

# SAFETY DATA SHEET

Creation Date 23-March-2012 Revision Date 25-December-2021 **Revision Number 4** 

1. Identification

**Product Name** Magnesium tert-butoxide

AC390470000; AC390470100; AC390470500; AC390472500 Cat No.:

CAS-No 32149-57-8

**Synonyms** No information available

**Recommended Use** Laboratory chemicals.

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

Details of the supplier of the safety data sheet

Company

Manufacturer Importer/Distributor

Acros Organics Fisher Scientific Company Fisher Scientific One Reagent Lane 112 Colonnade Road. One Reagent Lane Fair Lawn, NJ 07410 Fair Lawn, NJ 07410 Ottawa, ON K2E 7L6, Tel: (201) 796-7100

Canada

Tel: 1-800-234-7437

**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

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Flammable solids Category 2 Acute Inhalation Toxicity Category 4 Skin Corrosion/Irritation Category 2 Serious Eye Damage/Eye Irritation Category 2 Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

Physical Hazards Not Otherwise Classified Category 1

Reacts violently with water

Label Elements

Signal Word

Danger

#### **Hazard Statements**

Flammable solid
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
Reacts violently with water



### **Precautionary Statements**

#### Prevention

Do not allow contact with water

Keep container tightly closed

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

Ground/bond container and receiving equipment

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Use only outdoors or in a well-ventilated area

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

#### Response

IF ON SKIN: Wash with plenty of soap and water

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Call a POISON CENTER/ doctor if you feel unwell

Take off contaminated clothing

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

#### Storage

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

Store locked up

## Disposal

Dispose of contents/container to an approved waste disposal plant

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Magnesium 2-methylpropan-2-olate	32149-57-8	>95

## 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

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

medical attention.

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

**Inhalation** Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms/effects

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness,

**Notes to Physician** 

nausea and vomiting Treat symptomatically

## 5. Fire-fighting measures

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

chemical, dry sand, alcohol-resistant foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available No information available Method -

**Autoignition Temperature** 

**Explosion Limits** 

Not applicable

No data available Upper 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. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. Reacts violently with water.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Thermal decomposition can lead to release of irritating gases and vapors.

#### **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.

<u>NFPA</u>

Health	Flammability	Instability	Physical hazards
2	2	2	W

#### Accidental release measures

**Personal Precautions** Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust

formation

**Environmental Precautions** Should not be released into the environment. See Section 12 for additional Ecological

Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed Up

containers for disposal. Do not expose spill to water.

## 7. Handling and storage

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face Handling

protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust

formation. Do not allow contact with water.

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from Storage.

water or moist air. Flammables area. Keep away from open flames, hot surfaces and sources of ignition. Store under an inert atmosphere. Incompatible Materials. Strong

oxidizing agents.

## 8. Exposure controls / personal protection

#### **Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### **Engineering Measures**

Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

#### Personal protective equipment

**Eye Protection** Goggles

Hand Protection Protective gloves

Glove material		Breakthrough time	Glove thickness	Glove comments		
١	Nitrile rubber	See manufacturers	-	Splash protection only		
١	Viton (R)	recommendations				

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

#### **Respiratory Protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly **Recommended Filter type:** low boiling organic solvent Type AX Brown conforming to EN371 Type A Brown

When RPE is used a face piece Fit Test should be conducted

#### **Environmental exposure controls**

No information available.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical State Powder Solid Appearance Yellow

Odor No information available
Odor Threshold No information available
pH No information available

Melting Point/Range

Boiling Point/Range

Flash Point

Evaporation Rate

No information available

Evaporation Rate
Not applicable
Flammability (solid.gas)
No information available

Flammability (solid,gas)

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNot applicable

Specific Gravity

Solubility

No information available
Reacts violently with water

Partition coefficient; n-octanol/water No data available

#### Magnesium tert-butoxide

Not applicable

Autoignition Temperature

**Decomposition Temperature**No information available

Viscosity
Molecular Formula
Not applicable
C8 H18 Mg O2
Molecular Weight
170.53

## 10. Stability and reactivity

Reactive Hazard Yes

**Stability** Moisture sensitive. Air sensitive.

**Conditions to Avoid** Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water.

Exposure to moisture.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO<sub>2</sub>), Carbon dioxide (CO<sub>2</sub>), Thermal decomposition can lead to release

of irritating gases and vapors

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing. Reacts violently with water.

## 11. Toxicological information

**Acute Toxicity** 

Product Information Component Information

Toxicologically Synergistic No information available

**Products** 

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

Irritation Irritating to eyes, respiratory system and skin

Sensitization No information available

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Magnesium	32149-57-8	Not listed				
2-methylpropan-2-olat						
е						

Mutagenic Effects No information available

Reproductive Effects No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

delayed

Endocrine Disruptor Information No information available

#### Other Adverse Effects

The toxicological properties have not been fully investigated.

## 12. Ecological information

#### **Ecotoxicity**

Do not empty into drains. Reacts with water so no ecotoxicity data for the substance is available.

Persistence and Degradability Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation**No information available.

**Mobility** Is not likely mobile in the environment.

### 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 3205

Proper Shipping Name Alkaline earth metal alcoholates, n.o.s

Hazard Class 4.2 Packing Group

TDG

**UN-No** 3205

Proper Shipping Name Alkaline earth metal alcoholates, n.o.s

Hazard Class 4.2 Packing Group

<u>IATA</u>

UN-No UN3205

Proper Shipping Name Alkaline earth metal alcoholates, n.o.s

Hazard Class 4.2 Packing Group II

IMDG/IMO

**UN-No** UN3205

**Proper Shipping Name** Alkaline earth metal alcoholates, n.o.s

Hazard Class 4.2 Packing Group

# 15. Regulatory information

#### **International Inventories**

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Magnesium 2-methylpropan-2-olate	32149-57-8	=	-	-	-	250-931-3		-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Magnesium	32149-57-8	-	-	-	-	Х	-	-	-
2-methylpropan-2-olate									

#### Legend:

X - Listed '-' - Not Listed

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

#### Other International Regulations

#### Authorisation/Restrictions according to EU 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)
Magnesium 2-methylpropan-2-olate	32149-57-8	Not applicable	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)
Magnesium 2-methylpropan-2-olate	32149-57-8	Not applicable	Not applicable	Not applicable	Not applicable

16	Other	information
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Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

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**Revision Summary**This document has been updated to comply with the requirements of WHMIS 2015 to align

with the Globally Harmonised System (GHS) for the Classification and Labelling of

Chemicals.

#### 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**