We create chemistry

Safety data sheet

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.
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Product: **K-Methylate Crystals**

(ID no. 30036705/SDS_GEN_DE/EN)
Date of print 14.11.2024

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

1.1. Product identifier

K-Methylate Crystals

Chemical name: potassium methylate crystals
INDEX-Number: 603-040-00-2
CAS Number: 865-33-8

REACH registration number: 01-2119519243-47-0000

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

Relevant identified uses: Chemical
Recommended use: initial product for chemical syntheses, process chemical

For the detailed identified uses of the product see appendix of the safety data sheet.

1.3. Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY
Division Monomers

Telephone: +49 621 60 42737
E-mail address: pss.monomers@basf.com

1.4. Emergency telephone number

International emergency number:
Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Flam. Sol. 1	H228 Flammable solid.
Self-heat. 1	H251 Self-heating: may catch fire.
Acute Tox. 4 (oral)	H302 Harmful if swallowed.
Skin Corr./Irrit. 1B	H314 Causes severe skin burns and eye damage.
Eye Dam./Irrit. 1	H318 Causes serious eye damage.

According to BASF current knowledge and application of the criteria given in Annex I of Regulation (EC) No. 1272/2008, the following classification exceeding the classification given in Regulation (EC) No 1272/2008, Annex VI, Table 3.1 is required.

Self-heat. 1
Skin Corr./Irrit. 1A
Flam. Sol. 1
Acute Tox. 4 (oral)
Eye Dam./Irrit. 1

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Pictogram:

Signal Word:

Danger

Hazard Statement:

H228	Flammable solid.
H251	Self-heating: may catch fire.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

Precautionary Statements (Prevention):

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves, protective clothing and eye protection or face protection.

Precautionary Statements (Response):

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.

Precautionary Statements (Storage):

P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

According to Regulation (EC) No 1272/2008 [CLP]

Labeling of special preparations (GHS):

EUH014: Reacts violently with water.

According to Regulation (EC) No 1272/2008 [CLP]EUH071: Corrosive to the respiratory tract.

Hazard determining component(s) for labelling: potassium methanolate

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.
When finely distributed, self-ignition is possible.
The product does not contain a substance above legal limits fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.
Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Chemical nature

potassium methanolate

CAS Number: 865-33-8	Flam. Sol. 1 Self-heat. 1
EC-Number: 212-736-1	Acute Tox. 4 (oral)
INDEX-Number: 603-040-00-2	Skin Corr./Irrit. 1B Eye Dam./Irrit. 1 H228, H251, H314, H302 EUH014 , EUH071

Differing classification according to current

	knowledge and the criteria given in Annex I of Regulation (EC) No. 1272/2008
	Self-heat. 1 Skin Corr./Irrit. 1A Flam. Sol. 1 Acute Tox. 4 (oral) Eye Dam./Irrit. 1 EUH014, EUH071

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

3.2. Mixtures

Not applicable

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

Immediately remove contaminated clothing. First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position).

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:
Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:
Immediately rinse mouth and then drink 200 - 300 ml water, do not induce vomiting, seek medical attention. Administer 50 ml of pure ethanol in a drinkable concentration. Seek medical attention.

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

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., skin corrosion, irritates the eyes and respiratory tract, Further symptoms are possible

Hazards: No hazard is expected under intended use and appropriate handling.

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

Treatment: Symptomatic treatment (decontamination, vital functions).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:
dry powder, Dry sand, alcohol-resistant foam

Unsuitable extinguishing media for safety reasons:
water, carbon dioxide

5.2. Special hazards arising from the substance or mixture

Endangering substances: corrosive gases/vapours
Advice: The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with the skin, eyes and clothing. Use breathing apparatus if exposed to vapours/dust/aerosol.

6.2. Environmental precautions

Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

For small amounts: Sweep/shovel up. Correctly dispose of recovered product immediately.
For large amounts: Sweep/shovel up. Correctly dispose of recovered product immediately.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Breathing must be protected when large quantities are decanted without local exhaust ventilation. Protect against moisture. Protect from air. Protect from direct sunlight.

Protection against fire and explosion:
Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Avoid dust formation.

7.2. Conditions for safe storage, including any incompatibilities

Segregate from acids and acid forming substances.

Suitable materials for containers: Low density polyethylene (LDPE), Stainless steel 1.4301 (V2), Stainless steel 1.4401, glass, High density polyethylene (HDPE), Carbon steel (Iron), Stainless steel 1.4541, Stainless steel 1.4571, Alkyd resin lacquer 441
Unsuitable materials for containers: Aluminium, Galvanized carbon steel (Zinc), Lead-plated, Paper/Fibreboard, tinned carbon steel (Tinplate)
Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place.

Storage class according to TRGS 510 (originally VCI, Germany): (4.2) Pyrophoric or self-heating substances

7.3. Specific end use(s)

See exposure scenario(s) in the attachment to this safety data sheet.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

The surveillance of the workplace by exposure measurements may be necessary, in order to prove the efficiency of safety measures, for example ventilation or the need of respiratory protection. Since this requires a specific competency, only accredited laboratories should be contracted. Regarding suitable methods to assess inhalation exposure, the European Standards EN 482, 689 and 14042 are to be considered. In addition, the TRGS 402 has to be observed in Germany. The mentioned substance is result of gradual decomposition under influence of atmospheric humidity.

67-56-1: methanol

Skin Designation (OEL (EU))
The substance can be absorbed through the skin.
TWA value 260 mg/m3 ; 200 ppm (OEL (EU))
indicative
Skin Designation (TRGS 900 (DE))
The substance can be absorbed through the skin.
Short Term Exposure Classification: (TRGS 900 (DE))
Category II: Substances with a resorptive effect
OEL 130 mg/m3 ; 100 ppm (TRGS 900 (DE))
Ceiling limit value/factor: 2
If the occupational exposure limit value (AGW) and the biological limit value (BGW) are complied with, there should be no risk of damage for the unborn child (see TRGS 900, Number 2.7)

PNEC

freshwater:
No hazard identified.

marine water:
No hazard identified.

intermittent release:
No hazard identified.

STP:
No hazard identified.

sediment (freshwater):
No hazard identified.

soil:
No hazard identified.

oral (secondary poisoning):
No PNEC oral derived, as accumulation in organisms is not to be expected.

DNEL

worker:
combined (oral, dermal and inhalative)
No DNELs have been derived.

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:
Use gauntlets.
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):
butyl rubber (butyl) - 0.7 mm coating thickness
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.
Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and face shield.

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Avoid contact with the skin, eyes and clothing. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice. Avoid inhalation of dusts.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter:	solid	
Form:	powder, crystalline	
Colour:	white to light yellow	
Odour:	odourless	
Odour threshold:		
	Not determined due to potential health hazard by inhalation.	
Melting point:	359 - 400 °C (1.013 hPa) The substance / product decomposes.	(Directive 92/69/EEC, A.1)
decomposition point:	384 - 430 °C (1.013 hPa)	(Directive 92/69/EEC, A.1)
Boiling point:	(1.013 hPa) Cannot be distilled without decomposition at normal pressure.	(Directive 92/69/EEC, A.2)
Flammability:	Highly flammable.	(Directive 84/449/EEC, A.10)

Lower explosion limit:
For solids not relevant for classification and labelling.

Upper explosion limit:
For solids not relevant for classification and labelling.

Flash point:
Study technically not feasible.

Self-ignition temperature: Temperature: 70 °C
Pressure: 1.013 hPa
Test type: Self-ignition at high temperatures.
(Method: Directive 92/69/EEC, A.16)

Thermal decomposition: > 300 °C (DTA)
The indicated value is for inert gas atmosphere.
> 50 °C
Risk of spontaneous ignition when exposed to air.

pH value: 12,8
(7 g/l, 20 °C)

Viscosity, kinematic:
not applicable, the product is a solid

Viscosity, dynamic:
Study technically not feasible.

Solubility in water: Study scientifically not justified.

Solubility (qualitative) solvent(s): alcohols
soluble

Partitioning coefficient n-octanol/water (log Kow): -0,72 (calculated)
(25 °C; pH value: < 13)

Information on: methanol
Partitioning coefficient n-octanol/water (log Kow): -0,77 (measured)
(20 °C)
Literature data.

Vapour pressure: < 0,000001 hPa (calculated)
(25 °C)

Relative density: 1,7
(20 °C)
Literature data.

Density: 1,7 g/cm3
(20 °C)
Literature data.

Relative vapour density (air):
The product is a non-volatile solid.

Particle characteristics

Particle size distribution: 82,2 µm (D10, ISO 13320-1)
20,2 µm (D90, ISO 13320-1)
44,4 µm (D50, ISO 13320-1)

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard:	not explosive	(other)
Impact sensitivity:	Based on the chemical structure there is no shock-sensitivity.	

Oxidizing properties

Fire promoting properties: not fire-propagating

Pyrophoric properties

Self-ignition temperature:		Test type: Spontaneous self-ignition at room-temperature.
	not self-igniting	

Self-heating substances and mixtures

Self heating ability:	It is a substance capable of spontaneous heating.	

Substances and mixtures, which emit flammable gases in contact with water

Formation of flammable gases:		(Directive 92/69/EEC, A.12)
	The product liberates flammable gases in contact with water.	

Other safety characteristics

Bulk density:	approx. 900 kg/m3 (< 40 °C)	(DIN 53466)
pKA:	15,17 (20 °C)	(calculated)
Hygroscopy:	hygroscopic	
Adsorption/water - soil:	KOC: 1 The product has not been tested. The statement has been derived from the properties of the hydrolysis products.	(calculated)
Adsorption:	Because of the n-octanol/water distribution coefficient (log Pow) adsorption is not to be expected.	
Surface tension:	Study scientifically not justified.	
Evaporation rate:	The product is a non-volatile solid.	

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Formation of flammable gases:	Remarks:	The product liberates flammable gases in contact with water.
	Method:	Flammability (contact with water)

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

Exothermic reaction. Reacts with water and acids. Reacts with substances which contain active hydrogen. Self heating possible in the presence of air. Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.

10.4. Conditions to avoid

Avoid contact with air.

10.5. Incompatible materials

Substances to avoid:
water, acids

10.6. Hazardous decomposition products

Hazardous decomposition products:
potassium hydroxide, methanol

SECTION 11: Toxicological Information

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

Acute toxicity

Assessment of acute toxicity:

The toxicity of the product is based on its corrosivity. Of moderate toxicity after single ingestion.

Experimental/calculated data:

LD50 rat (oral): > 1.200 mg/kg (OECD Guideline 401)
The product has not been tested. The statement has been derived from the properties of the individual components. An aqueous solution was tested.
(by inhalation):Study does not need to be conducted.
LD50 rabbit (dermal): > 2.000 mg/kg (BASF-Test)

No mortality was observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. An aqueous solution was tested.

Information on: methanol
Assessment of acute toxicity:
Of high toxicity after single ingestion. Of high toxicity after short-term inhalation. Of high toxicity after short-term skin contact.

Information on: potassium methanolate

Experimental/calculated data:
LD50 rat (oral): 1.687 mg/kg (OECD Guideline 401)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. An aqueous solution was tested.

Information on: methanol

Experimental/calculated data:
LD50 rat (oral): > 1187 - 2769 mg/kg (BASF-Test)

Information on: potassium hydroxide

Experimental/calculated data:
LD50 rat (oral): 333 mg/kg (OECD Guideline 425)
Literature data.

Irritation

Assessment of irritating effects:

Corrosive! Damages skin and eyes.
The break through time determined in the in-vitro membrane barrier test indicates that the test substance is expected to cause skin necrosis in vivo within 14 days after a 1-hour exposure.

Experimental/calculated data:

Skin corrosion/irritation

rabbit: Corrosive.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Skin corrosion/irritation

: Corrosive. (OECD Guideline 435)

Serious eye damage/irritation

rabbit: irreversible damage (BASF-Test)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Respiratory/Skin sensitization

Assessment of sensitization:

The substance did not cause skin sensitization in humans. Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

Guinea pig maximization test guinea pig: Non-sensitizing. (similar to OECD guideline 406)
The product has not been tested.
Closed-patch Test human: Non-sensitizing. (Human patch test)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Germ cell mutagenicity

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in a test with mammals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity:
Study does not need to be conducted. The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity

Assessment of reproduction toxicity:
Study does not need to be conducted. The chemical structure does not suggest a specific alert for such an effect.

Developmental toxicity

Assessment of teratogenicity:

Study does not need to be conducted. The chemical structure does not suggest a specific alert for such an effect.

Specific target organ toxicity (single exposure)

Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Study does not need to be conducted.

Information on: methanol
Assessment of repeated dose toxicity:

The substance may cause blindness after repeated ingestion. The substance may cause blindness after repeated inhalation.

Aspiration hazard

Harmful if swallowed.

Interactive effects

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

The substance is not identified to have endocrine disrupting properties according to Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 nor is included in the Candidate List of substances of very high concern according to EU REACh Article 59 for having endocrine disrupting properties.

Other information

Other relevant toxicity information

The toxicity of the product is based on its corrosivity. The data given refers to the decomposition or transformation products.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.
The product has not been tested. The statement has been derived from the properties of the hydrolysis products. The product gives rise to pH shifts.

Toxicity to fish:
LC50 (96 h) 15.400 mg/l, Lepomis macrochirus (Fish test acute, Flow through.)
Literature data. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Aquatic invertebrates:
EC50 (48 h) > 10.000 mg/l, Daphnia magna (DIN 38412 Part 11, static)
Literature data. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

EC50 (96 h) 18.260 mg/l, Daphnia magna (OECD Guideline 202, part 1, semistatic)
Literature data.
The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Aquatic plants:
EC50 (96 h) approx. 22.000 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
Literature data. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Microorganisms/Effect on activated sludge:
EC50 (3 h) > 1.000 mg/l, activated sludge (OECD Guideline 209, static)
Literature data. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Chronic toxicity to fish:
No observed effect concentration (200 h) 7.900 mg/l, Oryzias latipes (static)
The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

No observed effect concentration (28 d) 446,7 mg/l, Pimephales sp. (calculated)
The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d) 208 mg/l, Daphnia magna (calculated)
The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Information on:methanol
Toxicity to fish:
LC50 (96 h) 15.400 mg/l, Lepomis macrochirus (other, Flow through.)

Information on:methanol
Aquatic invertebrates:
EC50 (48 h) 18.260 mg/l, Daphnia magna (OECD Guideline 202, part 1, semistatic)

Information on:potassium hydroxide
Aquatic invertebrates:
EC50 (48 h) 40,4 mg/l, Ceriodaphnia dubia (other, static)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The product will cause changes in the pH value of the test system. The result refers to an unneutralized sample.

Information on:methanol

Aquatic plants:
EC50 (96 h) approx. 22.000 mg/l (growth rate), Selenastrum capricornutum (OECD Guideline 201, static)

Information on:methanol
Microorganisms/Effect on activated sludge:
EC50 (3 h) > 1.000 mg/l, (OECD Guideline 209, aquatic)

EC50 (24 h) 880 mg/l, Nitrosomonas sp. (Inhibition of nitrification, aquatic)

Assessment of terrestrial toxicity:
No toxic effects have been observed in terrestrial studies.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Soil living organisms:
LC50 (48 h), Eisenia foetida (OECD Guideline 207, filter paper)
The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

No observed effect concentration (63 d) 10.000 mg/kg, Eisenia sp. (other)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

No observed effect concentration (28 d) 1.000 mg/kg, Folsomia candida (other)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Terrestrial plants:
EC50 (72 h) 41000 mg/l, Lactuca sativa (other)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

No observed effect concentration (21 d) 1.555 mg/kg, terrestrial plants (other)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

No observed effect concentration (14 d) 1.555 mg/kg, terrestrial plants (other)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Other terrestrial non-mammals:
(No data available.)
No data available.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O):
Readily biodegradable (according to OECD criteria).

Elimination information:
90 - 100 % BOD of the ThOD (20 d) (aerobic, activated sludge, domestic)
Literature data. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on:methanol
Assessment biodegradation and elimination (H2O):
Readily biodegradable (according to OECD criteria).

Assessment of stability in water:
In contact with water the substance will hydrolyse rapidly.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:
Does not significantly accumulate in organisms.

Bioaccumulation potential:

Bioconcentration factor(BCF): 4,5 (72 h), Cyprinus carpio (measured)
The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Information on:methanol
Assessment bioaccumulation potential:
Significant accumulation in organisms is not to be expected.

12.4. Mobility in soil

Assessment transport between environmental compartments:
Volatility: The substance will not evaporate into the atmosphere from the water surface.
Adsorption in soil: Adsorption to solid soil phase is not expected.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT

(Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative). Self classification

12.6. Endocrine disrupting properties

The substance is not identified to have endocrine disrupting properties according to Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 nor is included in the Candidate List of substances of very high concern according to EU REACh Article 59 for having endocrine disrupting properties.

12.7. Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.8. Additional information

Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen.

Other ecotoxicological advice:
Do not release untreated into natural waters. Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. After neutralization only the relatively minor harmful effect of the resulting salts remains. The local regulations on waste-water treatment must be followed.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Hydrolyze product with excess of water under usage of the personal protection equipment and dispose of in accordance with local authority regulations.
Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

SECTION 14: Transport Information

Land transport

ADR

UN number or ID number:	UN3206
UN proper shipping name:	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S. (POTASSIUM METHANOLATE)
Transport hazard class(es):	4.2, 8
Packing group:	II
Environmental hazards:	no
Special precautions for user:	Tunnel code: D/E

RID

UN number or ID number:	UN3206
UN proper shipping name:	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S. (POTASSIUM METHANOLATE)
Transport hazard class(es):	4.2, 8
Packing group:	II
Environmental hazards:	no
Special precautions for user:	None known

Inland waterway transport

ADN

UN number or ID number:	UN3206
UN proper shipping name:	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S. (POTASSIUM METHANOLATE)
Transport hazard class(es):	4.2, 8
Packing group:	II
Environmental hazards:	no
Special precautions for user:	None known

Transport in inland waterway vessel
Not evaluated

Sea transport

IMDG

UN number or ID number:	UN 3206
UN proper shipping name:	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S. (POTASSIUM METHANOLATE)

Transport hazard class(es):	4.2, 8
Packing group:	II
Environmental hazards:	no Marine pollutant: NO
Special precautions for user:	EmS: F-A; S-J

Air transport

IATA/ICAO

UN number or ID number:	UN 3206
UN proper shipping name:	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S. (POTASSIUM METHANOLATE)
Transport hazard class(es):	4.2, 8
Packing group:	II
Environmental hazards:	No Mark as dangerous for the environment is needed
Special precautions for user:	None known

14.1. UN number or ID number
See corresponding entries for “UN number or ID number” for the respective regulations in the tables above.

14.2. UN proper shipping name
See corresponding entries for “UN proper shipping name” for the respective regulations in the tables above.

14.3. Transport hazard class(es)
See corresponding entries for “Transport hazard class(es)” for the respective regulations in the tables above.

14.4. Packing group
See corresponding entries for “Packing group” for the respective regulations in the tables above.

14.5. Environmental hazards
See corresponding entries for “Environmental hazards” for the respective regulations in the tables above.

14.6. Special precautions for user
See corresponding entries for “Special precautions for user” for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

Further information
Specific national features of transport regulations must be observed. They are to be found in the shipping documents.

SECTION 15: Regulatory Information

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

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 40, 69, 75

Hazardous Incident Ordinance (Germany):
List entry in regulation: 1.4.1

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
List entry in regulation: O1

Classification according to 'TA-Luft' (Germany):

5.2.1: total dust, including fine dust

Water hazard class (§6 AwSV para.4 (Legal binding announcement of the substance in the Federal Gazette)): (2) significantly water polluting.

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Chemical Safety Assessment performed

SECTION 16: Other Information

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Flam. Sol.	Flammable solids
Self-heat.	Self-heating substances and mixtures
Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation

H228	Flammable solid.
H251	Self-heating: may catch fire.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

Abbreviations
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Annex: Exposure Scenarios

Index

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1. Short title of exposure scenario

Manufacture of substance
IS; SU8, SU9; ERC1; PROC1, PROC8b, PROC9

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Physical state	liquid, Solid

Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes

Contributing exposure scenario	
Use descriptors covered	ERC1: Manufacture of the substance As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

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2. Short title of exposure scenario

Use in/as Formulation, Formulation & (re)packing of substances and mixtures
IS; SU10; ERC2; PROC1, PROC8b, PROC9

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial

Operational conditions	
Physical state	liquid, Solid
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes

Contributing exposure scenario	
Use descriptors covered	ERC2: Formulation into mixture As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

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3. Short title of exposure scenario

Use in chemical synthesis
IS; SU8, SU9; ERC6a; PROC1, PROC8b, PROC9; PC19

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing).

	Use domain: industrial
Operational conditions	
Physical state	liquid, Solid
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes

Contributing exposure scenario	
Use descriptors covered	ERC6a: Use of intermediate As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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4. Short title of exposure scenario

Use as laboratory reagent/agent, Use in laboratories
PW; SU24; ERC8a; PROC15; PC21

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: professional
Operational conditions	
Physical state	liquid, Solid
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes

Contributing exposure scenario	
Use descriptors covered	ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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5. Short title of exposure scenario

Production of pharmaceutical products
IS; SU0-1, IS; ERC4; PROC2, PROC8b, PROC9; PC29

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Physical state	liquid, Solid
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes

Contributing exposure scenario	
Use descriptors covered	ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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6. Short title of exposure scenario

Use as a Process chemical, Manufacture of fine chemicals
IS; SU8, SU9; ERC4; PROC1, PROC8b, PROC9; PC20

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Physical state	liquid, Solid
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes

Contributing exposure scenario	
Use descriptors covered	ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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7. Short title of exposure scenario

Use as a Process chemical, Use in food products
IS; SU4; ERC4; PROC1, PROC8b, PROC9; PC20

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Physical state	liquid, Solid
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter	

or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes

Contributing exposure scenario	
Use descriptors covered	ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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8. Short title of exposure scenario

Use as a Process chemical, Manufacturing of fuels
IS; SU8; ERC4; PROC1, PROC8b, PROC9; PC13

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Physical state	liquid, Solid
Risk Management Measures	

Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes

Contributing exposure scenario	
Use descriptors covered	ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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