

ALFAA15301

# Neodymium (III) carbonate

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

| 产品说明:                      | 碳酸钕(III)水合物   |
|----------------------------|---|
| Product Description:       | Neodymium (III) carbonate   |
| Cat No. :                  | <b>15301</b>  |
| CAS No                     | 38245-38-4  |
| Molecular Formula          | Nd2 (CO3)3. xH2 O   |
| Supplier                   | Avocado Research Chemicals Ltd.<br>(Part of Thermo Fisher Scientific)<br>Shore Road, Heysham<br>Lancashire, LA3 2XY,<br>United Kingdom<br>Office Tel: +44 (0) 1524 850506<br>Office Fax: +44 (0) 1524 850608  |
| Emergency Telephone Number | For information <b>US</b> call: 001-800-227-6701 / <b>Europe</b> call: +32 14 57 52 11<br>Emergency Number <b>US:</b> 001-201-796-7100 / <b>Europe:</b> +32 14 57 52 99<br><b>CHEMTREC</b> Tel. No. <b>US:</b> 001-800-424-9300 / <b>Europe:</b> 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 |
|----------|-------|
| Solic    | k     |

Appearance Violet Odor Odorless

# **Emergency Overview**

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

#### <u>Classification of the substance or mixture</u> Based on available data, the classification criteria are not met

#### Label Elements

None required

#### Physical and Chemical Hazards None identified.

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. Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil.

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

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component  | CAS No     | Weight % |
|--|------------|----------|
| Carbonic acid, neodymium(3+) salt (3:2), hydrate | 38245-38-4 | <=100    |

## SECTION 4. FIRST AID MEASURES

#### 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 immediately if symptoms occur.

#### Inhalation

Remove to fresh air. Get medical attention immediately 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

No special precautions required.

#### Notes to Physician

Treat symptomatically.

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

#### 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. See Section 12 for additional Ecological Information.

## Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

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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. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

#### Storage

Keep container tightly closed in a dry and well-ventilated place.

#### 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

None under normal use conditions. .

#### 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        |
|---|-----------------------------------|-----------------|-------------|-----------------------|
| Natural rubber<br>Nitrile rubber<br>Neoprene<br>PVC | See manufacturers recommendations | -               | EN 374      | (minimum requirement) |

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     | No protective equipment is needed under normal use conditions.  |
| 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 <b>Recommended Filter type:</b> Particle filter |
| Small scale/Laboratory use | Maintain adequate ventilation   |

#### **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<br>Physical State   | Violet<br>Solid  |  |
|--|--|--|
| Odor<br>Odor Threshold<br>pH<br>Melting Point/Range<br>Softening Point<br>Boiling Point/Range<br>Flash Point<br>Evaporation Rate<br>Flammability (solid,gas)<br>Explosion Limits           | Odorless<br>No data available<br>No information available<br>No data available<br>No data available<br>No information available<br>Not applicable<br>No information available<br>No data available | <b>Method -</b> No information available Solid |
| Vapor Pressure<br>Vapor Density<br>Specific Gravity / Density<br>Bulk Density<br>Water Solubility  | No data available<br>Not applicable<br>No data available<br>No data available<br>Insoluble in water  | Solid  |
| Solubility in other solvents<br>Partition Coefficient (n-octanol/wat<br>Autoignition Temperature<br>Decomposition Temperature<br>Viscosity<br>Explosive Properties<br>Oxidizing Properties | No information available<br>er)<br>No data available<br>No data available<br>Not applicable<br>No information available<br>No information available  | Solid  |
| Molecular Formula  | Nd2 (CO3)3. xH2 O  |  |

# **SECTION 10. STABILITY AND REACTIVITY**

| Stability                                       | Stable under normal conditions.                            |
|---|--|
| Hazardous Reactions<br>Hazardous Polymerization | None under normal processing.<br>No information available. |
| Conditions to Avoid                             | None known.  |
| Materials to avoid                              | No information available.                                  |

468.51(anhy)

Hazardous Decomposition Products None under normal use conditions.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

# **Product Information**

#### (a) acute toxicity;

**Molecular Weight** 

| Component                                | LD50 Oral           | LD50 Dermal | LC50 Inhalation |
|--|---------------------|-------------|-----------------|
| Carbonic acid, neodymium(3+) salt (3:2), | LD50 > 5 g/kg (Rat) |             |                 |
| hydrate                                  |                     |             |                 |

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| (b) skin corrosion/irritation; No data available   (c) serious eye damage/irritation; No data available   (d) respiratory or skin sensitization; No data available   (e) germ cell mutagenicity; No data available   (f) carcinogenicity: No data available   (f) reproductive toxicity: No data available   (h) STOT-single exposure; No data available   (i) STOT-repeated exposure; No data available   (i) aspiration hazard; Not anta available   (j) aspiration hazard; Not applicable   Solid Solid   Symptoms / effects,both acute and No information available Solid   elayed Contains no substances known to be hazardous to the environment or that are not degradable in waster water treatment plants.   Persistence and Degradability Insoluble in water.   Persistence Degradability Not relevant for inorganic substances.   Bioaccumulative Potential May have some potential to bioaccumulate   Mobility in soli Spillage unlikely to penetratesoil Is not likely mobile in the environment due its lo |
|---|
| (d) respiratory or skin sensitization;<br>Respiratory or skin sensitization;<br>Skin No data available<br>No data available   (e) germ cell mutagenicity; No data available   (f) carcinogenicity; No data available   (f) carcinogenicity; No data available   (g) reproductive toxicity; No data available   (h) STOT-single exposure; No data available   (h) STOT-repeated exposure; No data available   (i) STOT-repeated exposure; No data available   (i) aspiration hazard; Not applicable   Solid Symptoms / effects,both acute and delayed   Voinformation available Solid   Symptoms / effects Contains no substances known to be hazardous to the environment or that are not degradability   Persistence and Degradability Insoluble in water.   Not relevant for inorganic substances. Bioaccumulative Potential   Bioaccumulative Potential May have some potential to bioaccumulate   |
| Respiratory<br>Skin No data available<br>No data available   (e) germ cell mutagenicity: No data available   (f) carcinogenicity: No data available   (f) carcinogenicity: No data available   (g) reproductive toxicity: No data available   (h) STOT-single exposure: No data available   (h) STOT-repeated exposure: No data available   (i) STOT-repeated exposure: No data available   (j) aspiration hazard: No information available   (j) aspiration hazard: No information available   Symptoms / effects,both acute and<br>delayed No information available   Ecotoxicity effects Contains no substances known to be hazardous to the environment or that are not<br>degradable in waster treatment plants.   Persistence and Degradability<br>Persistence Insoluble in water.<br>Not relevant for inorganic substances.   Bioaccumulative Potential May have some potential to bioaccumulate   |
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| Persistence<br>DegradabilityInsoluble in water.<br>Not relevant for inorganic substances.Bioaccumulative PotentialMay have some potential to bioaccumulate  |
|   |
| Mobility in soil Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low wate   |
| solubility  |
| Endocrine Disruptor Information<br>Persistent Organic Pollutant<br>Ozone Depletion PotentialThis product does not contain any known or suspected endocrine disruptors<br>This product does not contain any known or suspected substance<br>This product does not contain any known or suspected substance   |
| SECTION 13. DISPOSAL CONSIDERATIONS   |

## Neodymium (III) carbonate

| Waste from Residues/Unused<br>Products | Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. |  |  |  |
|--|---|--|--|--|
| Contaminated Packaging                 | Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.  |  |  |  |
| Other Information                      | Waste codes should be assigned by the user based on the application for which the product was used.   |  |  |  |
|  | SECTION 14. TRANSPORT INFORMATION   |  |  |  |
| Road and Rail Transport                | Not Regulated   |  |  |  |
| IMDG/IMO_                              | Not regulated   |  |  |  |
| IATA                                   | Not regulated   |  |  |  |
| Special Precautions for User           | No special precautions required   |  |  |  |
|  | SECTION 15. REGULATORY INFORMATION  |  |  |  |

#### **International Inventories**

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

| Component  | The<br>Inventory of<br>Hazardous<br>Chemicals<br>(2015<br>Edition) | goods GB | TCSI | IECSC | EINECS | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|--|--|----------|------|-------|--------|------|-----|-------|------|------|------|------|
| Carbonic acid,<br>neodymium(3+) salt<br>(3:2), hydrate | -  | -        | X    | -     | -      | -    | -   | -     | -    |      | -    | -    |

### **National Regulations**

# SECTION 16. OTHER INFORMATION

Prepared By Revision Date Revision Summary Health, Safety and Environmental Department 02-May-2024 New emergency telephone response service provider.

Training Advice

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

Legend

# Neodymium (III) carbonate

| CAS - Chemical Abstracts Service   | TSCA - United States Toxic Substances Control Act Section 8(b)<br>Inventory                       |
|--|---|
| EINECS/ELINCS - European Inventory of Existing Commercial Chemica                                |   |
| Substances/EU List of Notified Chemical Substances   | Substances List   |
| PICCS - Philippines Inventory of Chemicals and Chemical Substances                               | ENCS - Japanese Existing and New Chemical Substances  |
| IECSC - Chinese Inventory of Existing Chemical Substances  | AICS - Australian Inventory of Chemical Substances  |
| KECL - Korean Existing and Evaluated Chemical Substances   | NZIOC - New Zealand Inventory of Chemicals  |
| WEL - Workplace Exposure Limit   | TWA - Time Weighted Average   |
| ACGIH - American Conference of Governmental Industrial Hygienists                                | IARC - International Agency for Research on Cancer  |
| DNEL - Derived No Effect Level   | PNEC - Predicted No Effect Concentration  |
| RPE - Respiratory Protective Equipment   | LD50 - Lethal Dose 50%  |
| LC50 - Lethal Concentration 50%  | EC50 - Effective Concentration 50%  |
| NOEC - No Observed Effect Concentration  | <b>POW</b> - Partition coefficient Octanol:Water  |
| PBT - Persistent, Bioaccumulative, Toxic   | vPvB - very Persistent, very Bioaccumulative  |
| ICAO/IATA - International Civil Aviation Organization/International Air<br>Transport Association | <b>IMO/IMDG</b> - International Maritime Organization/International Maritime Dangerous Goods Code |
| ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road        | <b>MARPOL</b> - International Convention for the Prevention of Pollution from Ships               |
|  | ATE - Acute Toxicity Estimate   |
| <b>OECD</b> - Organisation for Economic Co-operation and Development                             |   |

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

### 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 Safety Data Sheet**