

Material Safety Data Sheet POLYAMIDE

Section 1 - Product Identification

Synonyms : Polyamide
Chemical Formula : $(C_6H_{11}NO)_n$
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Section 2 – Composition/Information on Ingredients

Chemical Name	EC No/CAS No	Purity, %
Polyamide	25038-54-4	max. 99.9

Section 3 – Hazards Identification

3.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

3.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)
not required

Signal word not required

3.3 Other hazards

There is no additional information

Section 4 – Composition/ information on ingredients

4.1 Composition comments

Name of substance Polyamide

EC number 607-506-6

CAS number 25038-54-4

Molecular formula $(C_6H_{11}NO)_n$

Section 5 – First-Aid Measures

5.1. Description of first aid measures

General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Rinse mouth. Call a doctor if you feel unwell

5.2. Most important symptoms and effects, both acute and delayed

N.A.

5.3. Indication of any immediate medical attention and special treatment needed

N.A.

Section 6 – Fire Fighting Measures**6.1. Suitable Extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings water spray, foam, dry extinguishing powder, carbon dioxide (CO₂)

6.2. Specific hazards arising from the chemical

Combustible.

Hazardous combustion products

In case of fire may be liberated: nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)

6.3. Special protective actions for fire-fighters

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus

Section 7 – Accidental Release Measures**7.1. Personal precautions, protective equipment and emergency procedures**

Control of dust.

7.2. Environmental precautions

Keep away from drains, surface and ground water

7.3. Methods and material for containment and cleaning up**Advices on how to contain a spill**

Covering of drains.

Advices on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal.

Section 8 – Handling and Storage**8.1. Precautions for safe Handling**

No special measures are necessary.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs

8.2. Conditions for safe storage, including any incompatibilities

Conditions for safe storage, including any incompatibilities

Store in a dry place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

Ventilation requirements

Use local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C.

Section 9 – Exposure Controls/Personal Protection

9.1. Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

9.2. Individual protection measures, such as personal protective equipment (PPE)

Respiratory protection

Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).

Eye/face protection

Use safety goggle with side protection.

Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

Environmental exposure controls

Keep away from drains, surface and ground water.

Section 10 – Physical and Chemical Properties

10.1. Information on basic physical and chemical properties

Appearance Physical state solid (powder)

Colour white

Odour odourless

Odour threshold No data available

Other physical and chemical parameters

pH (value) This information is not available.

Melting point/freezing point >215 °C

Initial boiling point and boiling range This information is not available.

Flash point not applicable

Evaporation rate no data available

Flammability (solid, gas) These information are not available

Explosive limits

lower explosion limit (LEL) this information is not available

upper explosion limit (UEL) this information is not available

Explosion limits of dust clouds these information are not available

Vapour pressure This information is not available.

Density 1,14 g/cm³ at 20 °C

Vapour density This information is not available.

Relative density Information on this property is not available.

Water solubility no data available

n-octanol/water (log KOW) This information is not available.

Auto-ignition temperature Information on this property is not available.

Decomposition temperature no data available

Viscosity not relevant (solid matter)

Explosive properties Shall not be classified as explosive

Oxidising properties none

10.2. Other information

There is no additional information.

Section 11 – Stability and Reactivity

11.1. Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

11.2. Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

11.3. Possibility of hazardous reactions

Violent reaction with: Strong oxidiser

11.4. Conditions to avoid:

There are no specific conditions known which have to be avoided.

11.5. Incompatible materials

There is no additional information.

11.6. Hazardous decomposition products

Hazardous combustion products: see section 5.

Section 12 – Toxicological Information

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard

Section 14 – Disposal Considerations

13.1 Waste treatment methods

Consult the appropriate local waste disposal expert about waste disposal.

Sewage disposal-relevant information

Do not empty into drains.

Sewage disposal-relevant information

Do not empty into drains.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Section 15 – Transport Information

UN number (not subject to transport regulations)

UN proper shipping name not relevant

Transport hazard class(es) not relevant

Packing group not relevant

Environmental hazards none (non-environmentally hazardous acc. to the dangerous goods regulations)

Special precautions for user There is no additional information.

Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

Not subject to ADR, RID and ADN.

• **International Maritime Dangerous Goods Code (IMDG)**

Not subject to IMDG.

• **International Civil Aviation Organization (ICAO-IATA/DGR)**

Not subject to ICAO-IATA.

Section 16 – Regulatory Information

15.1. Safety, health and environmental regulations

Safety, health and environmental regulations/legislation specific for the substance or mixture relevant provisions of the European Union (EU)

Section 16 : Additional Information

16.1. List of abbreviation and acronyms used in this MSDS

SDS : Safety Data Sheets

Index N° : atomic number of the element most characteristic of the properties of the substance

CAS No : Chemical Abstracts Service number

EC No : EINECS Number : European Inventory of Existing Commercial Substances

Repr. Cat. 2 : Substance presumed human reproductive toxicant

Acute Oral Cat. 5 : Substance which is of relatively low acute oral toxicity.

GHS : Globally Harmonised System of Classification and Labelling

LD₅₀ : Median Lethal Dose

LC₅₀ : Lethal Concentration, 50%

N.A. : Not Applicable

OSHA : Occupational Safety & Health Administration

Cal OSHA : The State of California Division of Occupational Safety and Health (DOSH)

PEL : Permissible Exposure Limits

ACGIH : American Conference of Governmental Industrial Hygienists

TLV : Threshold Limit Value

Japanese MITI : Japanese Ministry of International Trade and Industry

EC₅₀ : Half maximal effective concentration

UN : United Nations

U.S. EPA TSCA Inventory: Inventory of the chemical substances manufactured or processed in the United States according to Toxic Substances Control Act compiled and published under the authority of the Environmental Protection Agency

Canadian DSL: Canadian Domestic Substances List

16.2. List of relevant hazard statements and precautionary statements used in this MSDS

Hazard Statement

H361 d: Suspected of damaging the unborn child

H319: Causes serious eye irritation

H303: May be harmful if swallowed

Precautionary Statements

Prevention

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P281: Use personal protective equipment as required.

P264: Wash eyes thoroughly after handling.

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

Response

P308 + P313: If exposed or concerned: get medical advice/attention.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

Storage

P405: Store locked up.

Disposal

P501: Dispose of contents/container to in accordance with local regulations.

16.3. References

1. Litovitz T L, Norman S A, Veltri J C, Annual Report of the American Association of Poison Control Centers Data Collection System. Am. J. Emerg. Med. (1986), 4, 427-458
2. Denton SM (1996). Acute oral toxicity study in the rat: anhydrous boric acid. Final report. Report no.: 1341/7-1032.
3. National Toxicology Program (NTP) – Technical Report Series No. TR324, NIH Publication No. 88 2580 (1987), PB88 213475/XAB
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5. Heindel et al., Fund. Appl. Toxicol. (1992) 18, 266-277
6. Birge W J, Black J A, EPA-560/-76-008 (April 1977) PB 267 085
7. Scialli AR, Bonde JP, Brüske-Hohlfeld I, Culver D, Li Y, Sullivan FM; ELSEVIER 2009
8. Robbins WA, Xun L, Jia J, Kennedy N, Elashoff DA, Ping L. ;ELSEVIER 2009;(Reproductive Toxicology)
9. Hansveit and Oldersma, 2000; TNO Nutrition and Food Research Institute. Report No. V99.157.
10. Gersich, FM (1984a). Environ.Toxicol.Chem., 3 #1, 89-94 (1984)

11. Soucek et al., 2010. Illinois Natural History Survey, University of Illinois.

For general information on the toxicology of borates see ECETOC Technical Report No. 63 (1995); Patty's Industrial Hygiene and Toxicology, 4th Edition Vol. II, (1994) Chap. 42, 'Boron'.

16.4. Disclaimer of Liability

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