Plasmaterials, Inc.
1270-B Quarry Lane
Pleasanton, CA 94566
Ph: (925) 447-4030 Fx: (925) 447-4031
http://plasmaterials.com

SAFETY DATA SHEET

Section 1- IDENTIFICATION

COMPOSITION		PRODUCT NAME
Dy		**Dysprosium**
SUPPLIER: **Plasmaterials, Inc.** **1270-B Quarry Lane** **Pleasanton, CA 94566** **Ph: 925-447-4030**	RECOMMENDED USE: **Laboratory Chemicals** **Scientific Research**	EMERGENCY TELEPHONE NUMBERS **US: 001-800-424-9300** **Europe: 001-703-527-3887**

Section 2- HAZARD(S) IDENTIFICATION

Classification:
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable Solids: Category 1

LABEL ELEMENTS:	**Hazard Statements:**
Signal Word: Warning	Flammable solid

PRECAUTIONARY STATEMENTS

Prevention:
-Keep away from heat/sparks/open flames/hot surfaces – No Smoking
-Ground/bound container and receiving equipment
-Wear protective gloves, protective clothing, eye protection and face protection
-Use explosion-proof electrical/ventilating/lighting/equipment

Fire:
-In case of fire: Use CO_2, dry chemical or foam for extinction.

Hazards not otherwise classified (HNOC):
-None identified.

Section 3- COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS-No	Weight %
Dysprosium	7429-91-6	<=100

Section 4- FIRST AID MEASURES

INHALATION: Remove victim from exposure to fresh air; lie down and keep warm and quiet. Give oxygen if breathing is difficult. If not breathing, give artificial respiration. Obtain medical attention.
SKIN CONTACT: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.
EYE CONTACT: Flush eyes with lukewarm water, lifting upper and lower lids, for at least 15 minutes. Obtain medical attention.
INGESTION: Clean mouth with water. Get medical attention.
MOST IMPORTANT SYMPTOMS/EFFECTS: No information available
NOTES TO PHYSICIAN: Treat symptomatically

Section 5- FIREFIGHTING MEASURES

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment	**Unsuitable Extinguishing Media:** No information available
Flash Point: No Information Available **Method:** No Information Available **Auto Ignition Temperature:** No Information Available	**Explosion Limits:** **Upper:** No Data Available **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. Combustible material.

Hazardous Combustion Products:
Metal Oxides. Hydrogen.

Protective Equipment & Precautions for Firefighters:
As in any fire, Firefighters must wear full face, self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective clothing to prevent contact with skin and eyes.

NFPA:

Health	Flammability	Instability	Physical Hazards
0	3	2	W

Section 6- ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions: See Section 12 for additional ecological information.

Methods for Containment & Clean Up: Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

Section 7- HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Take precautionary measures against static discharges. Use explosion-proof equipment. Use only non-sparking tools. Minimize dust generation and accumulation.

Storage: Keep in a dry, cool and well ventilated place. Keep container tightly closed. Keep away from heat and sources of ignition. Flammables area

Section 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: Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment:

Eye/Face Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin and Body Protection: Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection: 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.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

Section 9- PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder Solid
Appearance: Grey
Odor: No information available
Odor Threshold: No information available
pH: No information available
Melting Point/Range: 1,412°C / 2,573.6°F
Boiling Point/Range: 2,567°C / 4,652.6°F
Flash Point: No information available
Evaporation Rate: No information available
Flammability (solid,gas): No information available
Flammability or Exposure Limits:
Upper: No data available
Lower: No data available
Vapor Pressure: No information available
Vapor Density: No information available
Relative Density: 8.55 g/cm3
Solubility: No information available
Partition coefficient; n-octanol/water: No data available
Auto Ignition Temperature: No information available
Decomposition Temperature: No information available
Viscosity: No information available
Molecular Formula: Dy
Molecular Weight: 162.5 g/mol

Section 10- STABILITY AND REACTIVITY

Reactive Hazard: Yes

Stability: Moisture and Air Sensitive

Conditions to Avoid: Incompatible products.

Incompatible Materials: Acids, Halogens, Acid Chlorides, Oxidizing agent

Hazardous Decomposition Products: Hydrogen, Metal Oxides

Hazardous Polymerization: Hazardous polymerization does not occur

Hazardous Reactions: None under normal processing.

Section 11- TOXICOLOGICAL INFORMATION

Acute Toxicity:

Product Information/Component Information: No acute toxicity information is available for this product.

Toxicological Synergistic Products: No information available

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

Irritation: No information available
Sensitization: No information available
Carcinogenicity: Not Identified as carcinogenic.
Mutagenic Effects: No information available
Reproductive Effects: No information available
Development Effects: No information available
Teratogenicity: No information available
STOT – single exposure: None known
STOT – repeated exposure: None known
Aspiration Hazard: No information available
Symptoms/effects, both acute & delayed: No information available
Endocrine Disruptor: No information available
Other Adverse Effects: The toxicological properties have not been fully investigated.

Section 12- ECOLOGICAL INFORMATION

Ecotoxicity: Do not empty into drains; May cause long-term adverse effect in the environment.
Persistence and Degradability: May Persist
Bioaccumulation/Accumulation: No information available
Mobility: No information available

Section 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.

Section 14- TRANSPORT INFORMATION

DOT:

UN-No: 3089
Proper Shipping Name: Metal Powders, Flammable, N.O.S.
Hazard Class: 4.1
Packing Group: II

TDG:

UN-No: 3089
Proper Shipping Name: Metal Powders, Flammable, N.O.S.
Hazard Class: 4.1
Packing Group: II

IATA:

UN-No: 3089
Proper Shipping Name: Metal Powders, Flammable, N.O.S.
Hazard Class: 4.1
Packing Group: II

IMDG/IMO:

UN-No: 3089
Proper Shipping Name: Metal Powders, Flammable, N.O.S.
Hazard Class: 4.1

Packing Group: II

Section 15- REGULATORY INFORMATION

US Federal Regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the US EPA TSCA Inventory List. CERCLA/SARA Hazardous Substance List-Not applicable.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt.D): Not regulated
U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053): Not Listed
CERCLA Hazardous Substance List (40 CFR 302.4): Not Listed
SARA 302 Extremely Hazardous Substance: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA 304 Emergency Release Notification: Not regulated
SARA 311/312 Hazardous Chemical: No
SARA 313 (TRI Reporting): This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not regulated
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not regulated
Safe Drinking Water Act (SDWA): Not regulated
US California Proposition 65: This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.
WHMIS Hazard Class: No Information Available.

Section 16- OTHER INFORMATION

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulations are subject to change, the conditions of handling and use, or misuse are beyond our control, Plasmaterials, Inc. makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Users should satisfy themselves that they have all current data relevant to their particular use.

The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any representation or warranty, expressed or implied, regarding the accuracy or correctness.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

REVISION: 01-01-2026