

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Dichloromethane ROTISOLV® ≥99,9 %, GC Ultra Grade

article number: **KK47**
Version: **6.0 en**
Replaces version of: 2023-07-27
Version: (5)

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Revision: 2024-03-04

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

1.1 Product identifier

| | |
|---------------------------------|--|
| Identification of the substance | Dichloromethane ROTISOLV® ≥99,9 %, GC Ultra Grade |
| Article number | KK47 |
| Index No (GB CLP) | 602-004-00-3 |
| EC number | 200-838-9 |
| CAS number | 75-09-2 |
| Alternative name(s) | Dichloromethane |

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

| | |
|---------------------------|--|
| Relevant identified uses: | Laboratory chemical Laboratory and analytical use |
| Uses advised against: | Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household). Food, drink and animal feeding-stuffs. |

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co. KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone:+49 (0) 721 - 56 06 0

Telefax: +49 (0) 721 - 56 06 149

e-mail: sicherheit@carlroth.de

Website: www.carlroth.de

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

e-mail (competent person): sicherheit@carlroth.de

1.4 Emergency telephone number

| Name | Street | Postal code/city | Telephone | Website |
|---|-----------|----------------------|--------------|---------|
| National Poisons Information Service City Hospital | Dudley Rd | B187QH Birmingham | 844 892 0111 | |

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

| Section | Hazard class | Cat-egory | Hazard class and category | Hazard statement |
|---------|---|-----------|---------------------------|------------------|
| 3.2 | Skin corrosion/irritation | 2 | Skin Irrit. 2 | H315 |
| 3.3 | Serious eye damage/eye irritation | 2 | Eye Irrit. 2 | H319 |
| 3.6 | Carcinogenicity | 2 | Carc. 2 | H351 |
| 3.8D | Specific target organ toxicity - single exposure (narcotic effects, drowsiness) | 3 | STOT SE 3 | H336 |

For full text of abbreviations: see SECTION 16

2.2 Label elements

Labelling

Signal word

Warning

Pictograms

GHS07, GHS08



Hazard statements

| | |
|------|-----------------------------------|
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H336 | May cause drowsiness or dizziness |
| H351 | Suspected of causing cancer |

Precautionary statements

Precautionary statements - prevention

| | |
|------|---------------------------------------|
| P261 | Avoid breathing mist/vapours/spray |
| P280 | Wear protective gloves/eye protection |

Precautionary statements - response

| | |
|----------------|---|
| P302+P352 | IF ON SKIN: Wash with plenty of water |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing |
| P308+P313 | IF exposed or concerned: Get medical advice/attention |

For professional users only

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2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

| | |
|-------------------|---------------------------------|
| Name of substance | Dichloromethane |
| Molecular formula | CH ₂ Cl ₂ |
| Molar mass | 84,93 g/mol |
| CAS No | 75-09-2 |
| EC No | 200-838-9 |
| Index No (GB CLP) | 602-004-00-3 |

To stabilise:

| Name of substance | Identifier | Wt% |
|-------------------|--|---------------|
| Amylene | CAS No 513-35-9 EC No 208-156-3 | 0,002 – 0,006 |

Remarks

For full text of abbreviations: see SECTION 16

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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4.2 Most important symptoms and effects, both acute and delayed

Irritation, Nausea, Vomiting, Cough, Vertigo, Dyspnoea, Drowsiness, Dizziness, Narcosis

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings!
water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Non-combustible.

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen chloride (HCl), Hydrogen halides (HX)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

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6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid exposure. Provide adequate ventilation as well as local exhaust at critical locations. When not in use, keep containers tightly closed.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed.

Incompatible substances or mixtures

Observe hints for combined storage.

Protect against external exposure, such as

direct light irradiation, UV-radiation/sunlight

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

| Country | Name of agent | CAS No | Identifier | TWA [ppm] | TWA [mg/m ³] | STEL [ppm] | STEL [mg/m ³] | Ceiling-C [ppm] | Ceiling-C [mg/m ³] | Notation | Source |
|---------|--------------------------------------|---------|------------|-----------|--------------------------|------------|---------------------------|-----------------|--------------------------------|----------|-------------|
| EU | methylene chloride (dichloromethane) | 75-09-2 | IOELV | 100 | 353 | 200 | 706 | | | H | 2017/164/EU |
| GB | dichloromethane | 75-09-2 | WEL | 100 | 353 | 200 | 706 | | | | EH40/2005 |

Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

H Absorbed through the skin

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA Time-weighted average (long-term exposure limit); measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

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Biological limit values

| Country | Name of agent | CAS No | Parameter | Notation | Identifier | Value | Material | Source |
|---------|-----------------|---------|-----------------|----------|------------|--------|------------------|-----------|
| GB | dichloromethane | 75-09-2 | carbon monoxide | | BMGV | 30 ppm | end-tidal breath | EH40/2005 |

Human health values

| Relevant DNELs and other threshold levels | | | | |
|---|-----------------------|------------------------------------|-------------------|----------------------------|
| Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
| DNEL | 706 mg/m ³ | human, inhalatory | worker (industry) | acute - systemic effects |
| DNEL | 176 mg/m ³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| DNEL | 12 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |

Environmental values

| Relevant PNECs and other threshold levels | | | | |
|---|-----------------|-----------------------|------------------------------|------------------------------|
| Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
| PNEC | 0,31 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| PNEC | 0,031 mg/l | aquatic organisms | marine water | short-term (single instance) |
| PNEC | 26 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| PNEC | 2,57 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| PNEC | 0,26 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| PNEC | 0,33 mg/kg | terrestrial organisms | soil | short-term (single instance) |

| Relevant PNECs of components | | | | | | |
|------------------------------|----------|----------|-----------------|-----------------------|------------------------------|------------------------------|
| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
| Amylene | 513-35-9 | PNEC | 0,37 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| Amylene | 513-35-9 | PNEC | 0,37 mg/l | aquatic organisms | marine water | short-term (single instance) |
| Amylene | 513-35-9 | PNEC | 5,77 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Amylene | 513-35-9 | PNEC | 8,1 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Amylene | 513-35-9 | PNEC | 8,1 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Amylene | 513-35-9 | PNEC | 1,44 mg/kg | terrestrial organisms | soil | short-term (single instance) |

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8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Skin protection



• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. 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. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

FKM: fluoro-elastomer

• material thickness

0,7mm

• breakthrough times of the glove material

>120 minutes (permeation: level 4)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: AX (gas filters and combined filters against low-boiling point organic compounds, colour code: Brown).

Environmental exposure controls

Keep away from drains, surface and ground water.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|--|
| Physical state | liquid |
| Colour | colourless |
| Odour | mild sweet |
| Odour threshold | 250 ppm |
| Melting point/freezing point | -95 °C at 1.013 hPa (ECHA) |
| Boiling point or initial boiling point and boiling range | 40 °C at 1.013 hPa (ECHA) |
| Flammability | non-combustible |
| Lower and upper explosion limit | 13 vol% (LEL) - 22 vol% (UEL) |
| Flash point | not determined |
| Auto-ignition temperature | 605 °C |
| Decomposition temperature | not relevant |
| pH (value) | not determined |
| Kinematic viscosity | not determined |
| Dynamic viscosity | 0,43 mPa s at 20 °C |
| <u>Solubility(ies)</u> | |
| Water solubility | 20 g/l at 20 °C |
| <u>Partition coefficient</u> | |
| Partition coefficient n-octanol/water (log value): | 1,25 (pH value: 7, 20 °C) (ECHA) |
| Vapour pressure | 475 hPa at 20 °C |
| <u>Density and/or relative density</u> | |
| Density | 1,33 g/cm ³ at 20 °C (ECHA) |
| Relative vapour density | 2,93 (air = 1) |
| Particle characteristics | not relevant (liquid) |
| <u>Other safety parameters</u> | |
| Oxidising properties | none |

9.2 Other information

| | |
|---|---|
| Information with regard to physical hazard classes: | hazard classes acc. to GHS (physical hazards): not relevant |
| Other safety characteristics: | There is no additional information. |

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SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

May cause decomposition by long-term light influence.

10.3 Possibility of hazardous reactions

Danger of explosion: Alkali metals, Nitric acid, Aluminium, Amines, Nitrogen oxides (NO_x),
Exothermic reaction with: Alkaline earth metal, Metal powder, Strong alkali

10.4 Conditions to avoid

Direct light irradiation. UV-radiation/sunlight.

10.5 Incompatible materials

Steel, aluminium, different plastics, Rubber articles

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4. May be harmful if swallowed or in contact with skin.

| Acute toxicity | | | | | |
|----------------|----------|--------------|---------|--------|--------|
| Exposure route | Endpoint | Value | Species | Method | Source |
| oral | LD50 | >2.000 mg/kg | rat | | ECHA |
| dermal | LD50 | >2.000 mg/kg | rat | | ECHA |

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

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Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

vomiting, nausea

• If in eyes

Causes serious eye irritation, corneal opacity

• If inhaled

vertigo, dizziness, fatigue, narcosis

• If on skin

causes skin irritation

• Other information

Other adverse effects: Liver and kidney damage, Circulatory collapse, Headache, Dyspnoea, Blood pressure drop

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

| Aquatic toxicity (acute) | | | | |
|--------------------------|----------|---------|--------|---------------|
| Endpoint | Value | Species | Source | Exposure time |
| LC50 | 193 mg/l | fish | ECHA | 96 h |

| Aquatic toxicity (acute) of components | | | | | |
|--|----------|----------|-----------|-----------------------|---------------|
| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
| Amylene | 513-35-9 | LC50 | 4,99 mg/l | fish | 96 h |
| Amylene | 513-35-9 | EC50 | 3,84 mg/l | aquatic invertebrates | 48 h |
| Amylene | 513-35-9 | ErC50 | 12 mg/l | algae | 72 h |

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| Aquatic toxicity (chronic) | | | | |
|----------------------------|------------|----------------|--------|---------------|
| Endpoint | Value | Species | Source | Exposure time |
| LC50 | 471 mg/l | fish | ECHA | 8 d |
| EC50 | 2.590 mg/l | microorganisms | ECHA | 40 min |

12.2 Persistence and degradability

Theoretical Oxygen Demand: 0,3768 mg/mg
Theoretical Carbon Dioxide: 0,5182 mg/mg

Biodegradation

The substance is readily biodegradable.

| Process of degradability | | |
|--------------------------|------------------|------|
| Process | Degradation rate | Time |
| biotic/abiotic | 5 - 26 % | 28 d |
| oxygen depletion | 68 % | 28 d |

| Degradability of components | | | | | | |
|-----------------------------|----------|------------------|------------------|------|--------|--------|
| Name of substance | CAS No | Process | Degradation rate | Time | Method | Source |
| Amylene | 513-35-9 | oxygen depletion | 7 % | 28 d | | ECHA |

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

| | |
|---------------------------|----------------------------------|
| n-octanol/water (log KOW) | 1,25 (pH value: 7, 20 °C) (ECHA) |
| BCF | 39 (ECHA) |

12.4 Mobility in soil

| | |
|----------------------|--|
| Henry's law constant | 0,002 Pa m ³ /mol at 24,8 °C (ECHA) |
|----------------------|--|

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

12.7 Other adverse effects

Data are not available.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Properties of waste which render it hazardous

HP 4 irritant - skin irritation and eye damage

HP 7 carcinogenic

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number or ID number

| | |
|-----------|---------|
| ADRRID | UN 1593 |
| IMDG-Code | UN 1593 |
| ICAO-TI | UN 1593 |

14.2 UN proper shipping name

| | |
|-----------|-----------------|
| ADRRID | DICHLOROMETHANE |
| IMDG-Code | DICHLOROMETHANE |
| ICAO-TI | Dichloromethane |

14.3 Transport hazard class(es)

| | |
|-----------|-----|
| ADRRID | 6.1 |
| IMDG-Code | 6.1 |
| ICAO-TI | 6.1 |

14.4 Packing group

| | |
|-----------|-----|
| ADRRID | III |
| IMDG-Code | III |
| ICAO-TI | III |

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14.5 Environmental hazards non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user


Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments


The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information

| | |
|---|--|
| Proper shipping name | DICHLOROMETHANE |
| Particulars in the transport document | UN1593, DICHLOROMETHANE, 6.1, III, (E) |
| Classification code | T1 |
| Danger label(s) | 6.1 |
|  | |
| Special provisions (SP) | 516, 802(ADN) |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 5 L |
| Transport category (TC) | 2 |
| Tunnel restriction code (TRC) | E |
| Hazard identification No | 60 |
| Emergency Action Code | 2Z |

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information

| | |
|---|---------------|
| Classification code | T1 |
| Danger label(s) | 6.1 |
|  | |
| Special provisions (SP) | 516, 802(ADN) |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 5 L |
| Transport category (TC) | 2 |
| Hazard identification No | 60 |

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International Maritime Dangerous Goods Code (IMDG) - Additional information

| | |
|---|--------------------------------------|
| Proper shipping name | DICHLOROMETHANE |
| Particulars in the shipper's declaration | UN1593, DICHLOROMETHANE, 6.1, III |
| Marine pollutant | - |
| Danger label(s) | 6.1 |
|  | |
| Special provisions (SP) | - |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 5 L |
| EmS | F-A, S-A |
| Stowage category | A |
| Segregation group | 10 - Liquid halogenated hydrocarbons |

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

| | |
|---|-----------------------------------|
| Proper shipping name | Dichloromethane |
| Particulars in the shipper's declaration | UN1593, Dichloromethane, 6.1, III |
| Danger label(s) | 6.1 |
|  | |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 2 L |

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Seveso Directive

| 2012/18/EU (Seveso III) | | | |
|-------------------------|---------------------------------------|---|-------|
| No | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the application of lower and upper-tier requirements | Notes |
| | not assigned | | |

Deco-Paint Directive

| | |
|-------------|-----------|
| VOC content | 100 % |
| VOC content | 1.330 g/l |

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Industrial Emissions Directive (IED)

| | |
|-------------|-----------|
| VOC content | 100 % |
| VOC content | 1.330 g/l |

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

| Pollutant release and transfer registers (PRTR) | | | |
|---|---------|---------|---|
| Name of substance | CAS No | Remarks | Threshold for releases to air (kg/year) |
| Dichloromethane | 75-09-2 | | 1 000 |

Water Framework Directive (WFD)

| List of pollutants (WFD) | | | | |
|--------------------------|---|---------|-----------|---------|
| Name of substance | Name acc. to inventory | CAS No | Listed in | Remarks |
| Dichloromethane | dichloromethane | 75-09-2 | b) | |
| Dichloromethane | dichloromethane | 75-09-2 | c) | |
| Dichloromethane | Organohalogen compounds and substances which may form such compounds in the aquatic environment | | a) | |
| Dichloromethane | Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment | | a) | |

Legend

- a) Indicative list of the main pollutants
- b) List of priority substances in the field of water policy
- c) Environmental Quality Standards for Priority Substances and certain other pollutants

Regulation on the marketing and use of explosives precursors

not listed

Regulation on drug precursors

not listed

Regulation on substances that deplete the ozone layer (ODS)

not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

Regulation on persistent organic pollutants (POP)

not listed

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National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list
not listed

Restrictions according to GB REACH, Annex 17

| Dangerous substances with restrictions (GB REACH, Annex 17) | | | |
|---|--|---------|----|
| Name of substance | Name acc. to inventory | CAS No | No |
| Dichloromethane | Dichloromethane | 75-09-2 | 59 |
| Dichloromethane | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC | | 3 |

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

| Country | Inventory | Status |
|---------|------------|------------------------------|
| AU | AIIC | substance is listed |
| CA | DSL | substance is listed |
| CN | IECSC | substance is listed |
| EU | ECSI | substance is listed |
| EU | REACH Reg. | substance is listed |
| JP | CSCL-ENCS | substance is listed |
| KR | KECI | substance is listed |
| MX | INSQ | substance is listed |
| NZ | NZIoC | substance is listed |
| PH | PICCS | substance is listed |
| TR | CICR | substance is listed |
| TW | TCSI | substance is listed |
| US | TSCA | substance is listed (ACTIVE) |
| VN | NCI | substance is listed |

Legend

| | |
|------------|---|
| AIIC | Australian Inventory of Industrial Chemicals |
| CICR | Chemical Inventory and Control Regulation |
| CSCL-ENCS | List of Existing and New Chemical Substances (CSCL-ENCS) |
| DSL | Domestic Substances List (DSL) |
| ECSI | EC Substance Inventory (EINECS, ELINCS, NLP) |
| IECSC | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ | National Inventory of Chemical Substances |
| KECI | Korea Existing Chemicals Inventory |
| NCI | National Chemical Inventory |
| NZIoC | New Zealand Inventory of Chemicals |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances (PICCS) |
| REACH Reg. | REACH registered substances |
| TCSI | Taiwan Chemical Substance Inventory |
| TSCA | Toxic Substance Control Act |

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15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

| Section | Former entry (text/value) | Actual entry (text/value) | Safety-relevant |
|---------|--|---|-----------------|
| 2.3 | Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$. | Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$. | yes |
| 15.1 | | Pollutant release and transfer registers (PRTR): change in the listing (table) | yes |
| 15.1 | | List of pollutants (WFD): change in the listing (table) | yes |
| 15.1 | | Dangerous substances with restrictions (GB REACH, Annex 17): change in the listing (table) | yes |

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|-------------|--|
| 2017/164/EU | Commission Directive establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU |
| ADR | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road) |
| BCF | Bioconcentration factor |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| Ceiling-C | Ceiling value |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DNEL | Derived No-Effect Level |
| EC50 | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| EC No | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union) |
| ED | Endocrine disruptor |
| EH40/2005 | EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/) |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EmS | Emergency Schedule |
| ErC50 | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| GB CLP | The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended) |
| GB REACH | The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended) |

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| Abbr. | Descriptions of used abbreviations |
|-----------|---|
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| ICAO-TI | Technical instructions for the safe transport of dangerous goods by air |
| IMDG | International Maritime Dangerous Goods Code |
| IMDG-Code | International Maritime Dangerous Goods Code |
| index No | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 |
| IOELV | Indicative occupational exposure limit value |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval |
| LD50 | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval |
| LEL | Lower explosion limit (LEL) |
| NLP | No-Longer Polymer |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |
| ppm | Parts per million |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail) |
| STEL | Short-term exposure limit |
| TWA | Time-weighted average |
| UEL | Upper explosion limit (UEL) |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and very Bioaccumulative |
| WEL | Workplace exposure limit |

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

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| Code | Text |
|------|------------------------------------|
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.