# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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Revision Date 03-May-2024
Version 5

ALFAA39240

# Bis(n-propylcyclopentadienyl)magnesium

# SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明: 双(正丙基环戊二烯基)镁

Product Description: Bis(n-propylcyclopentadienyl)magnesium

 Cat No.:
 39240

 CAS No
 114504-74-4

 Molecular Formula
 C16 H22 Mg

Supplier Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

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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

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

# **SECTION 2. HAZARD IDENTIFICATION**

Physical State Appearance Odor

Solid Crystalline No information available No information available

**Emergency Overview** 

Catches fire spontaneously if exposed to air. Self-heating in large quantities; may catch fire. Air sensitive.

#### Classification of the substance or mixture

Self-heating substances/mixtures	Category 2
Pyrophoric solids	Category 1

# **Label Elements**



Signal Word Danger

**Hazard Statements** 

H252 - Self-heating in large quantities; may catch fire

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# Bis(n-propylcyclopentadienyl)magnesium

H250 - Catches fire spontaneously if exposed to air

#### **Precautionary Statements**

#### Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P222 - Do not allow contact with air

P235 + P410 - Keep cool. Protect from sunlight

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### Response

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

P302 + P335 + P334 - IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages

#### Storage

P407 - Maintain air gap between stacks/pallets

P420 - Store away from other materials

#### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

# **Physical and Chemical Hazards**

Catches fire spontaneously if exposed to air. Self-heating in large quantities; may catch fire.

#### **Health Hazards**

The product contains no substances which at their given concentration are considered to be hazardous to health.

#### **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

This product does not contain any known or suspected endocrine disruptors.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
Bis(n-propylcyclopentadienyl)magnesium	114504-74-4	<=100

# **SECTION 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. If skin irritation persists, call a physician.

## Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

# Most important symptoms and effects

None reasonably foreseeable.

# Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

#### Notes to Physician

Treat symptomatically.

# **SECTION 5. FIRE-FIGHTING MEASURES**

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# **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

# Extinguishing media which must not be used for safety reasons

No information available.

# **Specific Hazards Arising from the Chemical**

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.

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

#### **Environmental Precautions**

Should not be released into the environment.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

# **SECTION 7. HANDLING AND STORAGE**

#### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

#### Storage

Store under an inert atmosphere.

# Specific Use(s)

Use in laboratories

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

# Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

# **Exposure Controls**

# **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. 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.

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# Bis(n-propylcyclopentadienyl)magnesium

Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

Glove material Breakthrough time Glove thickness EU standard Glove comments

Nitrile rubber See manufacturers - EN 374 (minimum requirement)

Neoprene recommendations

Natural rubber

PVC

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure 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.

Remove gloves with care avoiding skin contamination.

Skin and body protection Long sleeved clothing

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

Method - No information available

Solid

Solid

@ 20 °C

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particulates filter conforming to EN 143

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

**Recommended half mask:-** Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

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

**Environmental exposure controls** No information available.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** 

Physical State Solid Crystalline

Odor No information available

Odor Threshold
pH
Not applicable
Melting Point/Range
No data available
No data available
No data available
No data available

Boiling Point/Range No information available Flash Point No information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Explosion Limits

No data available

Explosion Limits No data available

Vapor PressureNo data availableVapor DensityNot applicableSpecific Gravity / Density0.94 g/cm3

Bulk Density No data available

Water Solubility No information available Solubility in other solvents No information available

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# Bis(n-propylcyclopentadienyl)magnesium

Solid

Partition Coefficient (n-octanol/water)

**Autoignition Temperature** No data available **Decomposition Temperature** No data available Not applicable **Viscosity** 

**Explosive Properties** No information available **Oxidizing Properties** No information available

**Molecular Formula** C16 H22 Mg **Molecular Weight** 238.66

# **SECTION 10. STABILITY AND REACTIVITY**

Air sensitive. Stability

**Hazardous Reactions** None under normal processing. **Hazardous Polymerization** No information available.

**Conditions to Avoid** None known.

Materials to avoid No information available.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Magnesium oxides.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information** 

(a) acute toxicity;

No data available (b) skin corrosion/irritation;

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

(d) respiratory or skin sensitization;

No data available Respiratory No data available Skin

No data available (e) germ cell mutagenicity;

No data available (f) carcinogenicity;

There are no known carcinogenic chemicals in this product

No data available (g) reproductive toxicity;

(h) STOT-single exposure; No data available

No data available (i) STOT-repeated exposure;

**Target Organs** No information available.

Not applicable (j) aspiration hazard;

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Bis(n-propylcyclopentadienyl)magnesium

Solid

Symptoms / effects,both acute and No information available delayed

# **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects** Contains no substances known to be hazardous to the environment or that are not

degradable in waste water treatment plants.

No information available Persistence and Degradability

**Bioaccumulative Potential** No information available

No information available Mobility in soil

**Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential** 

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

# **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste from Residues/Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives

on waste and hazardous waste. Dispose of in accordance with local regulations.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point. Empty containers

retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and

empty container away from heat and sources of ignition.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used. Do not flush to sewer. Can be landfilled or incinerated, when in compliance with

local regulations.

# **SECTION 14. TRANSPORT INFORMATION**

Bis(n-propylcyclopentadienyl)magnesium

# **Road and Rail Transport**

**UN-No** ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC

**Proper Shipping Name Technical Shipping Name** 

**Hazard Class** 4.2 **Packing Group** 

IMDG/IMO

UN3391 **UN-No** 

ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC **Proper Shipping Name** 

**Technical Shipping Name** Bis(n-propylcyclopentadienyl)magnesium

**Hazard Class Packing Group** 

4.2 ı

FORBIDDEN FOR IATA TRANSPORT IATA

UN3391 **UN-No** 

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# Bis(n-propylcyclopentadienyl)magnesium

**Proper Shipping Name** ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC\* FORBIDDEN FOR IATA

TRANSPORT

**Technical Shipping Name** Bis(n-propylcyclopentadienyl)magnesium

**Hazard Class** 4.2 **Packing Group** 

No special precautions required **Special Precautions for User** 

# **SECTION 15. REGULATORY INFORMATION**

#### International Inventories

X = listed, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS).

# **National Regulations**

# **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

**Revision Date** 03-May-2024

**Revision Summary** New emergency telephone response service provider.

### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

## Legend

**CAS** - Chemical Abstracts Service

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances **IECSC** - Chinese Inventory of Existing Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances

IARC - International Agency for Research on Cancer

**KECL** - Korean Existing and Evaluated Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

PNEC - Predicted No Effect Concentration

TWA - Time Weighted Average

LD50 - Lethal Dose 50%

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water PBT - Persistent, Bioaccumulative, Toxic vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association** 

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate **VOC** - (Volatile Organic Compound)

# Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

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# **SAFETY DATA SHEET**

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Bis(n-propylcyclopentadienyl)magnesium

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

# **Disclaimer**

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**End of Safety Data Sheet** 

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