

# SAFETY DATA SHEET

Creation Date 19-Nov-2009 Revision Date 19-Dec-2025 Revision Number 6

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

# 1. Identification

Product Name Potassium methoxide

Cat No.: AC240600000; AC240600025; AC240600050; AC240605000

**Synonyms** No information available

**Recommended Use** Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

# Details of the supplier of the safety data sheet

#### Company

Fisher Scientific Company Acros Organics
One Reagent Lane One Reagent Lane
Fair Lawn, NJ 07410 Fair Lawn, NJ 07410

Tel: (201) 796-7100

# **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

# 2. Hazard(s) identification

## Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

Flammable liquids

Acute oral toxicity

Category 3

Acute dermal toxicity

Category 3

Acute Inhalation Toxicity - Vapors

Skin Corrosion/Irritation

Category 2

Serious Eye Damage/Eye Irritation

Reproductive Toxicity

Category 2

Category 2

Specific target organ toxicity (single exposure)

Category 1 Category 3

Target Organs - Optic nerve, Respiratory system, Central nervous system (CNS).

Specific target organ toxicity - (repeated exposure)

Category 2

Target Organs - Neurological effects, Eyes, Ears.

Aspiration Toxicity Category 1

### Label Elements

#### Signal Word

Danger

## **Hazard Statements**

Highly flammable liquid and vapor

May be fatal if swallowed and enters airways

Causes skin irritation

Causes serious eye irritation

May cause drowsiness or dizziness

Suspected of damaging the unborn child

Causes damage to organs

May cause damage to organs through prolonged or repeated exposure

Toxic if swallowed, in contact with skin or if inhaled



## **Precautionary Statements**

#### Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Wear eye/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground and bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Keep cool

Wear protective gloves/protective clothing/eye protection/face protection

Take action to prevent static discharges

Use non-sparking tools

# Response

IF exposed: Call a POISON CENTER or doctor

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a POISON CENTER or doctor

#### Skin

Call a POISON CENTER or doctor if you feel unwell

Take off contaminated clothing and wash before reuse

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

## **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor

Do NOT induce vomiting

Rinse mouth

## Fire

In case of fire: Use CO2, dry chemical, or foam to extinguish

### Storage

Store locked up

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

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Harmful to aquatic life with long lasting effects

# Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available

#### Other hazards

Poison, may be fatal or cause blindness if swallowed. Vapor harmful. CANNOT BE MADE NON-POISONOUS.

WARNING. Reproductive Harm - https://www.p65warnings.ca.gov/.

# 3. Composition/information on Ingredients

Component	CAS No	Weight %
Toluene	108-88-3	70 - 80
Methyl alcohol	67-56-1	20-30
Methanol, potassium salt	865-33-8	0.8

# 4. First-aid measures

**General Advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In

the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth

method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Immediate medical attention is required. Risk of serious damage to the lungs (by

aspiration).

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. If vomiting

occurs naturally, have victim lean forward.

Most important symptoms and

effects

**Notes to Physician** 

None reasonably foreseeable. Inhalation of high vapor concentrations may cause

symptoms like headache, dizziness, tiredness, nausea and vomiting

Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical. Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media No information available

Flash Point 7 °C / 44.6 °F

Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

Revision Date 19-Dec-2025 Potassium methoxide

Upper No data available Lower No data available Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

## **Specific Hazards Arising from the Chemical**

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO2). Potassium oxides.

# **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

#### NFPA

Health **Flammability** Instability Physical hazards 3 4 Λ N/A

# 6. Accidental release measures

**Personal Precautions** Use personal protective equipment as required. Ensure adequate ventilation. Keep people

away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources

of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Up

# 7. Handling and Storage Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on Handling clothing. Use only under a chemical fume hood. Do not breathe mist/yapors/spray. Do not

ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Take precautionary measures against static discharges.

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Storage. Keep away from heat, sparks and flame. Keep under nitrogen. Incompatible Materials.

Strong oxidizing agents. Acids.

# 8. Exposure controls / personal protection

#### **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Toluene	TWA: 20 ppm	(Vacated) TWA: 100 ppm	IDLH: 500 ppm	TWA: 20 ppm
		(Vacated) TWA: 375 mg/m <sup>3</sup>	REL = 100 ppm (TWA)	
		Ceiling: 300 ppm	REL = $375 \text{ mg/m}^3$ (TWA)	
		(Vacated) STEL: 150 ppm STEL: 150 ppm		
		(Vacated) STEL: 560 mg/m <sup>3</sup>	STEL: 560 mg/m <sup>3</sup>	
		TWA: 200 ppm	_	
Methyl alcohol	TWA: 200 ppm	(Vacated) TWA: 200 ppm	IDLH: 6000 ppm	TWA: 200 ppm
	STEL: 250 ppm	(Vacated) TWA: 260 mg/m <sup>3</sup>	REL = 200 ppm (TWA)	STEL: 250 ppm
	Skin	(Vacated) STEL: 250 ppm	REL = $260 \text{ mg/m}^3 \text{ (TWA)}$	
		(Vacated) STEL: 325 mg/m <sup>3</sup>	STEL: 250 ppm	
		Skin	STEL: 325 mg/m <sup>3</sup>	
		TWA: 200 ppm	_	
		TWA: 260 mg/m <sup>3</sup>		

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures**Use only under a chemical fume hood. Ensure that eyewash stations and safety showers

are close to the workstation location. Use explosion-proof electrical/ventilating/lighting

equipment. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Method

Recommended Filter type: low boiling organic solvent. Type AX. Brown. conforming to EN371. or. Organic gases and

vapours filter. Type A. Brown. conforming to EN14387.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

**Appearance** 

Physical State Liquid
Color Colorless

Odor No information available Odor Threshold No information available

Property Values Remarks

Melting Point/RangeNo data availableSoftening PointNo data availableBoiling Point/RangeNo information available

Flash Point 7 °C / 44.6 °F Method - No information available

Flammability (liquid) Highly flammable On basis of test data

Flammability (solid,gas)

Not applicable

Liquid

Explosion Limits No data available

Autoignition Temperature
Decomposition Temperature
pH
Viscosity

No data available
No data available
Not applicable
No data available

Water Solubility Decomposes in contact with water

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Componentlog PowToluene2.73Methyl alcohol-0.74

Vapor Pressure No information available

Density / Specific Gravity 0.850

Bulk DensityNot applicableLiquidVapor DensityNo information available(Air = 1.0)

Particle characteristics Not applicable (liquid)

Other Information

Molecular FormulaC H3 K OMolecular Weight70.13

Explosive Properties Vapors may form explosive mixtures with air

**Evaporation Rate** No information available

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Moisture sensitive.

Conditions to Avoid Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Acids

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Potassium oxides

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions**None under normal processing.

# 11. Toxicological information

#### Information on expected route of exposure

**Inhalation** Not an expected route of exposure.

Ingestion May be harmful if swallowed. Harmful if swallowed. Potential for aspiration if swallowed.

**Eyes** Avoid contact with eyes. Irritating to eyes.

Skin Avoid contact with skin. May cause irritation. Harmful in contact with skin.

# Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Toluene	luene > 5000 mg/kg ( Rat )		26700 ppm (Rat) 1 h	
Methyl alcohol	LD50 = 1187 - 2769 mg/kg (Rat)	LD50 = 17100 mg/kg ( Rabbit )	LC50 = 128.2 mg/L ( Rat ) 4 h	

**Toxicologically Synergistic** 

**Products** 

No information available

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

**Respiratory**Skin
No data available
No data available

	Component	Test method	Test species	Study result
Г	Methyl alcohol	OECD Test Guideline 406	guinea pig	non-sensitising
	67-56-1 ( 20-30 )	Guinea Pig Maximisation Test		
1		(GPMT)		

(e) germ cell mutagenicity; No data available

(f) carcinogenicity;

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Toluene	108-88-3	Not listed				
Methyl alcohol	67-56-1	Not listed				
Methanol, potassium salt	865-33-8	Not listed				

Category 2 (g) reproductive toxicity;

Component	Test method	Test species / Duration	Study result
Methyl alcohol	OECD Test Guideline 416	Rat / Inhalation	NOAEC =
67-56-1 ( 20-30 )		2 Generation	1.3 mg/l (air)

**Developmental Effects Teratogenicity** 

Component substance is listed on California Proposition 65 as a developmental hazard.

Possible risk of harm to the unborn child.

Category 3 (h) STOT-single exposure;

Central nervous system (CNS), Optic nerve. Results / Target organs

(i) STOT-repeated exposure; Category 2

Neuropsychological effects, Eyes, Ears. **Target Organs** 

(j) aspiration hazard; Category 1

delayed

Symptoms / effects,both acute and Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

tiredness, nausea and vomiting.

**Other Adverse Effects** The toxicological properties have not been fully investigated.

**Endocrine Disrupting Properties** This product does not contain any known or suspected endocrine disruptors.

# 12. Ecological information

## **Ecotoxicity**

The product contains following substances which are hazardous for the environment. Contains a substance which is:. Toxic to aquatic organisms. Reacts with water so no ecotoxicity data for the substance is available.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Toluene	EC50: = 12.5 mg/L, 72h static (Pseudokirchneriella subcapitata) EC50: > 433 mg/L, 96h	50-70 mg/L LC50 96 h 5-7 mg/L LC50 96 h 15-19 mg/L LC50 96 h 28 mg/L LC50 96 h	EC50 = 19.7 mg/L 30 min	EC50: = 11.5 mg/L, 48h (Daphnia magna) EC50: 5.46 - 9.83 mg/L, 48h Static (Daphnia magna)
	(Pseudokirchneriella subcapitata)	12 mg/L LC50 96 h		
Methyl alcohol	Not listed	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	EC50 > 10000 mg/L 24h

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

No information available. **Bioaccumulation/ Accumulation** 

. Will likely be mobile in the environment due to its water solubility. Is not likely mobile in the **Mobility** 

environment.

Component log Pow	Component	log Pow
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	0.70
l oluene	2.73
Methyl alcohol	-0.74

# 13. Disposal considerations

#### **Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Toluene - 108-88-3	U220	-
Methyl alcohol - 67-56-1	U154	-

# 14. Transport information

DOT

UN-No UN1992

Proper Shipping Name FLAMMABLE LIQUIDS, TOXIC, N.O.S.

Hazard Class 3
Subsidiary Hazard Class 6.1
Packing Group II

\_TDG

**UN-No** UN1992

Proper Shipping Name FLAMMABLE LIQUIDS, TOXIC, N.O.S.

Hazard Class 3
Subsidiary Hazard Class 6.1
Packing Group ||

IATA

UN-No UN1992

Proper Shipping Name FLAMMABLE LIQUID, TOXIC, N.O.S.\*

Hazard Class 3
Subsidiary Hazard Class 6.1
Packing Group II

IMDG/IMO

**UN-No** UN1992

**Proper Shipping Name** Flammable liquid, toxic, n.o.s.

Hazard Class 3
Subsidiary Hazard Class 6.1
Packing Group ||

# 15. Regulatory Information

## **United States of America Inventory**

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Toluene	108-88-3	X	ACTIVE	-
Methyl alcohol	67-56-1	X	ACTIVE	-
Methanol, potassium salt	865-33-8	X	ACTIVE	-

## Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

Not applicable

**International Inventories** 

TSCA 12(b) - Notices of Export

Revision Date 19-Dec-2025

#### Potassium methoxide

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Toluene	108-88-3	Χ	-	203-625-9	Χ	Χ	Х	Х	Χ	KE-33936
Methyl alcohol	67-56-1	Χ	-	200-659-6	Х	Χ	Х	Х	Χ	KE-23193
Methanol, potassium salt	865-33-8	Х	-	212-736-1	Х	Х	Х	Х	Х	KE-23195

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

## U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS No	Weight %	SARA 313 - Threshold Values %	SARA 313 - Reporting threasholds
Toluene	108-88-3	70 - 80	1.0 %	-
Methyl alcohol	67-56-1	20-30	1.0 %	-

# SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)** 

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Toluene	X	1000 lb	X	X

#### Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Toluene	X		-
Methyl alcohol	X		-

**OSHA** - Occupational Safety and

Not applicable

Health Administration

### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

Component	Hazardous Substances RQs	CERCLA Extremely Hazardous Substances RQs	SARA Reportable Quantity (RQ)
Toluene	1000 lb	·	1000 lb
			454 kg
Methyl alcohol	5000 lb	-	5000 lb
,			2270 kg

## **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Toluene	108-88-3	Developmental	-	Developmental
Methyl alcohol	67-56-1	Developmental	-	Developmental

# U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island

Toluene	X	X	Х	X	Х
Methyl alcohol	X	X	X	X	X

**U.S. Department of Transportation** 

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

# Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Toluene	108-88-3	-	Use restricted. See entry 48. (see link for restriction details) Use restricted. See entry 75. (see link for restriction details)	-
Methyl alcohol	67-56-1	-	Use restricted. See entry 69. (see link for restriction details) Use restricted. See entry 75. (see link for restriction details)	-
Methanol, potassium salt	865-33-8	-	Use restricted. See entry 75. (see link for restriction details)	-

# REACH links

https://echa.europa.eu/substances-restricted-under-reach

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Toluene	108-88-3	Listed	Not applicable	Not applicable	Not applicable
Methyl alcohol	67-56-1	Listed	Not applicable	Not applicable	Not applicable
Methanol, potassium salt	865-33-8	Listed	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Toluene	108-88-3	Not applicable	Not applicable	Not applicable	Annex I - Y42
Methyl alcohol	67-56-1	500 tonne	5000 tonne	Not applicable	Not applicable
Methanol, potassium salt	865-33-8	Not applicable	Not applicable	Not applicable	Not applicable

# 16. Other Information

Prepared By Product stewardship (Regulatory Affairs)

Thermo Fisher Scientific

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Revision Summary Updated to the U.S. Department of Labor's Occupational Safety and Health Administration

(OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200,

2024), May 20, 2024, effective July 19, 2024.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**