

# SAFETY DATA SHEET

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#### **SECTION 1. IDENTIFICATION**

Product Identifier: (3N) 99.9% Dysprosium(III) Isopropoxide

Product Code: DY-IP-03-P

CAS Number: 6742-68-3

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551 Fax: +1 310-208-0351 Emergency telephone number: +1 800-424-9300

# **SECTION 2. HAZARDS IDENTIFICATION**

Classification of the substance or mixture GHS02 Flame Flam, Sol. 1 H228 Flammable solid, GHS07 Eye Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation. Label elements **GHS** label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms GHS02 GHS07 Signal word Danger Hazard-determining components of labeling: Dysprosium(III) i-propoxide (99.9%-Dy) (REO) Hazard statements H228 Flammable solid. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements P231 Handle under inert gas. P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P422 Store contents under inert gas. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Classification system: NFPA ratings (scale 0 - 4) Health = 1Fire = 2Reactivity = 0HMIS-ratings (scale 0 - 4) Health = 1Fire = 0Reactivity = 0Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

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

Chemical characterization: Substances CAS No. Description 6742-68-3 Dysprosium(III) isopropoxide

# **SECTION 4. FIRST AID MEASURES**

Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. After swallowing: If symptoms persist consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

# **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture No further relevant information available. Advice for firefighters

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Environmental precautions: No special measures required. Methods and material for containment and cleaning up: Dispose contaminated material as waste according to item 13. Ensure adequate ventilation. Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

#### **SECTION 7. HANDLING AND STORAGE**

Handling:

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Specific end use(s) No further relevant information available.

# **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Additional information about design of technical systems: No further data; see item 7. Control parameters

Components with limit values that require monitoring at the workplace: Not required.

Additional information: The lists that were valid during the creation were used as basis. Exposure controls

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use

respiratory protective device that is independent of circulating air. Protection of hands: Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Eye protection: Tightly sealed goggles

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

Information on basic physical and chemical properties **General Information** Appearance: Form: Powder Color: Dark beige Odor: Alcohol-like Odor threshold: Not determined. pH-value: Not applicable. Change in condition Melting point/Melting range: no data °C Boiling point/Boiling range: no data °C Flash point: Not applicable. Flammability (solid, gaseous): Product is not flammable. Ignition temperature: Decomposition temperature: Not determined. Auto igniting: Not determined. Danger of explosion: Not determined. **Explosion limits:** Lower: Not determined. Upper: Not determined. Vapor pressure: no data hPa Density: Not determined. Relative density Not determined. Vapor density Not applicable. Evaporation rate Not applicable. Solubility in / Miscibility with Water: Insoluble. Partition coefficient (n-octanol/water): Not determined. Viscosity: Dynamic: Not applicable.

Kinematic: Not applicable. Solvent content: Organic solvents: 0.0 % VOC content: 0.0 g/l / 0.00 lb/gl Solids content: 100.0 % Other information No further relevant information available.

### SECTION 10. STABILITY AND REACTIVITY

Reactivity No further relevant information available. Chemical stability Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity: Primary irritant effect: on the skin: No irritant effect. on the eye: Irritating effect. Sensitization: No sensitizing effects known. Additional toxicological information: Carcinogenic categories IARC (International Agency for Research on Cancer) Substance is not listed. NTP (National Toxicology Program) Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

# SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Behavior in environmental systems: Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Not known to be hazardous to water. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

#### **SECTION 14. TRANSPORT INFORMATION**

**UN-Number** DOT, IMDG, IATA UN1325 UN proper shipping name DOT, IATA Flammable solids, organic, n.o.s. IMDG FLAMMABLE SOLID, ORGANIC, N.O.S. Transport hazard class(es) DOT Class 4.1 Flammable solids, self-reactive substances and solid desensitised explosives Label 4.1 IMDG Class 4 Label 4.1 IATA Class 4.1 Flammable solids, self-reactive substances and solid desensitised explosives Label 4.1 Packing group DOT, IMDG, IATA II Environmental hazards: Marine pollutant: No Special precautions for user Not applicable. EMS Number: F-A,S-G Stowage Category B Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. Transport/Additional information: DOT Quantity limitations On passenger aircraft/rail: 15 kg On cargo aircraft only: 50 kg UN "Model Regulation": UN 1325 FLAMMABLE SOLIDS, ORGANIC, N.O.S., 4.1, II

#### **SECTION 15. REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara Section 355 (extremely hazardous substances): Substance is not listed. Section 313 (Specific toxic chemical listings):

Substance is not listed. TSCA (Toxic Substances Control Act): Substance is not listed. **Proposition 65** Chemicals known to cause cancer: Substance is not listed. Chemicals known to cause reproductive toxicity for females: Substance is not listed. Chemicals known to cause reproductive toxicity for males: Substance is not listed. Chemicals known to cause developmental toxicity: Substance is not listed. Carcinogenic categories EPA (Environmental Protection Agency) Substance is not listed. TLV (Threshold Limit Value established by ACGIH) Substance is not listed. NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed. **GHS** label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms Signal word Danger Hazard-determining components of labeling: Dysprosium(III) i-propoxide (99.9%-Dy) (REO) Hazard statements H228 Flammable solid. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements P231 Handle under inert gas. P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P422 Store contents under inert gas. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# **16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.