



Dysprosium Hydride		Pricing >
Linear Formula	DyH ₃	
Pubchem CID	166841	
MDL Number	N/A	
EC No.	236-900-7	
IUPAC Name	dysprosium(+3) cation; hydrogen(-1) anion	
Beilstein/Reaxys No.	N/A	
SMILES	[H-].[H-].[H-].[Dy+3]	
InchI Identifier	InChI=1S/Dy.3H/q+3;3*-1	
InchI Key	QZJXVVNB MUGWEO-UHFFFAOYSA-N	
Signal Word	N/A	
Hazard Statements	N/A	
Hazard Codes	N/A	
Risk Codes	N/A	
Safety Statements	N/A	
Transport Information	N/A	
GHS Pictograms	GHS02 Flame  GHS07 Exclamation Point 	

[Create Printable PDF](#)

SAFETY DATA SHEET

Date Accessed: 05/04/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American

Elements product codes for CAS #13537-09-2

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:

Domestic, North America +1 800-424-9300

International +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Signal Word: Danger

Hazard Statements

H228 Flammable solid.

H261 In contact with water releases flammable gas.

H302+H312+H332 Harmful if swallowed, in contact with skin, or if inhaled. H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.



Precautionary Phrases

P210 Keep away from heat/sparks/open flames/hot surfaces.

P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.

P231+P232 Handle under inert gas. Protect from moisture.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

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

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

HMIS CLASSIFICATION:

Health: 1

Fire: 2

Reactivity Hazard: 2

NFPA RATING:

Health: 1

Flammability: 2

Reactivity Hazard: 2

EYE CONTACT: Causes serious eye irritation.

SKIN CONTACT: Causes skin irritation.

INHALATION: May cause respiratory irritation.

INGESTION: Harmful if swallowed.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: DyH3

Cas number: 13537-09-2

Molecular weight: 165.52382

SECTION 4. FIRST AID MEASURES

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes.

Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

SKIN EXPOSURE: Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

INGESTION: Seek medical attention immediately.

SECTION 5. FIREFIGHTING MEASURES

FLASH POINT: Flammable solid.

Autoignition: Not available

EXPLOSION LIMITS: Not available

EXTINGUISHING MEDIUM: Carbon dioxide, dry chemical powder, or alcohol resistant foam. DO NOT USE WATER!

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. Contact with water releases flammable gases.

HAZARDOUS COMBUSTION AND
DECOMPOSITION PRODUCTS: Hydrogen, fumes of
nitrogen oxides.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate
equipment when using this material. Ensure adequate
ventilation. Avoid the formation of dust. Avoid
breathing vapors, mist, gas, or dust.

ENVIRONMENTAL PRECAUTIONS: Prevent spillage
from entering drains or allowing to be released into
the environment.

METHODS AND MATERIALS FOR CONTAINMENT
AND CLEANING UP: Shut off all sources of ignition.
Contain spill with inert material. Pick up and arrange
disposal without creating dust. Ventilate and wash
spill site after material is pickup is complete. Sweep
up and keep in suitable, closed containers for
disposal. Dispose of all waste and cleanup materials
in accordance with regulations.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear
appropriate personal protective equipment. Avoid
contact with skin and eyes. Use with adequate
ventilation. Avoid formation of dusts and aerosols.
Handle under inert gas. Keep away from sources of
ignition.

CONDITIONS FOR SAFE STORAGE: Store in cool,
dry well ventilated area. Keep away from incompatible
materials. Store under nitrogen or argon. Protect from
moisture, acids, and oxidizers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS: Contains no substances
with occupational exposure limit values.

EYE PROTECTION: Wear chemical safety glasses or
goggles and face shield.

SKIN PROTECTION: Wear nitrile or rubber gloves,
and a complete suit protecting against chemicals.

VENTILATION: Provide local exhaust, preferably
mechanical.

RESPIRATOR: Use an approved respirator.

ADDITIONAL PROTECTION: Provide eyewash
stations, quick-drench showers and washing facilities

accessible to areas of use and handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: powder
MOLECULAR WEIGHT: 165.52382
BOILING POINT: No data available
MELTING POINT: No data available
DENSITY: 7.1 g/cm³

SECTION 10. STABILITY AND REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: Humidity, all sources of ignition
INCOMPATIBILITY: Oxidizing agents, alcohols, water, acids, moisture, fluorine, chlorine, bromine, iodine, carbon tetrachloride, freons, and halogens.
DECOMPOSITION PRODUCTS: Hydrogen, fumes of nitrogen oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: Humidity, all sources of ignition
INCOMPATIBILITY: Oxidizing agents, alcohols, water, acids, moisture, fluorine, chlorine, bromine, iodine, carbon tetrachloride, freons, and halogens.
DECOMPOSITION PRODUCTS: Hydrogen, fumes of nitrogen oxides.
To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12. ECOLOGICAL INFORMATION

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal

regulations.

SECTION 14. TRANSPORT INFORMATION

UN3132 Marine Pollutant: No
Water-reactive Solid, Flammable, n.o.s. CLASS 4.3
(4.1) Packing Group: II

SECTION 15. REGULATORY INFORMATION

TSCA: Listed in the TSCA inventory
SARA 302/304: Not Listed SARA 311/312: Not Listed
SARA (TITLE 313): Not Listed CALIFORNIA PROP.
65: Not Listed
MASSACHUSETTS RIGHT TO KNOW
COMPONENTS: No components are subject to the
Massachusetts Right to Know Act. NEW JERSEY
RIGHT TO KNOW COMPONENTS: No components
are subject to the New Jersey Right to Know Act.
PENNSYLVANIA RIGHT TO KNOW COMPONENTS:
No components are subject to the Pennsylvania Right
to Know Act.

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.
