

Material Safety Data Sheet

Creation Date 27-Apr-2009

Revision Date 04-Jun-2012

Revision Number 4

1. PRODUCT AND COMPANY IDENTIFICATION

Product N	lame
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Recommended Use

Methanol

AC176840000; AC176840010; AC176840025; AC176840100; AC176840250; AC176845000

Synonyms

Company

Fisher Scientific

One Reagent Lane

Fair Lawn, NJ 07410

Tel: (201) 796-7100

Cat No.

Methyl alcohol

Laboratory chemicals

Entity / Business Name Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300 CHEMTREC Phone Number, Europe: 001-703-527-3887

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Flammable liquid and vapor. Poison, may be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Vapor harmful. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Irritating to eyes and skin. WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

Appearance Colorless

Physical State Liquid

odor Alcohol-like

	2. HAZARDS IDENTIFICATION
Target Organs	Gastrointestinal tract (GI), Central nervous system (CNS), Eyes, Respiratory system, Skin, Optic nerve, Liver, Kidney, spleen, Blood
Potential Health Effects	
Acute Effects Principle Routes of Exposure	
Eyes Skin Inhalation Ingestion	Irritating to eyes. Toxic in contact with skin. Irritating to skin. Toxic by inhalation. Vapor harmful. May cause irritation of respiratory tract. Poison, may be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Effects	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Experiments have shown reproductive toxicity effects on laboratory animals. May cause adverse liver effects. May cause adverse kidney effects. Component substance is listed on California Proposition 65 as a developmental hazard.
See Section 11 for additional Toxicol	ogical information.
Aggravated Medical Conditions	Central nervous system disorders. Gastrointestinal tract. Preexisting eye disorders. Skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

disorders. Kidney disorders. Liver disorders.

Haz/Non-haz

Component	CAS-No	Weight %
Methyl alcohol	67-56-1	>95

4. FIRST	AID	MEASURES	

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	12°C / 53.6°F
Method	No information available.
Autoignition Temperature	455°C / 851°F

Explosion Limits Upper Lower	31.00 vol % 6.0 vol %
Suitable Extinguishing Media	CO ₂ , dry chemical, dry sand, alcohol-resistant foam. Use water spray to cool unopened containers.
Unsuitable Extinguishing Media	Water may be ineffective
Hazardous Combustion Products	No information available.
Sensitivity to mechanical impact Sensitivity to static discharge	No information available. 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.

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 1	Flammability 3	Instability 0	Physical hazards N/A
	6. AC	CIDENTAL RELEAS	E MEASURES	
Personal Precautions		e all sources of ignition. Eva of spill/leak. Use personal p		areas. Keep people away from and ure adequate ventilation.
Environmental Precaut	tions Should	not be released into the env	vironment.	
Methods for Containm Up		e all sources of ignition. Soa es against static discharges	•	material. Take precautionary l containers for disposal
7. HANDLING AND STORAGE				

Handling	Use only under a chemical fume hood. Use explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Flammables area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures

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

Exposure Guidelines

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

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Methyl alcohol	TWA: 200 ppm	TWA: 200 ppm	TWA: 200 ppm
	TWA: 262 mg/m ³	TWA: 260 mg/m ³	STEL: 250 ppm
	STEL: 250 ppm	STEL: 250 ppm	Skin
	STEL: 328 mg/m ³	STEL: 310 mg/m ³	
	Skin	Ű	

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face Protection Skin and body protection Respiratory Protection Tightly fitting safety goggles.

Antistatic boots. Wear fire/flame resistant/retardant clothing. Impervious gloves. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Appearance odor **Odor Threshold** bН Vapor Pressure Vapor Density Viscosity Boiling Point/Range Melting Point/Range Decomposition temperature Flash Point **Evaporation Rate Specific Gravity** Solubility log Pow Molecular Weight Molecular Formula

Liquid Colorless Alcohol-like No information available. No information available. 128 hPa @ 20 °C 1.11 (Air = 1.0)0.55 cP at 20 °C 64.7°C / 148.5°F@ 760 mmHg -98°C / -144.4°F No information available. 12°C / 53.6°F 5.2 (ether = 1) 0.791 Miscible with water No data available 32.04 C H4 O

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products. Heat, flames and sparks.
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

Component Information

Component Information					
Component	LD50 Oral	LD50 Dermal	LC50 Inhalation (Dust)		
Methyl alcohol	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	64000 ppm (Rat) 4 h		
L I		I I	83.2 mg/L (Rat)4 h		
Irritation	Irritating to eyes and skin				
Toxicologically Synergistic Products	Carbon tetrachloride				
Chronic Toxicity					
Carcinogenicity	There are no known carcin	ogenic chemicals in this product			
Sensitization	No information available.				
Mutagenic Effects	Mutagenic effects have occurred in experimental animals.				
Reproductive Effects	Experiments have shown reproductive toxicity effects on laboratory animals.				
Developmental Effects	Developmental effects have occurred in experimental animals. Component substance is listed on California Proposition 65 as a developmental hazard.				
Teratogenicity	Teratogenic effects have o	ccurred in experimental animals			
Other Adverse Effects	See actual entry in RTECS	for complete information.			
Endocrine Disruptor Information	No information available				

12. ECOLOGICAL INFORMATION

Ecotoxicity

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Component	Fresh	water Algae	Freshwa	ter Fish	Microtox	Water Flea
Methyl alcohol	N	ot 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 24ł
ersistence and Degradab	ility	No informat	ion available			
ioaccumulation/ Accumu	lation	No informat	ion available			
lobility						
Component				log Pow		
Ν	Aethyl alco	hol		-0.74		
Naste Disposal Methods			SPOSAL CO			
Compo	nent		RCR	A - U Series Wa	astes RCRA	- P Series Wastes
			U154		-	
		44 11	RANSPORT			

DOT

UN-No	UN1230
Proper Shipping Name	METHANOL
Hazard Class	3
Packing Group	II

TDG

UN-No	UN1230
Proper Shipping Name	METHANOL
Hazard Class	3
Subsidiary Hazard Class	6.1
Packing Group	II

IATA

UN-No	UN1230
Proper Shipping Name	METHANOL
Hazard Class	3
Subsidiary Hazard Class	6.1
Packing Group	II

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No	UN1230
Proper Shipping Name	METHANOL
Hazard Class	3
Subsidiary Hazard Class	6.1
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Methyl alcohol	Х	Х	-	200-659-	-		Х	Х	Х	Х	Х
				6							

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

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

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Not applicable

Clean Air Act

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

OSHA

Not applicable

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)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Methyl alcohol	5000 lb	-

California Proposition 65

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65	Prop 65 NSRL
Methyl alcohol	67-56-1	Methanol	-

State Right-to-Know

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

U.S. Department of Transportation

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

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

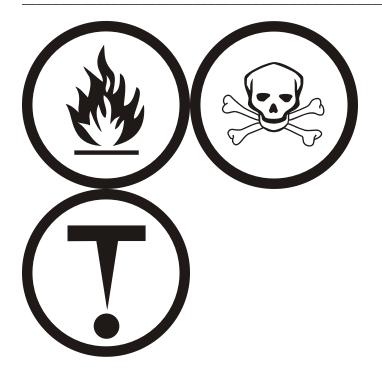
Mexico - Grade Serious risk, Grade 3

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

B2 Flammable liquid D1B Toxic materials D2B Toxic materials



16. OTHER INFORMATION

Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
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Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS