We create chemistry

Safety Data Sheet
K-Methylate Crystals

1. Identification

Product identifier used on the label

K-Methylate Crystals

Recommended use of the chemical and restriction on use

Recommended use*: Chemical
Recommended use*: for industrial use only

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
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MÉXICO

Telephone: +52 55 5325 2600

Emergency telephone number

SETIQ: 1800-00-214-(Rep. Mexicana) or 55-59-15-88 (CDMX)
Telephone: +1-800-849-5204 or +1-833-229-1000

Other means of identification

Molecular formula:	CH3OK
Chemical family:	alcohol, potassium salt
Synonyms:	Potassium Methylate Use: chemical
	POTASSIUM METHOXIDE

2. Hazards Identification

According to Regulation NOM-018-STPS-2015

Classification of the product

Flam. Sol.	1	Flammable solids
Self-heat.	1	Self-heating substances and mixtures

Met. Corr.	1	Corrosive to metals
Acute Tox.	4 (oral)	Acute toxicity
Skin Corr./Irrit.	1B	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
STOT SE	1	Specific target organ toxicity — single exposure

Label elements

Pictogram:

Signal Word:
Danger

Hazard Statement:

H228	Flammable solid.
H290	May be corrosive to metals.
H251	Self-heating: may catch fire.
H302	Harmful if swallowed.
H370	Causes damage to organs (central nervous system, optic nerve).
H314	Causes severe skin burns and eye damage.

Precautionary Statements (Prevention):

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/gas/mist/vapours.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P235 + P410	Keep cool. Protect from sunlight.
P264	Wash with plenty of water and soap thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P240	Ground and bond container and receiving equipment.
P234	Keep only in original packaging.

Precautionary Statements (Response):

P310	Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303 + P361 + P352	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P301 + P330	IF SWALLOWED: rinse mouth.
P370 + P378	In case of fire: Use… to extinguish.
P390	Absorb spillage to prevent material damage.
P370 + P378	In case of fire: Use water spray or dry powder for extinction.

Precautionary Statements (Storage):

P405	Store locked up.
P407	Maintain air gap between stacks or pallets.
P413	Store bulk masses greater than 1,000 kg/2,205 lbs at temperatures not exceeding 25 °C/77 °F.
P420	Store separately.
P406	Store in a corrosion-resistant/… container with a resistant inner liner.

Precautionary Statements (Disposal):

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

Hazards not otherwise classified

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.

Labeling of special preparations (GHS):
Reacts violently with water.

3. Composition / Information on Ingredients

According to Regulation NOM-018-STPS-2015

CAS Number	Weight %	Chemical name
865-33-8	>= 75.0 - <= 100.0%	potassium methanolate
67-56-1	>= 1.0 - < 3.0%	Methanol
1310-58-3	>= 0.3 - < 3.0%	Potassium hydroxide

4. First-Aid Measures

Description of first aid measures

General advice:
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:
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:
Wash affected areas with water while removing contaminated clothing. Immediate medical attention required.

If in eyes:
In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention required.

If swallowed:
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.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or 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.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

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

Unsuitable extinguishing media for safety reasons:
water, carbon dioxide

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
corrosive gases/vapours
The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:
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.

Impact Sensitivity:
Remarks: Based on the chemical structure there is no shock-sensitivity.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

Environmental precautions

Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

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.

Conditions for safe storage, including any incompatibilities

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.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Methanol	Exposure limits	Skin Designation ; The substance can be absorbed through the skin. TWA value 200 ppm ; STEL value 250 ppm ;
Potassium hydroxide	Exposure limits	CLV 2 mg/m3 ;

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) particulate respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination.

Hand protection:
Use gauntlets., Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):, 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. Avoid contact with skin and eyes. Take off immediately all contaminated clothing. Avoid inhalation of dusts. Store work clothing separately.

9. Physical and Chemical Properties

Form:	powder, crystalline	
Odour:	odourless	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
Colour:	white to light yellow	
pH value:	12.8 (7 g/l, 20 °C)	
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)
Flash point:	Study technically not feasible.	
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.	
Vapour pressure:	< 0.000001 hPa (25 °C)	(calculated)
Density:	1.7 g/cm3 (20 °C) Literature data.	
Relative density:	1.7 (20 °C) Literature data.	
Bulk density:	approx. 900 kg/m3 (< 40 °C)	(DIN 53466)
Vapour density:	The product is a non-volatile solid.	
Partitioning coefficient n-octanol/water (log Pow):	-0.72 (25 °C)	(calculated)
Information on: Methanol		
Partitioning coefficient n-octanol/water (log Pow):	-0.77 (20 °C) Literature data.	(measured)
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Self-ignition temperature:	70 °C not self-igniting	(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.	
Viscosity, dynamic:	Study technically not feasible.	
Particle size:	44 µm	(measured)
Solubility in water:	Study scientifically not justified.	
Solubility (qualitative):	soluble solvent(s): alcohols,	

Evaporation rate: The product is a non-volatile solid.

10. Stability and Reactivity

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

Corrosion to metals:
Corrosive effect on metals.

Oxidizing properties:
not fire-propagating

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

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

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.

Conditions to avoid
Avoid contact with air.

Incompatible materials
water, acids

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: Potassium hydroxide, Methanol

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

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity
Assessment of acute toxicity: The toxicity of the product is based on its corrosivity.

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.

Oral
Type of value: ATE
Species: rat
Value: 1,202 mg/kg (OECD Guideline 401)
<** No user-defined text in value assignment: 000000014119 ; SAP_EHS_1019_001 ; 0001 [ ] **>
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: potassium methanolate
Type of value: LD50
Species: rat
Value: 1,687 mg/kg (OECD Guideline 401)
An aqueous solution was tested.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: Methanol
Type of value: LD50
Species: rat
Value: > 1187 - 2769 mg/kg (BASF-Test)

Information on: Potassium hydroxide
Type of value: LD50
Species: rat (male)
Value: 333 mg/kg (OECD Guideline 425)
Literature data.

Inhalation
Study does not need to be conducted.

Dermal
Type of value: LD50
Species: rabbit
Value: > 2,000 mg/kg (BASF-Test)
An aqueous solution was tested.
No mortality was observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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

Irritation / corrosion
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.

Skin
Species: rabbit
Result: Corrosive.

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

Result: Corrosive.
Method: OECD Guideline 435

Eye
Species: rabbit
Result: Risk of serious damage to eyes.
Method: BASF-Test
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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.

Guinea pig maximization test
Species: guinea pig
Result: Non-sensitizing.
Method: similar to OECD guideline 406
The product has not been tested.

Closed-patch Test
Species: human
Result: Non-sensitizing.
Method: Human patch test
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aspiration Hazard
Harmful if swallowed.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: Study does not need to be conducted.

Genetic toxicity
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.

Reproductive toxicity
Assessment of reproduction toxicity: Study does not need to be conducted.

Teratogenicity
Assessment of teratogenicity: Study does not need to be conducted.

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

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., skin corrosion, irritates the eyes and respiratory tract, Further symptoms are possible

12. Ecological Information

Toxicity

Aquatic 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.

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.

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.

Chronic toxicity to aquatic invertebrates
Study scientifically not justified.

Toxicity to fish

Information on: Methanol
LC50 (96 h) 15,400 mg/l, Lepomis macrochirus (other, Flow through.)

Aquatic invertebrates

Information on: methanol
LC50 (48 h) > 10,000 mg/l, Daphnia magna
Literature data.

Information on: potassium hydroxide
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.

Aquatic plants

Information on: Methanol
EC50 (96 h) approx. 22,000 mg/l (growth rate), Selenastrum capricornutum (OECD Guideline 201, static)

Assessment of terrestrial toxicity
No data available concerning terrestrial toxicity.
Study scientifically not justified.

Soil living organisms

Toxicity to soil dwelling 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.

Toxicity to 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.

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

Microorganisms/Effect on activated sludge

Toxicity to microorganisms
OECD Guideline 209 static
activated sludge/EC50 (3 h): > 1,000 mg/l
Literature data. The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Information on: Methanol
Inhibition of nitrification aquatic
Bacteria/EC50 (24 h): 880 mg/l

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.

Assessment biodegradation and elimination (H2O)

Information on: Methanol

Readily biodegradable (according to OECD criteria).

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

Bioaccumulative potential

Assessment bioaccumulation potential
Does not significantly accumulate in organisms.

Bioaccumulation potential
Bioconcentration factor: 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.

Assessment bioaccumulation potential

Information on: Methanol

Significant accumulation in organisms is not to be expected.

Mobility in soil

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

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.

13. Disposal considerations

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

14. Transport Information

Land transport
TDG

Hazard class:	4.2
Packing group:	II
ID number:	UN 3206
Hazard label:	4.2, 8
Proper shipping name:	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S. (contains POTASSIUM METHANOLATE)

Sea transport
IMDG

Hazard class:	4.2
Packing group:	II
ID number:	UN 3206
Hazard label:	4.2, 8
Marine pollutant:	NO
Proper shipping name:	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S. (contains POTASSIUM METHANOLATE)

Air transport
IATA/ICAO

Hazard class:	4.2
Packing group:	II
ID number:	UN 3206
Hazard label:	4.2, 8
Proper shipping name:	ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE, N.O.S. (contains POTASSIUM METHANOLATE)

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

15. Regulatory Information

Federal Regulations

Not applicable

NFPA Hazard codes:
Health: 3 Fire: 2 Reactivity: 2 Special:

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Skin Corr./Irrit.	1B	Skin corrosion/irritation
Acute Tox.	4 (oral)	Acute toxicity
Self-heat.	1	Self-heating substances and mixtures
Met. Corr.	1	Corrosive to metals
Flam. Sol.	1	Flammable solids
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
STOT SE	1	Specific target organ toxicity — single exposure

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2018/12/07

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

This information is considered accurate but is not exhaustive and shall only be used as a guideline based on current knowledge of the chemical substance or mixture. Safety precautions suitable for the product must be applied.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
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