Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 08.09.2022 / 0009
Replacing version dated / version: 29.09.2021 / 0008
Valid from: 08.09.2022
PDF print date: 08.09.2022
Fuel Cartridge M0.35 Regular DE
Art.: 303 905 088 / NSN: 6810-12-376-4753
Fuel Cartridge M 2.5 Regular
Art.: 303 905 069 / NSN: 6810-12-381-8735
Fuel Cartridge M5 Regular
Art.: 303 905 097 / NSN: 6810-12-382-0392
Fuel Cartridge M10 Regular
Art.: 303 905 098 / NSN: 6810-12-382-0394
Fuel Cartridge M28 Regular
Art.: 303 905 096 / NSN: 6810-12-382-0397
Fuel Cartridge M0.35 Regular EN
Art.: 303 905 090 / NSN: 6810-12-376-4699

Safety data sheet
according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Fuel Cartridge M0.35 Regular DE
Art.: 303 905 088 / NSN: 6810-12-376-4753
Fuel Cartridge M 2.5 Regular
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Art.: 303 905 096 / NSN: 6810-12-382-0397
Fuel Cartridge M0.35 Regular EN
Art.: 303 905 090 / NSN: 6810-12-376-4699

Methanol
Registration number (ECHA): 01-2119433307-44-XXXX
Index: 603-001-00-X
EINECS, ELINCS, NLP, REACH-IT List-No.: 200-659-6
CAS: 67-56-1

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

Relevant identified uses of the substance or mixture:
Fuel Cell

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

SFC Energy AG
Eugen-Sänger-Ring 7
85649 Brunnthal

Tel.: +49 (0)89 673-592-0
Fax: +49 (0)89 673-592-369
info@sfc.com

Distributor:
Fuel Cell Systems Ltd.
Station Yard
RG17 0DY Hungerford, Berkshire
GB
Tel.: +44 1488507053

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number
Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Flam. Liq.	2	H225-Highly flammable liquid and vapour.
Acute Tox.	3	H331-Toxic if inhaled.
Acute Tox.	3	H311-Toxic in contact with skin.
Acute Tox.	3	H301-Toxic if swallowed.
STOT SE	1	H370-Causes damage to organs.

2.2 Label elements
Labeling according to Regulation (EC) 1272/2008 (CLP)

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Fuel Cartridge M0.35 Regular EN
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Methanol
CAS: 67-56-1, Index:603-001-00-X

Danger

H225-Highly flammable liquid and vapour. H331-Toxic if inhaled. H311-Toxic in contact with skin. H301-Toxic if swallowed. H370-Causes damage to organs.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.
P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260-Do not breathe vapours or spray. P264-Wash hands thoroughly after handling. P270-Do not eat, drink or smoke when using this product. P280-Wear protective gloves / protective clothing.
P301+P310-IF SWALLOWED: Immediately call a POISON CENTER / doctor. P330-Rinse mouth.
P404-Store in a closed container.
P501-Dispose of contents / container to an approved waste disposal facility.

2.3 Other hazards

No vPvB substance
No PBT substance
No substance with endocrine disrupting properties.
Dangerous vapours heavier than air.
In case of spreading near the ground, flashback to distance sources of ignition is possible.

SECTION 3: Composition/information on ingredients

3.1 Substances

Methanol	**Substance for which an EU exposure limit value applies.**
Registration number (REACH)	01-2119433307-44-XXXX
Index	603-001-00-X
EINECS, ELINCS, NLP, REACH-IT List-No.	200-659-6
CAS	67-56-1
content %	

Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370
Specific Concentration Limits and ATE	STOT SE 1, H370: >=10 % STOT SE 2, H371: >=3 % ATE (oral): 300 mg/kg

3.2 Mixtures
n.a.

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures
Medical supervision necessary due to possibility of delayed reaction.
First-aiders should ensure they are protected!
Never pour anything into the mouth of an unconscious person!

Inhalation
Remove person from danger area.
Supply person with fresh air. Call doctor immediately.
If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact
Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap. Call a doctor immediately, keep datasheet at hand

Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion
Rinse the mouth thoroughly with water.
Give copious water to drink - consult doctor immediately.
Induce vomiting.
Allow drinking approx. 100 ml approx. 40% ethanol in esculent.

4.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.
The following may occur:
After resorption:
Nausea
Vomiting
Headaches
Dizziness
Danger of blindness.
Acidosis
Drop in blood pressure

Cramps
Narcotic effect.
Coma
Liver and kidney damage
Disturbed heart rhythm

4.3 Indication of any immediate medical attention and special treatment needed

n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO2
Alcohol resistant foam

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:
Oxides of carbon
Explosive vapour/air or gas/air mixtures.
Toxic gases

5.3 Advice for firefighters

For personal protective equipment see Section 8.
In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
Full protection
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.
Ensure sufficient ventilation, remove sources of ignition.
Avoid dust formation with solid or powder products.
Leave the danger zone if possible, use existing emergency plans if necessary.
Ensure sufficient ventilation.
Avoid inhalation, and contact with eyes or skin.
Remove possible causes of ignition - do not smoke.
Take measures against electrostatic charging, if appropriate.
If applicable, caution - risk of slipping.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

6.2 Environmental precautions

If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent surface and ground-water infiltration, as well as ground penetration.

Prevent from entering drainage system.
If accidental entry into drainage system occurs, inform responsible authorities.
Danger of explosion.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.
Use no flammable substances.
Flush residue using copious water.
Fill the absorbed material into lockable containers.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.
If applicable, suction measures at the workstation or on the processing machine necessary.
Avoid inhalation of the vapours.
Avoid contact with eyes or skin.
Keep away from sources of ignition - Do not smoke.
Take precautions against electrostatic charges.
Take explosion-prevention measures if applicable.
Use explosion-proof equipment.
Earth devices.
Do not use on hot surfaces.
Also seal emptied tanks and tanks in the process after they have been used.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep locked away.
Keep out of access to unauthorised individuals.
Store product closed and only in original packing.
Not to be stored in gangways or stair wells.
Solvent resistant floor
Do not store with flammable or self-igniting materials.
Do not store with oxidizing agents.
Protect against moisture and store closed.
Observe special storage conditions.
Store in a well ventilated place.
Protect from direct sunlight and warming.
Observe special storage conditions.
Store cool.
Unsuitable material:

Various plastics
Magnesium
Zinc alloys

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

GB **Chemical Name**	Methanol	
WEL-TWA: 200 ppm (266 mg/m3) (WEL), 200 ppm (260 mg/m3) (EU)	WEL-STEL: 250 ppm (333 mg/m3 (WEL)	---
Monitoring procedures:	- Draeger - Alcohol 25/a Methanol (81 01 631) - Compur - KITA-119 SA (549 640) - Compur - KITA-119 U (549 657) - DFG Meth. Nr. 6 (D) (Loesungsmittelgemische 6), DFG (E) (Solvent mixtures 6) - 2013, 2002 - EU project BC/CEN/ENTR/000/2002-16 card 65-1 (2004) - NIOSH 2000 (METHANOL) - 1998 - NIOSH 2549 (VOLATILE ORGANIC COMPOUNDS (SCREENING)) - 1996 - NIOSH 3800 (ORGANIC AND INORGANIC GASES BY EXTRACTIVE FTIR SPECTROMETRY) - 2016 - Draeger - Alcohol 100/a (CH 29 701)	
BMGV: ---		Other information: Sk (WEL, EU)

Methanol						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	154	mg/l	
	Environment - marine		PNEC	15,4	mg/l	
	Environment - sediment, freshwater		PNEC	570,4	mg/kg	
	Environment - sediment, marine		PNEC	57,04	mg/kg	
	Environment - soil		PNEC	23,5	mg/kg	
	Environment - water, sporadic (intermittent) release		PNEC	1540	mg/l	
	Environment - sewage treatment plant		PNEC	100	mg/l	
Consumer	Human - inhalation	Long term, local effects	DNEL	26	mg/m3	
Consumer	Human - inhalation	Short term, local effects	DNEL	26	mg/m3	
Consumer	Human - dermal	Short term, systemic effects	DNEL	4	mg/kg bw/day	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	26	mg/m3	

Consumer	Human - oral	Short term, systemic effects	DNEL	4	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	4	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	26	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	4	mg/kg bw/day	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	20	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	130	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	130	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	20	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	130	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	130	mg/m3	

GB WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).
(8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).
(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.
(13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

8.2 Exposure controls
8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.
Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
These are specified by e.g. EN 14042.
EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
Chemical resistant protective gloves (EN ISO 374).
Recommended
With short-term contact:
Protective Viton® / fluoroelastomer gloves (EN ISO 374).
Permeation time (penetration time) in minutes:
> 120
With long-term contact:
Protective gloves in butyl rubber (EN ISO 374).
Permeation time (penetration time) in minutes:
> 480
References
Protective hand cream recommended.
The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).
According to operation.
Protective working garment, antistatic (EN1149)
Natural fibre or heat-resistant synthetic fibre

Respiratory protection:
If OES or MEL is exceeded.
With short-term contact:
Gas mask filter AX (EN 14387), code colour brown.
With long-term contact:
Protective respirator with independent air supply.
Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls
No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour:	Alcoholic
Melting point/freezing point:	-98 °C
Boiling point or initial boiling point and boiling range:	64,7 °C
Flammability:	Flammable
Lower explosion limit:	5,5 Vol-%
Upper explosion limit:	44 Vol-%
Flash point:	11 °C
Auto-ignition temperature:	455 °C
Decomposition temperature:	There is no information available on this parameter.
pH:	There is no information available on this parameter.
Kinematic viscosity:	0,597 mPas (20°C, References, Dynamic viscosity)
Solubility:	Soluble
Partition coefficient n-octanol/water (log value):	-0,77 (References log Pow)
Vapour pressure:	128 hPa (20°C)
Density and/or relative density:	0,79 g/cm3 (20°C)
Relative vapour density:	1,11 (References)
Particle characteristics:	Does not apply to liquids.

9.2 Other information

Explosives:	Possible build up of explosive/highly flammable vapour/air mixture. Product is not explosive.
Oxidising liquids:	No

SECTION 10: Stability and reactivity

10.1 Reactivity
The product has not been tested.

10.2 Chemical stability
Stable with proper storage and handling.

10.3 Possibility of hazardous reactions
No decomposition if used as intended.

10.4 Conditions to avoid
Heating, open flame, ignition sources
Protect from humidity.
Product is hygroscopic.
Electrostatic charge

10.5 Incompatible materials
Alkali metals
Alkaline-earth metals
Developement of:
Hydrogen gas
Exothermic reaction possible with:
Acids
Acid halide
Acid anhydrides
Reducing agent
Danger of explosion with:

Oxidizing agents
Perchlorates
Peroxides
Perchloric acid
Chromium (VI) trioxide
Chlorates
Nitric acid
Oxides of nitrogen
Halogens
Magnesium
Hydrogen peroxide

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

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

Possibly more information on health effects, see Section 2.1 (classification).

Methanol						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	ATE	300	mg/kg	Human being		Experiences on persons.
Acute toxicity, by dermal route:	LD50	17100	mg/kg	Rabbit		Does not conform with EU classification.
Acute toxicity, by inhalation:	LC50	85	mg/l/4h	Rat		Not relevant for classification., Vapours
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Carcinogenicity:				Mouse	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative

Reproductive toxicity:	NOAEL	1,3	mg/l	Mouse	OECD 416 (Two-generation Reproduction Toxicity Study)	
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	0,13	mg/l	Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	
Aspiration hazard:						n.d.a.
Symptoms:						abdominal pain, vomiting, headaches, gastrointestinal disturbances, drowsiness, visual disturbances, watering eyes, nausea, mental confusion, intoxication, dizziness

11.2. Information on other hazards

Methanol						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Endocrine disrupting properties:						n.d.a.
Other information:						No other relevant information available on adverse effects on health.

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

Methanol							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
12.1. Toxicity to fish:	LC50	96h	15400	mg/l	Lepomis macrochirus		EPA-660/3-75-009
12.1. Toxicity to daphnia:	EC50	96h	18260	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	

12.1. Toxicity to algae:	EC50	96h	22000	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	99	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		28400		Chlorella vulgaris		Not to be expected
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Endocrine disrupting properties:							n.d.a.
12.7. Other adverse effects:							n.d.a.
Toxicity to bacteria:	IC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other information:	Log Pow		-0,77				
Other information:	DOC		<70	%			
Other information:	BOD		>60	%			

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:
The waste codes are recommendations based on the scheduled use of this product.
Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)
13 07 03 other fuels (including mixtures)
Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
E.g. suitable incineration plant.
E.g. dispose at suitable refuse site.

For contaminated packing material

Pay attention to local and national official regulations.
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.
Do not perforate, cut up or weld uncleaned container.
Residues may present a risk of explosion.

SECTION 14: Transport information

General statements

14.1. UN number or ID number: 3473

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:
UN 3473 FUEL CELL CARTRIDGES

14.3. Transport hazard class(es): 3
14.4. Packing group: -
Classification code: F3
LQ: 1 L
14.5. Environmental hazards: Not applicable
Tunnel restriction code: E

Transport by sea (IMDG-code)

14.2. UN proper shipping name:
FUEL CELL CARTRIDGES

14.3. Transport hazard class(es): 3
14.4. Packing group: -
EmS: F-E, S-D
Marine Pollutant: n.a
14.5. Environmental hazards: Not applicable

Transport by air (IATA)

14.2. UN proper shipping name:
Fuel cell cartridges

14.3. Transport hazard class(es): 3
14.4. Packing group: -
14.5. Environmental hazards: Not applicable

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

14.7. Maritime transport in bulk according to IMO instruments

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

Observe restrictions:
Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!
Regulation (EC) No 1907/2006, Annex XVII
Methanol
Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!
Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements
P5c		5000	50000
H2	7	50	200
H3		50	200

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 2 - This product contains the substances listed below:

Entry Nr	Dangerous substances	Notes to Annex I	Qualifying quantity (tonnes) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) for the application of - Upper-tier requirements
22	Methanol		500	5000

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): 100 %

15.2 Chemical safety assessment

There is no chemical safety report available.

SECTION 16: Other information

Revised sections: 1-16
These details refer to the product as it is delivered.
Employee instruction/training in handling hazardous materials is required.
The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).
H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
H370 Causes damage to organs.

Flam. Liq. — Flammable liquid
Acute Tox. — Acute toxicity - inhalation
Acute Tox. — Acute toxicity - dermal
Acute Tox. — Acute toxicity - oral
STOT SE — Specific target organ toxicity - single exposure

Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.
Guidelines for the preparation of safety data sheets as amended (ECHA).
Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).
Safety data sheets for the constituent substances.
ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).
German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).
EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.
National Lists of Occupational Exposure Limits for each country as amended.
Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ASTM ASTM International (American Society for Testing and Materials)
ATE Acute Toxicity Estimate
BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BCF Bioconcentration factor
BSEF The International Bromine Council
bw body weight
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)
EC European Community
ECHA European Chemicals Agency
ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect
EEC European Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
EN European Norms
EPA United States Environmental Protection Agency (United States of America)
ErCx, EμCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)
etc. et cetera
EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
Koc Adsorption coefficient of organic carbon in the soil
Kow octanol-water partition coefficient

IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
IUPAC International Union for Pure Applied Chemistry
LC50 Lethal Concentration to 50 % of a test population
LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
Log Koc Logarithm of adsorption coefficient of organic carbon in the soil
Log Kow, Log Pow Logarithm of octanol-water partition coefficient
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
NIOSH National Institute for Occupational Safety and Health (USA)
NLP No-longer-Polymer
NOEC, NOEL No Observed Effect Concentration/Level
OECD Organisation for Economic Co-operation and Development
org. organic
OSHA Occupational Safety and Health Administration (USA)
PBT persistent, bioaccumulative and toxic
PE Polyethylene
PNEC Predicted No Effect Concentration
ppm parts per million
PVC Polyvinylchloride
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SVHC Substances of Very High Concern
Tel. Telephone
TOC Total organic carbon
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative
wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
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