

Material Safety Data Sheet

Creation Date 19-Aug-2009

Revision Date 26-Sep-2009

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name 2-Methyl-3-butyn-2-ol

Cat No. AC156820000; AC156820010; AC156820050; AC156822500

Synonyms No information available.

Recommended Use Laboratory chemicals

CompanyEntity / Business NameFisher ScientificAcros Organics

One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
Fair Lawn, NJ 07410

Emergency Telephone Number

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

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

CHEMTREC Phone Number, US: 800-424-

9300

CHEMTREC Phone Number, Europe: 703-

527-3887

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Flammable liquid and vapor. Harmful if swallowed. Risk of serious damage to eyes. May cause skin and respiratory tract irritation. May cause central nervous system effects.

Appearance Clear Physical State Liquid Odor Alcohol-like

Target Organs Eyes, Central nervous system (CNS)

Potential Health Effects

Acute Effects

Principle Routes of Exposure

Eyes Risk of serious damage to eyes.

Skin May cause irritation. May be harmful in contact with skin.

Inhalation May be harmful if inhaled. May cause irritation of respiratory tract. Inhalation may cause central

nervous system effects.

Ingestion Harmful if swallowed. May cause central nervous system effects. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects None known.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
3-Methyl butynol	115-19-5	>95

4. FIRST AID MEASURES

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. Get medical attention

immediately if symptoms occur.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation

if victim indested or inhaled the substance; induce artificial respiration with a respiratory

medical device. Get medical attention immediately if symptoms occur.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point $< 21^{\circ}\text{C} / < 69.8^{\circ}\text{F}$

Method No information available.

Autoignition Temperature 350°C / 662°F

Explosion Limits

 Upper
 16 vol %

 Lower
 1.8 vol %

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide. Cool closed containers exposed to fire with water spray.

Unsuitable Extinguishing MediaNo information available.Hazardous Combustion ProductsNo information available.

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.

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 2 Flammability 3 Physical hazards N/A Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Remove all sources of ignition. Take precautionary

measures against static discharges.

Environmental Precautions Should not be released into the environment.

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

7. HANDLING AND STORAGE

Handling Use only under a chemical fume hood. Wear personal protective equipment. Ensure adequate

ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools, Use

explosion-proof equipment. Take precautionary measures against static discharges.

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep **Storage**

away from heat and sources of ignition. Keep at temperatures below 80°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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.

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits

established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

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

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid

9. PHYSICAL AND CHEMICAL PROPERTIES

Clear **Appearance** Odor Alcohol-like

Odor Threshold No information available. Ha

Vapor Pressure 20 mbar @ 20 °C

Vapor Density 2.9

Viscosity 3.02 mPa.s at 20 °C

Boiling Point/Range 104°C / 219.2°F@ 760 mmHg

Melting Point/Range 3°C / 37.4°F

Decomposition temperature °C No information available. **Flash Point** < 21°C / < 69.8°F **Evaporation Rate** No information available.

Specific Gravity 0.861

Miscible with water Solubility log Pow No data available

Molecular Weight 84.12 Molecular Formula C5 H8 O

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions.

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

hot surfaces and sources of ignition.

Incompatible Materials Bases

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

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions. None under normal processing..

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation		
3-Methyl butynol	1950 mg/kg (Rat)	2000 mg/kg (Rat)	21.3 mg/L (Rat) 4 h		
			20 mg/L (Rat) 1 h		

Irritation Severe eye irritant

Toxicologically Synergistic

Products

No information available.

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization No sensitization responses were observed

Mutagenic Effects Did not show mutagenic effects in animal experiments

Reproductive Effects

No information available.

Developmental Effects

No information available.

Teratogenicity

No information available.

Other Adverse Effects See actual entry in RTECS for complete information. The toxicological properties have not

been fully investigated..

Endocrine Disruptor Information No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

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Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
3-Methyl butynol	EC50 72 h >500 mg/L	Not listed	EC50 = 8600 mg/L 17 h	EC50 48 h >500 mg/L
	EC50 96 h >500 mg/L			

Persistence and Degradability

Not readily biodegradable.

Bioaccumulation/ Accumulation

No information available

Mobility .

Component	log Pow		
3-Methyl butynol	0.318		

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.

14. TRANSPORT INFORMATION

DOT

UN-No UN1987

Proper Shipping Name ALCOHOLS, N.O.S.

Hazard Class 3 Packing Group II

14. TRANSPORT INFORMATION

TDG

UN-No UN1987

Proper Shipping Name ALCOHOLS, N.O.S.

Hazard Class 3
Packing Group

IATA

UN-No UN1987

Proper Shipping Name ALCOHOLS, N.O.S.*

Hazard Class 3
Packing Group ||

IMDG/IMO

UN-No UN1987

Proper Shipping Name ALCOHOLS, N.O.S.

Hazard Class 3
Packing Group ||

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
3-Methyl butynol	Χ	Х	-	204-070- 5	-		Х	Х	Х	X	KE- 23667 X

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 Not applicable

SARA 311/312 Hazardous Categorization

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

Clean Water Act

Not applicable

Clean Air Act

Not applicable

OSHA

Not applicable

CERCLA

Not Applicable

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
3-Methyl butynol	X	Χ	Χ	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): N
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

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 Tel: (412) 490-8929

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Revision Summary "***", and red text indicates revision

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