

MATERIAL SAFETY DATA SHEET [91/155/EEC]

Version V 1.10 dated 25.08.2004

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product No.: 9005

1.1. **BRANDNAME:** NYLON-MXD6

1.2 Use of the Substance/Preparation

Intermediate textile industry.

1.3 **Supplier:** MITSUBISHI GAS CHEMICAL COMPANY INC.

Address: 2-5-2 Marunouchi Chivoda-ku

Tokyo 100-8324

Phone-No.: +81-3-3283-4801

Telefax-No.: +81-3-3214-0938

Department for Information:

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MSDS-History: Version V 1.10 dated 25.08.2004

replaces Version V 1.00 dated 27.05.2004

2. INFORMATION ON COMPOSITION

Polymer of adipinic acid with 1,3-bis(aminomethyl)benzene.
[CAS: 25718-70-1]

[Grades S6001, S6007, S6011 and S6121]

2.1 The Product Contains the Following Relevant Components:

(1) not concerned

2.2 Characterization of Components listed in Section 2.1 [for Exposure Limits see Section 8.2]

CAS	EEC/ELINCS	Index No.	Warnings	R-Phrases
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(1)

2.3 CMT-Categorization of Components Listed in Section 2.1

EEC Category
Carc Muta RF RE EEC Guideline

(1)

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Information given herein is to the best of our knowledge and is only related to the product as delivered in order to give a complete review of safety aspects accurate as of the date indicated. All data given are never meant to guarantee product properties. It is the sole responsibility of the user to take all precautions required in handling the product.

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3. HAZARD IDENTIFICATION

When respecting the general instructions of good occupational hygiene the handling of the product does not imply a particular acute toxicological hazard. Product vapours in high concentration may irritate the respiratory system.

Finely divided solid. Dust explosion possible when mixed with air.

Dangerous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: "Stability-Reactivity").

The product presents no particular risk to the environment, provided the disposal requirements (see section 13) and national or local regulations are complied with.

4. FIRST AID MEASURES

4.1 General Instructions

General recommendations are not necessary.

4.2 In Case of Eye Contact

After separating the eyelids immediately flush eyes thoroughly with plenty of water for at least 15 minutes. Consult an oculist.

4.3 In Case of Skin Contact

Take off polluted clothing and shoes. Wash affected skin thoroughly and lasting with plenty of soap and water.

4.4 In Case of Ingestion

In case affected person is fully conscious, rinse out the mouth with plenty of water. In case inconvenience persists, seek medical aid.

4.5 In Case of Inhalation

Immediately guide affected person from dangerous area to fresh air. In case inconvenience persists, seek medical aid.

4.6 Notes to the Physician

There is no specific information available about the product. Treat affected person according to symptoms developing.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

carbon dioxide, powder and foam extinguisher, water spray.

Not to be Used for Safety Reasons:

water jet.

Specific Exposure Hazards Arising from the Substance or its Combustion Products:

The product is combustible. Formation of carbon monoxide, carbon dioxide and nitrogen oxides during the combustion of the product. During the thermal decomposition/combustion of the product toxic and flammable vapours/gases are released. Risk of dust explosion.

Specific Protective Equipment and Measures Required for Fire-Fighting:

Cool containers exposed to the fire with water spray. In case of a fire wear a self-containing breathing apparatus and OSHA/MSHA-approved clothing. Collect contaminated extinguishing-water if any possible and dispose off (see also section 13).

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6. ACCIDENTAL RELEASE MEASURES

Wear protective clothing (see section 8.3). Evacuate contaminated area. Close all drains. Exhaust product dusts. Remove all sources of ignition. Do not breathe product dusts. In case of a large spillage, contain the spillage by bunding. Avoiding any dust formation take up spilled solid by mechanical means into labelled and resistant containers. Finally dispose off product as pointed out in section 13. Thoroughly wash ground using plenty of water.

7. HANDLING AND STORAGE

7.1 Handling

Use product only in well ventilated areas/workplaces. Exhaust effectively vapours released during the thermal treatment of the product directly at the origin of formation. If possible, exhaust product dusts released. Never mix product with incompatible substances (see section 10). Comply with the instructions for use (refer to technical sheet). Provide eyewash fountains at the working place.

7.2 Storage

Store product only in tightly closed original containers in a cool and dry well-ventilated area. Take all precautionary storage measures to avoid effectively any contamination of drains or water circuits in case of an accidental spill of the product. Do not store product close to incompatible substances (see section 10). Avoid any dust formation during refilling processes and do not breathe product dusts.

7.3 Specific Uses

no data available - refer to technical data sheet.

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8. EXPOSURE CONTROL AND PERSONAL PROTECTIVE EQUIPMENT

8.1 Components with an Exposure Limitation

a) Exposure Limits Related to the Product

Origin	ml/m ³	mg/m ³	Cat.	Refer to	Notes	Name
-						
-						

b) Exposure Limits of Components as Listed in Section 2.1

CAS	Origin	ml/m ³	mg/m ³	Cat.	Refer to	Notes
(1)						

8.2 Environmental Exposure Controls

no data available.

8.3 Personal Hygiene and Personal Protective Equipment

Respect the general regulations of industrial working hygiene as stated by the responsible professional association. Do not breathe product dusts. Do not rub your eyes with dirty hands. Take off polluted clothing and thoroughly clean before reuse. Separate work clothing from casual dress.

Respiratory: Respiratory protective device EN 3181 with combined filter and cartridge A2-P2 in case of insufficient ventilation.
Respect the national time-limitations for the use of respiratory protective devices.

Eye: protective goggles with side-protection.

Hand: impervious gloves [protection index 6, > 480 min breakthrough time according to EN 374] type of glove material: e.g.: butyl rubber, viton, nitrilo rubber

Body: working clothes.

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9. PHYSICAL AND CHEMICAL PROPERTIES

State: at 20 °C: solid (Pellets) **Colour:** varicoloured **Odour:** characteristic

9.1 Change in Physical State

Point of Decomposition 310 °C
°C
°C

9.2 Density (25 °C) 1.2 - 1.23 g/cm³
(°C) g/cm³

Bulk Density (20 °C) 600 - 800 kg/m³

9.3 Vapour Pressure (20 °C) neglectable hPa
(°C) hPa

9.4 Viscosity (25 °C) not applicable
(°C)

9.5 Water Solubility (25 °C) insoluble g/l

Fat Solubility partly soluble in the commonly used organic solvents

9.6 pH-Value (20 °C) not applicable (at g/l H₂O)

9.7 Flashpoint 331 °C

9.8 Autoflammability 385 °C

9.9 Exposure Limits lower: - upper: - no data available

The product is a non-oxidizing material according to the actual EEC criteria.

9.10 Partition Coefficient n-Octanol/Water [log Pow]: no data available

9.11 Further Data

10. STABILITY AND REACTIVITY

Conditions to Avoid:

The product is stable at ambient temperatures and if used according to given applications.

Products to Avoid:

strong oxidizers (reaction).

strong acids (reaction).

Hazardous Decomposition Products:

Formation of carbon monoxide, carbon dioxide and nitrogen oxides during the combustion of the product. During the thermal decomposition of the product toxic and flammable vapours/gases are released.

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11. TOXICOLOGICAL INFORMATION

LD(50)oral/rat: 5000 mg/kg

When respecting the general instructions of good occupational hygiene the handling of the product does not imply a particular acute toxicological hazard. Product vapours in high concentration may irritate the respiratory system. [Lit 1]

Fumes deriving from product processing cause irritation to certain sensitive individuals and aggravate preexisting lung disorders [Lit 1].

12. ECOLOGICAL INFORMATION

No data is available about the ecotoxicological impact of the product. Due to its almost insolubility in water a toxic effect of the product on aquatic organisms is very unlikely to occur. [Lit 1]

Do not release the product in the environment. Decant and purify polluted waste water before its release into the drains.

13. DISPOSAL CONSIDERATIONS

Dispose product or product residues in conformity with existing official local guidelines, for example recycling based on legally specified material reutilization or incinerate at an authorised chemical incinerator (equipped with an afterburner and a scrubber). Separate the different packaging materials and dispose of separately.

Since beginning of 1999 the Waste-Catalogue of the European Community is in force. As it is designed process-specific, different waste keys may apply to one specific chemical. A unique classification of a specific chemical by the producer is therefore not possible.

[Recommendations]:

EEC Waste Code: 07 02 13 waste plastic

EEC Waste Code:

EEC Waste Code:

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14. TRANSPORT INFORMATION

Das vorliegende Produkt unterliegt nicht den Vorschriften über den Transport gefährlicher Güter.

14.1 Transport Regulations Road

UN-No.: -	RID/ADR: -	Pack-Group:
Danger-Code:	Label:	Limited. Quantity: Begrenzte Menge
Shipping Name: not restricted		
Hazard caused by:		

14.2 Transport Regulations Sea

UN-No.: -	IMO/IMDG-Class: -	Limited Quantity: Begrenzte Menge
EMS-No.: -	MFAG-No.: -	MarPol: - ADNR: -/-
Pack-Group: -	Label: -	
Shipping Name: not restricted		
Hazard caused by:		

14.3 Transport Regulations Air

UN-No.: -	ICAO/IATA-Class: -	Limited. Quantity:
Label: -		Pack-Group: -
Passenger Aircraft/Quantity: -	Cargo Aircraft/Quantity: -	
Shipping Name: not restricted		
Hazard caused by:		

15.1 REGULATORY INFORMATION

Warning Sign(s):

The product described is not concerned by the relevant EEC-Guidelines (67/548 EEC for substances and 1999/45/EEC for chemical preparations) in their actual versions at the date of safety data sheet preparation.

R-Phrase(s) none

S-Phrase(s): none

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Product Classification

Water-Hazard Classification: not yet classified.

Polymers are by definition not listed in the EINECS inventory. The monomers corresponding to the polymers are listed in the EINECS inventory.

ADDITIONAL INFORMATION

16.1 References

[Lit 1]: Unpublished producer results.

16.2 The following Sections of the MSDS compared to Version dated 27.05.2004 has been revised:

The following sections of the safety data sheet have been revised: Section 2 Update of Grades.

16.3 R Phrases Referring to Headings 2 and 3 :

not concerned.