

SAFETY DATA SHEET

Creation Date 27-Apr-2009 Revision Date 24-Dec-2021 **Revision Number 4**

1. Identification

Product Name Chromplete™ Methanol

T001020025; T001021000; T001022500; T001024000 Cat No.:

CAS No 67-56-1 **Synonyms** Methyl alcohol

Recommended Use Laboratory chemicals.

Uses advised against

Details of the supplier of the safety data sheet

Company

Thermo Fisher Scientific Fisher Scientific Company

Technology Drive, PA 15219 USA One Reagent Lane

Telephone: 412-770-2326 Fair Lawn, NJ 07410

Fax: 412-770-2224 Tel: (201) 796-7100

Emergency Telephone Number For information **US** call: 001-800-ACROS-01 / 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 by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 2 Acute oral toxicity Category 3 Acute dermal toxicity Category 3 Acute Inhalation Toxicity - Vapors Category 3 Specific target organ toxicity (single exposure) Category 1

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

Specific target organ toxicity - (repeated exposure)

Target Organs - Kidney, Liver, spleen, Blood.

Category 1

Label Elements

Signal Word

Danger

Hazard Statements

Highly flammable liquid and vapor Causes damage to organs Causes damage to organs through prolonged or repeated exposure Toxic if swallowed, in contact with skin or if inhaled



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

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

Use only outdoors or in a well-ventilated area

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Keep cool

Response

IF exposed: Call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician

Skin

Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

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

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

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)

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 %
Ī	Methyl alcohol	67-56-1	>95

4. First-aid measures

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

attendance.

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

Immediate medical attention is required.

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 breathing is difficult, give oxygen. 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.

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

Most important symptoms and

effects

Notes to Physician

Difficulty in breathing. May cause blindness: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

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Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may

be used to cool closed containers.

Unsuitable Extinguishing Media Water may be ineffective

Flash Point 9.7 °C / 49.5 °F

Method - No information available

Autoignition Temperature 455 °C / 851 °F

Explosion Limits

Upper 31.00 vol % **Lower** 6.0 vol %

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

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

Hazardous Combustion Products

Carbon monoxide (CO). Formaldehyde.

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

HealthFlammabilityInstabilityPhysical hazards130N/A

6. Accidental release measures

Personal Precautions

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment as required. Ensure adequate ventilation. Remove all

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Environmental Precautions

sources of ignition. Take precautionary measures against static discharges. Should not be released into the environment. See Section 12 for additional Ecological

Information.

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.

7. Handling and storage

Handling

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

Storage.

Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Flammables area. Incompatible Materials. Strong oxidizing agents. Strong acids. Acid anhydrides. Acid chlorides. Strong bases. Metals. Peroxides.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Methyl alcohol	TWA: 200 ppm	(Vacated) TWA: 200 ppm	IDLH: 6000 ppm	TWA: 200 ppm
	STEL: 250 ppm	(Vacated) TWA: 260 mg/m ³	TWA: 200 ppm	STEL: 250 ppm
	Skin	(Vacated) STEL: 250 ppm	TWA: 260 mg/m ³	
		(Vacated) STEL: 325 mg/m ³	STEL: 250 ppm	
		Skin	STEL: 325 mg/m ³	
		TWA: 200 ppm	_	
		TWA: 260 mg/m ³		

Legend

ACGIH - American Conference of Governmental Industrial Hygienists OSHA - Occupational Safety and Health Administration NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures

Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that evewash stations and safety showers are close to the workstation location.

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.

Hygiene Measures

When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. Physical and chemical properties

Chromplete™ Methanol

Physical State Liquid **Appearance** Colorless Odor Alcohol-like

Odor Threshold No information available

Not applicable

-98 °C / -144.4 °F **Melting Point/Range Boiling Point/Range** 64.7 °C / 148.5 °F @ 760 mmHg

Flash Point 9.7 °C / 49.5 °F **Evaporation Rate** 5.2 (ether = 1)Flammability (solid,gas) Not applicable

Flammability or explosive limits

31.00 vol % Upper Lower 6.0 vol %

128 hPa @ 20 °C **Vapor Pressure**

Vapor Density 1.11 **Specific Gravity** 0.791

Solubility Miscible with water No data available Partition coefficient; n-octanol/water 455 °C / 851 °F **Autoignition Temperature Decomposition Temperature** No information available

Viscosity

0.55 cP at 20 °C Molecular Formula C H4 O **Molecular Weight** 32.04 VOC Content(%) 100

0.02255 N/m @ 20°C Surface tension

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Heat, flames and sparks. Keep away from open flames, hot

surfaces and sources of ignition.

Incompatible Materials Strong oxidizing agents, Strong acids, Acid anhydrides, Acid chlorides, Strong bases,

Metals, Peroxides

Hazardous Decomposition Products Carbon monoxide (CO), Formaldehyde

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl alcohol	LD50 = 1187 – 2769 mg/kg (Rat)	LD50 = 17100 mg/kg (Rabbit)	LC50 = 128.2 mg/L (Rat) 4 h

Carbon tetrachloride **Toxicologically Synergistic**

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

May cause skin and eye irritation Irritation

Sensitization No information available

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Chromplete™ Methanol

Carcinogenicity

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

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Methyl alcohol	67-56-1	Not listed				

Mutagenic Effects No information available

Reproductive Effects No information available.

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

Teratogenicity No information available.

Optic nerve Central nervous system (CNS) STOT - single exposure

STOT - repeated exposure Kidney Liver spleen Blood

Aspiration hazard No information available

delayed

Symptoms / effects,both acute and May cause blindness: Inhalation of high vapor concentrations may cause symptoms like

headache, dizziness, tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

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

12. Ecological information

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Methyl alcohol	Not listed	Pimephales promelas: LC50	EC50 = 39000 mg/L 25 min	EC50 > 10000 mg/L 24h
•		> 10000 mg/L 96h	EC50 = 40000 mg/L 15 min	_
		_	EC50 = 43000 mg/L 5 min	ļ

Persistence and Degradability Persistence is unlikely based on information available.

No information available. **Bioaccumulation/ Accumulation**

Mobility Will likely be mobile in the environment due to its volatility.

Component	log Pow
Methyl alcohol	-0.74

13. Disposal considerations

Should not be released into the environment. **Waste Disposal Methods**

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Methyl alcohol - 67-56-1	U154	-

14. Transport information

DOT

UN-No UN1230 **Proper Shipping Name METHANOL**

Hazard Class 3 **Packing Group** Ш

TDG

UN-No UN1230 **Proper Shipping Name METHANOL**

Hazard Class 3 **Subsidiary Hazard Class** 6.1 **Packing Group**

Chromplete™ Methanol

IATA

UN1230 **UN-No Proper Shipping Name METHANOL**

Hazard Class Subsidiary Hazard Class 6.1 **Packing Group**

IMDG/IMO

UN-No UN1230 **Proper Shipping Name METHANOL**

Hazard Class Subsidiary Hazard Class 6.1 **Packing Group** Ш

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Methyl alcohol	67-56-1	Х	ACTIVE	-

Legend:

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

X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

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
Methyl alcohol	67-56-1	Х	1	200-659-6	Х	Х	Χ	Х	Х	KE-23193

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

U.S. Federal Regulations

SARA 313

ONITY OTO						
Component	CAS No	Weight %	SARA 313 - Threshold Values %			
Methyl alcohol	67-56-1	>95	1.0			

See section 2 for more information SARA 311/312 Hazard Categories

CWA (Clean Water Act) Not applicable

Clean Air Act

CERCLA

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

OSHA - Occupational Safety and

Not applicable

Health Administration

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)

Component	Hazardous Substances RQs	CERCLA EHS RQs

Restriction of

Chromplete™ Methanol

Methyl alcohol	5000 lb	-

California Proposition 65

This product contains the following Proposition 65 chemicals.

	Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Γ	Methyl alcohol	67-56-1	Developmental	-	Developmental

U.S. State Right-to-Know

Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Methyl alcohol	Х	Х	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

Component

Mexico - Grade Serious risk, Grade 3

Authorisation/Restrictions according to EU REACH

Component	,	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	
Methyl alcohol	-	Use restricted. See item 69. (see link for restriction details)	-

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

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

·			Pollutant	Potential	Hazardous Substances (RoHS)
Methyl alcohol	67-56-1	Listed	Not applicable	Not applicable	Not applicable
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)
Methyl alcohol	67-56-1	500 tonne	5000 tonne	Not applicable	Not applicable

16. Other information

Prepared By Regulatory Affairs

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OECD HPV

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

Chromplete™ Methanol

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