

# Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 Issue date: 9/16/2022 Revision date: 9/19/2023 Version: 1.1

# **SECTION 1: Identification**

# 1.1. Identification

Product form : Mixture

Product name : PA 602, 603, 604-CF

# 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Specialty nylon composite for sintering.

# 1.3. Supplier

#### Manufacturer

Advanced Laser Materials, LLC. 3115 Lucius McCelvey Dr Temple, Texas 76504 - USA T (254) 773-3080 M-F, 8:00 a.m. – 5:00 p.m.

Life Cycle NA@eos-na.com

# 1.4. Emergency telephone number

CHEMTREC 1-800-424-9300

# SECTION 2: Hazard(s) identification

# 2.1. Classification of the substance or mixture

#### **GHS US classification**

Comb. Dust May form combustible dust concentrations in air

# 2.2. GHS Label elements, including precautionary statements

#### **GHS US labelling**

Signal word (GHS US) : Warning

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

#### 2.3. Other hazards which do not result in classification

Not additional information available

# 2.4. Unknown acute toxicity (GHS US)

Not applicable

# **SECTION 3: Composition/information on ingredients**

# 3.1. Substances

Not applicable

# Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

#### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

# **SECTION 4: First-aid measures**

# 4.1. Description of 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. Never give anything by mouth to an unconscious person. Get medical

advice/attention if you feel unwell.

# 4.2. Most important symptoms and 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.

: 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. Immediate medical attention and special treatment, if necessary

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**

Symptoms/effects after eye contact

# 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Carbon dioxide. 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.

Oxides of nitrogen.

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**

General measures

# 6.1. Personal precautions, protective equipment and emergency procedures

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: 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.

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# Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

# 6.3. Methods and material 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.

# 6.4. Reference to other sections

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.

When using do not eat or drink. Avoid contact with skin and eyes. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Do not breathe dust. Do not swallow. Handle and open container with care. If spilled, may cause the floor to be slippery. Take precautionary measures against static discharge. Use only in well ventilated areas. 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 any incompatibilities

Storage conditions : Keep out of the reach of children. Store in dust-tight, dry, labelled containers. Keep cool. Keep

container tightly closed. Avoid any dust buildup by frequent cleaning and suitable construction of

the storage area.

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

PA 602, 603, 604-CF	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m³ (Inhalable Particulate)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	15 mg/m³ (Total Dust)

9/19/2023 (Revision date) EN (English) 3/8

# Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

# 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/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

# Hand protection:

Wear suitable gloves

#### 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.

#### Thermal hazard protection:

Use personal protective equipment as required.

#### Other information:

Solubility

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

Negligible.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: SolidAppearance: Powder.Colour: GreyOdour: Odourless

Odour threshold No data available Negligible solubility рΗ > 80 °C (> 176 °F) Melting point No data available Freezing point **Boiling point** No data available Flash point > 350 °C (> 662 °F) Relative evaporation rate (butylacetate=1) No data available Flammability Combustible dust. Not applicable Vapour pressure Vapour pressure at 50 °C : Not applicable Relative vapour density at 20 °C : Not applicable Relative density No data available Density 1.1 - 1.2 g/cm<sup>3</sup>

9/19/2023 (Revision date) EN (English) 4/8

# Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Partition coefficient n-octanol/water : No data available
Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Viscosity, kinematic : Not applicable
Viscosity, dynamic : No data available

Explosive limits : Lower explosion limit: 60 g/m³

Explosive properties : No data available
Oxidising properties : No data available

# 9.2. Other information

Minimum ignition energy : With Inductance: 100 mJ < MIE < 300 mJ

Without Inductance: MIE > 1000 mJ

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under normal conditions. May form combustible dust concentrations in air.

# 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

# 10.4. Conditions to avoid

Heat. Ignition sources. Incompatible materials. Avoid dust formation.

# 10.5. Incompatible materials

Acids. Bases. Strong oxidizing agents.

# 10.6. Hazardous decomposition products

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

# **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.

pH: Negligible solubility

Serious eye damage/irritation : Not classified.

pH: Negligible solubility

Respiratory or skin sensitisation : Not classified. : Not classified. Germ cell mutagenicity : Not classified. Carcinogenicity : Not classified. Reproductive toxicity STOT-single exposure Not classified. STOT-repeated exposure Not classified. Aspiration hazard : Not classified. Viscosity, kinematic Not applicable

# Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

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. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

# 12.2. Persistence and degradability

# PA 602, 603, 604-CF

Persistence and degradability Not established.

# 12.3. Bioaccumulative potential

# PA 602, 603, 604-CF

Bioaccumulative potential Not established.

# 12.4. Mobility in soil

No additional information available

# 12.5. Other adverse effects

Other information : No other effects known.

# **SECTION 13: Disposal considerations**

# 13.1. Disposal methods

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

Not regulated for transport

# 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable

9/19/2023 (Revision date) EN (English) 6/8

# Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

#### 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. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

# 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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. US 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 2012

Issue date : 09/16/2022 Revision date : 09/19/2023

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.

NEXREG

Prepared by : Nexreg Compliance Inc.

www.Nexreg.com

#### Full text of H-statements

Comb. Dust Combustible Dust

# Indication of changes:

Physical and chemical properties.

# Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Safety Data Sheet (SDS), USA - Nexreg 2021

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