PA 950 HD

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024
Issue date: 9/20/2024 Revision date: 4/9/2025 Version: 2.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : PA 950 HD

1.2. Other means of identification

Use of the substance/mixture : Speciality nylon composite for sintering

1.3. Recommended use of the chemical and restrictions on use

No additional information available

1.4. Supplier's details

Supplier
Advanced Laser Materials, LLC.
3115 Lucius McCelvey Dr
Temple, Texas
USA
T (254) 773-3080 M-F, 8:00 a.m. – 5:00 p.m.
Life_Cycle_NA@eos-na.com

1.5. Emergency phone number

Emergency number : (254) 773-3080, 8:00 a.m. – 5:00 p.m. Monday – Friday, Central time

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Combustible dust May form combustible dust concentrations in air

2.2. Label elements

GHS US labeling

Signal word (GHS US) : Warning
Hazard statements (GHS US) : May form combustible dust concentrations in air

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria for section 3.2 of HCS

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Dust may cause respiratory tract irritation.

Symptoms/effects after skin contact : Dust may cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Dust may cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2). Water spray. Foam. Dry chemical powder.

Unsuitable extinguishing media : Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : Combustible dust. Products of combustion may include, and are not limited to: oxides of carbon. Irritating vapors.

Explosion hazard : Airborne dust in sufficient concentrations when confined and exposed to a sufficient ignition source can explode.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (ie, clearing dust surfaces with compressed air). Use only non-sparking tools.

For non-emergency personnel

No additional information available

For emergency responders

Environmental precautions : Prevent entry to sewers and public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Vacuum or sweep material and place in a disposal container. Avoid dust formation. Provide ventilation.

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Handle and open container with care. Ensure adequate ventilation. Good housekeeping is important to prevent accumulation of dust. Use only non-sparking tools. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. When using do not eat, drink or smoke. Avoid dust formation. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Handling this product may result in electrostatic accumulation. Use proper grounding procedures.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Keep away from sources of ignition. Keep out of the reach of children. Keep container tightly closed. Store in dust-tight, dry, labelled containers. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Store in a dry, cool and well-ventilated place.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e, there is not leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:
Wear suitable gloves. Consult glove manufacturer's product information on material suitability and material thickness.

Eye protection:
Safety glasses or goggles are recommended when using product.

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

Other information:
Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Solid
Appearance	:	No data available.
Color	:	No data available
Odor	:	No data available
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	May form combustible dust concentrations in air.
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosion limits	:	Explosible
Particle characteristics	:	No data available
Particle size	:	99.99% = <75µm 100% = <420 µm

9.2. Data relevant with regard to physical hazard classes (supplemental)

Moisture content	:	0.7%
Minimum Ignition Energy	:	Capacitive = 100 – 300 mJ Inductive = 30 – 100 mJ
Minimum Ignition Temperature	:	460 °C / 860 °F
Layer Ignition Temperature	:	>400 °C / 752 °F
Maximum Pressure	:	7.0 bar
Maximum Rate of Pressure Rise	:	325 $bar.s^{-1}$
Dust Constant	:	88 $bar.m.s^{-1}$
St Class	:	1
Minimum Explosible Concentration	:	60 $g.m^{-3}$
Limited Oxygen Concentration	:	14% O_2 v/v
Combustibility Screening	:	Burning Class 3

'SECTION 10 Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use. No exothermic activity was observed during a screening test, therefore this material will not self-heat.

10.2. Chemical stability

Stable under normal storage conditions. Keep dry in storage. May form combustible dust concentrations in air. The sample tested as Explosible, indicating that when dispersed as a dust cloud this material will form a flammable atmosphere and when ignited will support combustion propagation. Based on the combustibility screening test data, the sample is classified as Burning (Combustion) Class 3, indicating that fire will not propagate through the material if ignited by an external ignition source. Based upon the results of the explosion severity test, this material is classified as St Class 1 and will, on ignition, produce an explosion with an overpressure of 7.0 bar and dust constant (K_{St}) of 88 bar.m.s^{-1}.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Sparks. Open flame. Heat. Incompatible materials. Avoid dust formation.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Irritating vapors.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified
Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

PA 950 HD	
Viscosity, kinematic	No data available

Symptoms/effects after inhalation : Dust may cause respiratory tract irritation.
Symptoms/effects after skin contact : Dust may cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact : Dust may cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

12.2. Persistence and degradability

PA 950 HD	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

PA 950 HD	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

Other information : No other effects known.

SECTION 13 Disposal considerations

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. The generation of waste should be avoided or minimized wherever possible. Recover and recycle product if possible.

SECTION 14 Transport information

In accordance with DOT

14.1. UN number

UN-No. (DOT) : Not applicable

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Not applicable

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

Not applicable

SECTION 15 Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024
Revision date : 4/9/2025
Issue date : 9/20/2024
Other information : Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.
Prepared by : Nexreg Compliance Inc.
www.Nexreg.com

Indication of changes:			
Section	**Changed item**	**Comments**	**Version**
SDS	Product name. Physical and chemical properties. SDS update.	Modified	2.0

Full text of hazard classes and H-statements	
Comb. Dust	Combustible Dust

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