

Trade name: Polyamide 12

Mandible Repositioning Device

Product no.: 83600

Current version : 02 **Issued:** 2022-12-14

Replaced version: 01

Country: Canada

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name

Polyamide 12

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture

Laser sintering

1.3 Details of the supplier of the safety data sheet

Address

Panthera Dental Inc.
9105, John-Simons street
Quebec, Quebec
Canada, G2B 0S6
Phone : + 1 (418)-527-0388
Toll Free : + 1 (855)-233-0388

Advice on Safety Data Sheet

support@pantheradental.com

Manufacturer

Address

Panthera Dental Inc.
9105, John-Simons street
Quebec, Quebec
Canada, G2B 0S6
www.pantheradental.com
Phone : + 1 (418)-527-0388
Toll Free : + 1 (855)-233-0388

1.4 Emergency telephone

CHEMTREC US: (800) 262-8200
CHEMTREC: +1 703-741-5500 (24h) Transport

SECTION 2: Hazards identification

2.1 Immediate hazards

No data available.

2.2 Potential Health Effects

Eye

No hazard in normal industrial use.

Skin

No hazard in normal industrial use.

Inhalation

No hazard in normal industrial use.

Ingestion

No hazard in normal industrial use.

Cancer

None of the components present in this material at concentrations equal or greater than 0.1% is listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Trade name: Polyamide 12

Mandible Repositioning Device

Product no.: 83600

Current version: 01 **Issued:** 2018-10-19

Replaced version: N/A

Country: Canada

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterization

Substance name Polyaurolactam (polyamide 12) (CAS-No. 25038-74-8), modified, polymer

3.2 Mixtures

Not applicable. The product is not a mixture.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Change contaminated clothing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

When in contact with the skin, clean with soap and water. After contact with molten product cool quickly with cold water. Do not pull solidified product from skin. Take for medical treatment.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.).

After ingestion

Seek medical advice immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam; Carbon dioxide; Extinguishing powder; Water spray jet

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO); Nitrogen oxides (NO_x); Combustion products of this material have to be classed invariably as respiratory poison.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure - demand, MSHA/ NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid dust formation. Keep away sources of ignition.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Trade name: Polyamide 12

Mandible Repositioning Device

Product no.: 83600

Current version: 01 **Issued:** 2018-10-19

Replaced version: N/A

Country: Canada

6.3 Methods and material for containment and cleaning up

Take up mechanically. When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

No special measures necessary if stored and handled as prescribed. Avoid the formation and deposition of dust. Provide good ventilation of working area (local exhaust ventilation if necessary).

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Provide eye wash fountain in work area. Do not inhale dust. Use barrier skin cream. Areas of the skin soiled with dust are to be cleaned with soap and water without delay, as the powder draws the natural moisture from the skin.

Advice on protection against fire and explosion

Dust can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep containers dry, tightly closed, at temperatures between 41 and 95°F and relative air moisture of 20 – 70%.

Requirements for storage rooms and vessels

Store product in closed containers.

Hints on storage assembly

None known

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	DUST		
	LIMITS FOR AIR CONTAMINANTS (OSHA)		
	Particulates not otherwise regulated		
	Total dust		
	TWA	15	mg/m ³
	LIMITS FOR AIR CONTAMINANTS (OSHA)		
	Particulates not otherwise regulated		
	Respirable fraction		
	TWA	5	mg/m ³
	LIMITS FOR AIR CONTAMINANTS (ACGIH)		
	Particulates (insoluble or poorly soluble)		
	respirable particles		
	TWA	3	mg/m ³
	LIMITS FOR AIR CONTAMINANTS (ACGIH)		
	Particulates (insoluble or poorly soluble)		
	inhalable particles		
	TWA	10	mg/m ³

Trade name: Polyamide 12

Mandible Repositioning Device

Product no.: 83600

Current version: 01 **Issued:** 2018-10-19

Replaced version: N/A

Country: Canada

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respirations protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Eye / face protection

Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).

Hand protection

If this powder is handled at room temperature, it is not necessary to wear protective gloves. In case of thermal processing, thermally insulating protective gloves are to be used.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Color	
Powder	
white	
Odor	
odorless	
Odor threshold	
No data available	
pH value	
Not applicable	
Boiling point / boiling range	
Not applicable	
Melting point / melting range	
Value	185 °C
Method	EN ISO 11357-1
Decomposition point / decomposition range	
Value	> 572 °F
Flash point	
Not applicable	
Ignition temperature	
Value	> 350 °C
Method	DIN 51794

Material Safety Data Sheet

Trade name: Polyamide 12

Mandible Repositioning Device

Product no.: 83600

Current version: 01 **Issued:** 2018-10-19

Replaced version: N/A

Country: Canada

Auto-ignition temperature

No data available

Oxidising properties

No data available

Explosive properties

No data available

Flammability (solid, gas)

No data available

Lower flammability or explosive limits

No data available

Upper flammability or explosive limits

No data available

Vapor pressure

Not applicable

Vapour density

No data available

Evaporation rate

No data available

Relative density

No data available

Density

No data available

Solubility in water

Remarks insoluble

Solubility(ies)

No data available

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

9.2 Other information

Other information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

none, if handled according to order

10.5 Incompatible materials

none, if handled according to order

Material Safety Data Sheet

Trade name: Polyamide 12

Mandible Repositioning Device

Product no.: 83600

Current version: 01 **Issued:** 2018-10-19

Replaced version: N/A

Country: Canada

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity
No data available
Acute dermal toxicity
No data available
Acute inhalational toxicity
No data available
Skin corrosion/irritation
No data available
Serious eye damage/irritation
No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Reproduction toxicity
No data available
Carcinogenicity
No data available
STOT-single exposure
No data available
STOT-repeated exposure
No data available
Aspiration hazard
No data available
Symptoms related to the physical, chemical and toxicological characteristics
Eye contact may cause mechanical irritation through dust particles.
Delayed and immediate effects as well as chronic effects from short and long-term exposure
Inhalation of dusts may irritate the respiratory tract.

SECTION 12: Ecological information

12.1 Toxicity

Fish toxicity
No data available
Daphnia toxicity
No data available
Algae toxicity
No data available

Material Safety Data Sheet

Trade name: Polyamide 12

Mandible Repositioning Device

Product no.: 83600

Current version: 01 **Issued:** 2018-10-19

Replaced version: N/A

Country: Canada

Bacteria toxicity

No data available

12.2 Persistence and degradability

Physico-chemical eliminability

Remarks

If used properly, this product does not cause problems, on the strength of previous experience.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Dispose in accordance with federal, state and local regulations.

SECTION 14: Transport information

14.1 US DOT

The product is not subject to DOT regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

SECTION 15: Regulatory information

US FEDERAL REGULATIONS

Toxic Substances Control Act (TSCA)

All of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements (exempt).

Clean Water Act (CWA)

None of the ingredients is listed.

OSHA

OSHA: This product is not classified as hazardous in accordance with US OSHA Hazard Communication Standard 29 CFR 1910.1200.

SARA Section 302 (RQ):

None of the ingredients is listed.

SARA 311/312

Hazard category

Acute Health Hazards

Material Safety Data Sheet

Trade name: Polyamide 12

Mandible Repositioning Device

Product no.: 83600

Current version: 01 **Issued:** 2018-10-19

Replaced version: N/A

Country: Canada

SARA Section 313

None of the ingredients is listed.

HAPS Hazardous Air Pollutants

None of the ingredients is listed.

HMIS Classification

Health	1
Flammability	0
Physical Hazard	1
Personal Protection	C

NFPA Rating

Health	1
Flammability	0
Physical Hazard	1

CARCINOGENICITY

IARC

None of the ingredients is listed in group 1, 2A or 2B.

US STATE REGULATIONS

New Jersey Worker and Community Right to Know Act.

None of the ingredients is listed.

California Proposition 65.

None of the ingredients is listed.

Pennsylvania HAZARDOUS SUBSTANCE LIST

None of the ingredients is listed.

SECTION 16: Other information

Other information

Abbreviations:

ACGIH American Conference of Governmental Hygienics

CAS Chemical Abstracts Service

HAPS Hazardous Air Pollutants

HMIS Hazardous Material Identification System

IARC International Agency for Research on Cancer

IDLH Immediate Dangerous to Life and Health

LEL Lower Explosion Limit

NTP National Toxicology Program

OEL Occupational Exposure Limit

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

PPE Personal Protection Equipment

SARA Superfund Amendments and Reauthorization Act

STEL Short-Term Exposure Level (15 minutes)

TWA Time-Weighted Average (8 hours)

UEL Upper Explosion Limit

WEEL Workplace Environmental Exposure Level

Department issuing safety data sheet

Panthera Dental Inc.

9105 John-Simons Street, Quebec City, Quebec, Canada, G2B 0S6

Tel.: 418-527-0388 e-mail: support@pantheradental.com

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.