freshwater sediments - Value: 552 mg/kg

Target: Aquatic, periodic release - Value: 140.9 mg/l

Target: Microorganisms in sewage treatments - Value: 2251 mg/l

Target: Secondary poisoning - Value: 160 mg/kg

Target: Soil (agricultural) - Value: 28 mg/kg

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - CAS: 68424-85-1

Target: Fresh Water - Value: 0.001 mg/l

Target: Marine water - Value: 0.001 mg/l

Target: Freshwater sediments - Value: 12.27 mg/kg - Notes:: dry weight

Target: Marine water sediments - Value: 13.09 mg/kg - Notes:: dry weight

Target: Microorganisms in sewage treatments - Value: 0.4 mg/l

Target: Soil (agricultural) - Value: 7 mg/kg - Notes:: dry weight

ethanol - CAS: 64-17-5

Target: Fresh Water - Value: 0.96 mg/l

Target: Marine water - Value: 0.79 mg/l

Target: Freshwater sediments - Value: 36 mg/kg

Target: Marine water sediments - Value: 2.9 mg/kg

Target: Aquatic, periodic release - Value: 2.75 mg/l

Target: Microorganisms in sewage treatments - Value: 580 mg/l

Target: Secondary poisoning - Value: 0.72 mg/kg

Target: Soil (agricultural) - Value: 0.63 mg/kg

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)-ethanone - CAS: 54464-57-2

Target: Marine water - Value: 0.00028 mg/l

Target: Fresh Water - Value: 0.0028 mg/l

Target: Aquatic, periodic release - Value: 0.013 mg/l

Target: Freshwater sediments - Value: 3.73 mg/kg

Target: Marine water sediments - Value: 0.75 mg/kg

didecyldimethylammonium chloride - CAS: 7173-51-5

Target: Fresh Water - Value: 0.002 mg/l

Target: Marine water - Value: 0.0002 mg/l

Target: Freshwater sediments - Value: 2.82 mg/kg

# Safety Data Sheet

JAB



Target: Marine water sediments - Value: 0.28 mg/kg  
Target: Microorganisms in sewage treatments - Value: 0.595 mg/l  
Target: Soil (agricultural) - Value: 1.4 mg/kg  
2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2  
Target: Fresh Water - Value: 0.021 mg/l  
Target: Marine water - Value: 0.002 mg/l  
Target: Aquatic, periodic release - Value: 0.095 mg/l  
Target: Freshwater sediments - Value: 0.092 mg/kg  
Target: Marine water sediments - Value: 0.0092 mg/kg  
Target: Microorganisms in sewage treatments - Value: 100 mg/l  
Target: Soil (agricultural) - Value: 1.63 mg/kg  
Target: Oral - Value: 1.04 mg/kg

## 8.2. Exposure controls

### Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

### Protection for skin:

No special precaution must be adopted for normal use.

### Protection for hands:

Not needed for normal use.

### Respiratory protection:

Not necessary for normal use.

### Thermal Hazards:

None

### Environmental exposure controls:

None

### Appropriate engineering controls:

None

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	Green	--	--
Odour:	perfumed	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial boiling point and boiling range:	N.A.	--	--
Flammability:	N.A.	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	11	--	--
Kinematic viscosity:	N.A.	--	--
Solubility in water:	total	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--

Density and/or relative density:	1.0 g/mL (+20°C / +68°F)	--	--
Relative vapour density:	N.A.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

9.2. Other information  
 No other relevant information

**SECTION 10: Stability and reactivity**

- 10.1. Reactivity  
 Stable under normal conditions
- 10.2. Chemical stability  
 Stable under normal conditions
- 10.3. Possibility of hazardous reactions  
 None
- 10.4. Conditions to avoid  
 Stable under normal conditions.
- 10.5. Incompatible materials  
 None in particular.
- 10.6. Hazardous decomposition products  
 No data available

**SECTION 11: Toxicological information**

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

Toxicological information of the product:

- a) acute toxicity  
 Not classified  
 Based on available data, the classification criteria are not met
- b) skin corrosion/irritation  
 Not classified  
 Based on available data, the classification criteria are not met
- c) serious eye damage/irritation  
 Not classified  
 Based on available data, the classification criteria are not met
- d) respiratory or skin sensitisation  
 Not classified  
 Based on available data, the classification criteria are not met
- e) germ cell mutagenicity  
 Not classified  
 Based on available data, the classification criteria are not met
- f) carcinogenicity  
 Not classified  
 Based on available data, the classification criteria are not met
- g) reproductive toxicity  
 Not classified  
 Based on available data, the classification criteria are not met
- h) STOT-single exposure  
 Not classified  
 Based on available data, the classification criteria are not met
- i) STOT-repeated exposure  
 Not classified



Based on available data, the classification criteria are not met

j) aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

propan-2-ol - CAS: 67-63-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 4710 mg/kg

Test: LD50 - Route: Skin - Species: Rat 12800 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat 72.6 mg/l - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit 6290 mg/kg

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - CAS: 68424-85-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 344 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit 3412 mg/kg - Notes: Method: OPPTS 870.1200

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Positive - Duration: 24 h - Source: DOT - Notes: Corrosive

c) serious eye damage/irritation:

Test: Eye Irritant - Route: Eyes - Species: Rabbit Positive - Source: DOT - Notes: Corrosive

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin - Species: Guinea pig Negative - Source: Buehler Test OECD TG 406

e) germ cell mutagenicity:

Test: Ames test - Route: In vitro - Species: Salmonella Typhimurium Negative - Source: OECD TG 471 - Notes: Metabolic activation: yes - BPL: yes

Test: chromosomal aberration test - Route: In vitro - Species: Human lymphocytes Negative - Source: OECD TG 473

Test: Mutagenesis - Route: In vitro - Species: Chinese hamster ovary cells Negative - Source: OECD TG 476 - Notes: Metabolic activation: yes - BPL: yes

Test: Genotoxicity - Route: In vitro - Species: rat hepatocytes Negative - Source: OECD TG 482 - Notes: BPL: yes

Test: Micronucleus test - Route: Oral - Species: Mouse Negative - Source: OECD TG 474 - Notes: BPL: yes

ethanol - CAS: 64-17-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

Test: LC50 - Route: Inhalation - Species: Mouse > 20 mg/l - Duration: 4h

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)-ethanone - CAS: 54464-57-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

b) skin corrosion/irritation:

Test: NOEL - Route: Skin 47244 µg/cm<sup>2</sup> - Source: OECD TG 402

Test: Skin Irritant - Route: Skin Positive - Notes: 45% HRIPT

c) serious eye damage/irritation:

Test: Eye Irritant Negative - Notes: FHSA

d) respiratory or skin sensitisation:

Test: NESIL - Route: Skin 47200 µg/cm<sup>2</sup> - Source: OECD TG 402 - Notes: (no expected sensitization induction level)

Test: Skin Sensitization - Route: Skin Positive - Notes: >6% HRIPT

- e) germ cell mutagenicity:
    - Test: Genotoxicity Negative - Notes: in vivo and in vitro
- didecyldimethylammonium chloride - CAS: 7173-51-5
- a) acute toxicity:
    - Test: LD50 - Route: Oral - Species: Rat 238 mg/kg - Source: Method: OECD Test Guideline 401
    - Test: LD50 - Route: Skin - Species: Rabbit 3342 mg/kg
  - b) skin corrosion/irritation:
    - Test: Skin Irritant - Route: Skin - Species: Rabbit Positive - Source: Method: OECD Test Guideline 404 - Notes: Exposure time: 3 min
  - d) respiratory or skin sensitisation:
    - Test: Skin Sensitization - Route: Skin - Species: Guinea pig Negative - Source: Method: US-EPA - Notes: Buehler Test
  - e) germ cell mutagenicity:
    - Test: Ames test - Species: Salmonella Typhimurium Negative - Source: Method: OECD Test Guideline 471 - Notes: Metabolic activation
    - Test: chromosomal aberration test - Species: Chinese hamster ovary cells Negative - Notes: Metabolic activation
    - Test: Mutagenesis - Species: Chinese hamster ovary cells Negative - Notes: Metabolic activation
    - Test: chromosomal aberration test - Route: Oral - Species: Rat Negative 600 mg/kg - Source: Method: OECD Test Guideline 475 - Notes: Chromosome aberration test in vivo
- 1,2-benzisothiazolin-3-one - CAS: 2634-33-5
- a) acute toxicity:
    - Test: LD50 - Route: Oral - Species: Rat 670 mg/kg - Notes: OECD TG 401
    - Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Notes: OECD TG 402
  - b) skin corrosion/irritation:
    - Test: Skin Irritant - Route: Skin - Species: Rabbit Positive - Duration: 4h - Notes: US-EPA
  - c) serious eye damage/irritation:
    - Test: Eye Corrosive - Route: Eyes - Species: Rabbit Positive - Notes: OECD TG 405
  - d) respiratory or skin sensitisation:
    - Test: Skin Sensitization - Route: Skin - Species: Human beings Positive
  - e) germ cell mutagenicity:
    - Test: Mutagenesis - Route: In vitro - Species: Salmonella Typhimurium Negative - Notes: OECD TG 471
    - Test: chromosomal aberration test - Route: In vitro - Species: Human lymphocytes Negative - Notes: OECD TG 473; with Metabolic activation
    - Test: Mutagenesis - Route: In vitro - Species: murine lymphoma cells Negative - Notes: OECD TG 476
    - Test: Micronucleus test - Route: In vivo - Species: Mouse Negative - Notes: OECD TG 474; Cell type: Bone marrow; Oral; Doses: 1200 mg/kg
- 2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2
- a) acute toxicity:
    - Test: LC0 - Route: Inhalation - Species: Rat 0.2 mg/l - Duration: 8h
  - b) skin corrosion/irritation:
    - Test: Skin Irritant - Route: Skin - Species: Rabbit Positive
  - c) serious eye damage/irritation:
    - Test: Eye Corrosive - Route: Eyes - Species: Rabbit Positive
  - d) respiratory or skin sensitisation:
    - Test: Skin Sensitization - Route: Skin - Species: Guinea pig Negative
- sodium hydroxide - CAS: 1310-73-2
- b) skin corrosion/irritation:
    - Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive

- c) serious eye damage/irritation:  
Test: Eye Irritant - Species: Rabbit Positive - Source: Guidelines 405 Test OECD
  - e) germ cell mutagenicity:  
Test: Ames test - Species: Salmonella Typhimurium Negative
- 2-(2-butoxyethoxy)ethanol - CAS: 112-34-5  
LD50 (RAT) ORAL: 6560 MG/KG  
LD50 (RABBIT) SKIN: 4120 MG/KG

#### 11.2. Information on other hazards

- Endocrine disrupting properties:  
No endocrine disruptor substances present in concentration  $\geq$  0.1%

---

### SECTION 12: Ecological information

#### 12.1. Toxicity

- Adopt good working practices, so that the product is not released into the environment.
- The product is classified: Aquatic Chronic 3 - H412

#### propan-2-ol

- a) Aquatic acute toxicity:  
Endpoint: EC0 - Species: Fish 10000 mg/l - Duration h: 48 - Notes: Pimephales promelas  
Endpoint: LC50 - Species: Fish > 1400 mg/l - Duration h: 96 - Notes: Lepomis macrochirus  
Endpoint: LC50 - Species: Fish 6550 mg/l - Duration h: 96 - Notes: Pimephales promelas

#### Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

- a) Aquatic acute toxicity:  
Endpoint: LC50 - Species: Fish 0.28 mg/l - Duration h: 96 - Notes: Species: Pimephales promelas (fathead minnow) Acute Toxicity Method: US-EPA  
Endpoint: EC50 - Species: Daphnia 0.016 mg/l - Duration h: 48 - Notes: Species: Daphnia magna (Water flea) Immobilization Method: OECD Test Guideline 202  
Endpoint: ErC50 - Species: Algae 0.049 mg/l - Duration h: 72 - Notes: Species: Pseudokirchneriella subcapitata (green algae)  
Cell multiplication inhibition test Method: OECD Test Guideline 201  
Endpoint: NOEC - Species: Fish 0.456 mg/l - Duration h: 96 - Notes: Species: Lepomis macrochirus  
Endpoint: LC50 - Species: Fish 0.515 mg/l - Duration h: 96 - Notes: Species: Lepomis macrochirus
- b) Aquatic chronic toxicity:  
Endpoint: NOEC - Species: Fish 0.032 mg/l - Duration h: 816 - Notes: Species: Pimephales promelas (fathead minnow) Early-life Stage Method: EPA-FIFRA  
Endpoint: NOEC - Species: Daphnia 0.0042 mg/l - Duration h: 504 - Notes: Species: Daphnia magna (Water flea) Reproduction Test Method: EPA-FIFRA
- c) Bacteria toxicity:  
Endpoint: EC50 - Species: Bacteria 7.75 mg/l - Duration h: 3 - Notes: Species: activated sludge Respiration inhibition Method: OECD Test Guideline 209
- d) Terrestrial toxicity:  
Endpoint: LC50 - Species: earthworms 7070 mg/kg - Duration h: 336 - Notes: Species: Eisenia fetida Method: OECD Test Guideline 207  
Endpoint: EC50 - Species: Microflora of the soil > 1000 mg/kg - Duration h: 672 - Notes: OECD Test Guideline 216
- e) Plant toxicity:  
Endpoint: EC50 - Species: Terrestrial plants 277 mg/kg - Duration h: 336 - Notes: Growth inhibition Method: OECD Test Guideline 208

ethanol

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 11200 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia > 12300 mg/l - Duration h: 48 - Notes: Species:

Daphnia magna

Endpoint: EC50 - Species: Algae > 275 mg/l - Duration h: 72 - Notes: Species:

Chlorella vulgaris

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)-ethanone

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 1.3 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 1.38 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 2.6 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish = 0.16 mg/l

Endpoint: NOEC - Species: Daphnia = 0.028 mg/l

Endpoint: NOEC - Species: Algae = 2.6 mg/l

didecyldimethylammonium chloride

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 0.19 mg/l - Duration h: 96 - Notes: Species:

Pimephales promelas (fathead minnow) Acute toxicity Method: US-EPA

Endpoint: EC50 - Species: Daphnia 0.062 mg/l - Duration h: 48 - Notes: Species:

Daphnia magna (Water flea) Immobilization Method: EPA-FIFRA

Endpoint: ErC50 - Species: Algae 0.026 mg/l - Duration h: 96 - Notes: Species:

Pseudokirchneriella subcapitata (green algae) Growth inhibition Method: OECD Test Guideline 201

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish 0.032 mg/l - Duration h: 816 - Notes: Species: Danio rerio (zebra fish) Chronic toxicity Method: OECD Test Guideline 210

Endpoint: NOEC - Species: Daphnia 0.014 mg/l - Duration h: 504 - Notes: Species:

Daphnia magna (Water flea) Reproduction Test Method: OECD Test Guideline 211

c) Bacteria toxicity:

Endpoint: EC50 - Species: Activated sludge 11 mg/l - Duration h: 3 - Notes: Species: activated sludge Respiration inhibition Method: OECD Test Guideline 209

d) Terrestrial toxicity:

Endpoint: NOEC - Species: earthworms > 1000 mg/kg - Duration h: 336 - Notes:

Species: Eisenia fetida Method: OECD Test Guideline 207

e) Plant toxicity:

Endpoint: EC50 - Species: Terrestrial plants 283 mg/kg - Duration h: 336 - Notes:

Growth inhibition Method: OECD Test Guideline 208

1,2-benzisothiazolin-3-one

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 2.18 mg/l - Duration h: 96 - Notes: Species:

Oncorhynchus mykiss; Method: OECD TG 203

Endpoint: EC50 - Species: Daphnia 2.94 mg/l - Duration h: 48 - Notes: Species:

Daphnia magna; Method: OECD TG 202

Endpoint: ErC50 - Species: Algae 0.11 mg/l - Duration h: 72 - Notes: Species:

Pseudokirchneriella subcapitata; Method: OECD TG 201

Endpoint: ErC50 - Species: Algae 0.15 mg/l - Duration h: 72 - Notes: Species:

Selenastrum capricornutum; Test type: Growth inhibitor

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish 0.3 mg/l - Duration h: 672 - Notes: Species:

Oncorhynchus mykiss; Test type: Growth inhibitor

Endpoint: NOEC - Species: Daphnia 1.7 mg/l - Duration h: 504 - Notes: Species:

Daphnia magna; Method: OECD TG 211

d) Terrestrial toxicity:

Endpoint: LC50 - Species: earthworms > 410.6 mg/kg - Duration h: 336 - Notes:  
Species: Eisenia fetida; Method: OECD TG 207

Endpoint: NOEC - Species: Microflora of the soil 263.7 mg/kg - Duration h: 672 - Notes:  
OECD TG 216

2,2'-iminodiethanol; diethanolamine

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 1460 mg/l - Duration h: 96 - Notes: Method: ASTM  
E729-80; Species: Pimephales  
promelas

Endpoint: EC50 - Species: Daphnia 55 mg/l - Duration h: 48 - Notes: Method: EPA  
660/3-75/009; Species: Daphnia magna

Endpoint: EC10 - Species: Algae 1.1 mg/l - Duration h: 72 - Notes: Method: EPA  
600/9-78/018; Species: Pseudokirchneriella subcapitata

Endpoint: EC50 - Species: Algae 19 mg/l - Duration h: 72 - Notes: Method: EPA  
600/9-78/018; Species: Pseudokirchneriella subcapitata

b) Aquatic chronic toxicity:

Endpoint: EC10 - Species: Daphnia 1.05 mg/l - Duration h: 504 - Notes: Species:  
Daphnia magna

c) Bacteria toxicity:

Endpoint: EC10 - Species: Activated sludge > 1000 mg/l - Duration h: 0.5 - Notes:  
Method: OCSE 209

sodium hydroxide

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 189 mg/l - Duration h: 48

Endpoint: EC0 - Species: Daphnia = 40.4 mg/l - Duration h: 48 - Notes: Species:  
Ceriodaphnia dubia

Endpoint: LC50 - Species: Fish 125 mg/l - Duration h: 96 - Notes: Species: Gambusia  
affinis

Endpoint: LC50 - Species: Fish 45.4 mg/l - Duration h: 96 - Notes: Species  
Oncorhynchus mykiss

12.2. Persistence and degradability

propan-2-ol - CAS: 67-63-0

Biodegradability: Readily biodegradable

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - CAS:  
68424-85-1

Test: OECD Confirmatory Test: - %: 90 - Notes: Method: OECD Test Guideline 303 A

Test: Modified SCAS Test - Duration: 7 d - %: 99 - Notes: Method: OECD Test  
Guideline 302 A

Biodegradability: Readily biodegradable - Test: CO2 Evolution Test - Duration: 28 d -  
%: 95.5 - Notes: Method: OECD Test Guideline 301B

ethanol - CAS: 64-17-5

Biodegradability: Readily biodegradable - Test: Solubility in water - Notes: 1000 -  
10000 mg/L

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)-ethanone - CAS: 54464-57-2

Biodegradability: Non-readily biodegradable

didecyldimethylammonium chloride - CAS: 7173-51-5

Biodegradability: Readily biodegradable - Test: Modified Sturm Test - Duration: 28 d -  
%: 72 - Notes: Method: OECD Test Guideline 301B

Test: Die-Away Test - Duration: 28 d - %: 93.3 - Notes: Concentration: 0,016 mg/L

Test: OECD Confirmatory Test: - Duration: 24 - 70 d - %: 91 - Notes: Method: OECD  
Test Guideline 303 A

1,2-benzisothiazolin-3-one - CAS: 2634-33-5

Biodegradability: Readily biodegradable - Duration: 28 d - %: 70

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

Biodegradability: Readily biodegradable - Test: OECD 301 F - Duration: 28 d - %: 93

- 12.3. Bioaccumulative potential  
propan-2-ol - CAS: 67-63-0  
Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient 0.05  
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - CAS: 68424-85-1  
Bioaccumulation: Not bioaccumulative - Test: BCF - Bioconcentration factor -  
Duration: 35 d - Notes: BCF: 79 - Concentration: 0,076 mg/l  
Test: log Pow - Notes: 2.75 (20 °C) - Method: OECD TG 107 - GLP: yes  
ethanol - CAS: 64-17-5  
Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient 0.350000-  
1,2-benzisothiazolin-3-one - CAS: 2634-33-5  
Bioaccumulation: Not bioaccumulative  
2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2  
Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient -2.46
- 12.4. Mobility in soil  
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - CAS: 68424-85-1  
Mobility in soil: Not mobile - Test: Koc 282624 - Notes: L/kg Kd: 13630, log Kd: 3,13 -  
Method: OECD TG 106  
didecyldimethylammonium chloride - CAS: 7173-51-5  
Mobility in soil: Mobile - Notes: Method: US-EPA  
2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2  
Mobility in soil: Mobile - Test: Koc 0.99 - Notes: calculated value
- 12.5. Results of PBT and vPvB assessment  
vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties  
No endocrine disruptor substances present in concentration  $\geq$  0.1%
- 12.7. Other adverse effects  
None

---

### SECTION 13: Disposal considerations

- 13.1. Waste treatment methods  
Recover if possible. In so doing, comply with the local and national regulations currently in force.

---

### SECTION 14: Transport information

- 14.1. UN number or ID number  
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name  
N.A.
- 14.3. Transport hazard class(es)  
N.A.
- 14.4. Packing group  
N.A.
- 14.5. Environmental hazards  
ADR-Environmental Pollutant: No  
IMDG-Marine pollutant: No
- 14.6. Special precautions for user  
N.A.
- 14.7. Maritime transport in bulk according to IMO instruments  
N.A.

---

**SECTION 15: Regulatory information**

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) n. 2020/878  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)  
Regulation (EU) n. 944/2013 (ATP 5 CLP)  
Regulation (EU) n. 605/2014 (ATP 6 CLP)  
Regulation (EU) n. 2015/1221 (ATP 7 CLP)  
Regulation (EU) n. 2016/918 (ATP 8 CLP)  
Regulation (EU) n. 2016/1179 (ATP 9 CLP)  
Regulation (EU) n. 2017/776 (ATP 10 CLP)  
Regulation (EU) n. 2018/669 (ATP 11 CLP)  
Regulation (EU) n. 2018/1480 (ATP 13 CLP)  
Regulation (EU) n. 2019/521 (ATP 12 CLP)  
Regulation (EU) n. 2020/217 (ATP 14 CLP)  
Regulation (EU) n. 2020/1182 (ATP 15 CLP)  
Regulation (EU) n. 2021/643 (ATP 16 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

Restriction 55

Restriction 75

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

---

**SECTION 16: Other information**

Full text of phrases referred to in Section 3:

H319 Causes serious eye irritation.

H225 Highly flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

# Safety Data Sheet

## JAB



H410 Very toxic to aquatic life with long lasting effects.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H301 Toxic if swallowed.  
H411 Toxic to aquatic life with long lasting effects.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H412 Harmful to aquatic life with long lasting effects.  
H290 May be corrosive to metals.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of



# Safety Data Sheet

## JAB



	Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.