

SAFETY DATA SHEET

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

- | | |
|--|--|
| 1.1 Product identifier | PRODUCT NAME: UBE NYLON 6434T1
Chemical name: Polyamide 6/66/12 |
| 1.2 Relevant identified uses of the substance or mixture and uses advised against | Identified uses: Extrusion, Injection etc.
Uses advised against: MEDICAL APPLICATIONS such as any implantation in the human body or any contact with internal body fluids/tissues are PROHIBITED, since compliance with medical regulations is not assured. |
| 1.3 Details of the supplier of the safety data sheet | Supplier:
Company name: UBE Engineering Plastics, S.A.
Address: Polígono El Serrallo s/n 12100 Grao de Castellón (Spain)
Tel: +34 964 73 80 00
Commercial office:
Company name: UBE Engineering Plastics SA
Address: Immermannstrasse 65B D-40210 Dusseldorf (Germany)
Tel: +49 211 178 83 28 |
| 1.4 Emergency telephone number | +44 12 35 23 96 70 (24 hours everyday) |

Section 2: Hazards identification

2.1 Classification of the substance or mixture

- | | |
|--|---|
| <i>Classification according to Regulation (EC) No. 1272/2008</i> | This product does not meet the criteria for classification in any hazard class. |
| <i>Classification according to Directive 1999/45/EC</i> | This product does not meet the criteria for classification in any hazard class. |

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008

- | | |
|--------------------------|-------|
| Hazard pictograms | None |
| Signal words | None |
| Hazard statements | None |
| Precautionary statements | |
| prevention | |
| response | |
| storage | |
| disposal | |
| Supplemental | None. |

information

*Labelling according to
Directive 1999/45/EC*

Symbols	None
Symbol letters	None
R phrases	None
S phrases	None
2.3 Other hazards	None.
2.4 The main symptoms and emergency summary after exposure	Not found

Section 3: Composition/information on ingredients

3.1 Composition of Mixture

<i>Declarable components</i>	<i>Conc. (wt%)</i>	<i>REACH Registration No.</i>	<i>EC No.</i>	<i>CAS No.</i>
Polyamide 6/66/12	> 99	Non classified constituent	Not applicable (Polymer)	40959-29-3
others	< 1			

3.2 Information of hazardous ingredients

<i>Components Name</i>	Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting.
<i>Classification according to Regulation (EC) No. 1272/2008</i>	Not applicable
<i>Classification according to Directive 67/548/EEC</i>	Not applicable

Section 4: First aid measures

4.1 Description of first aid measures

Inhalation	If exposed to vapours from heating and molding material, remove to fresh air. If symptoms, coughing and discomfort in nose and throat remain, get medical attention.
Skin	Wash material off skin with plenty of water and soap. If redness, itching or burning sensation develops, get medical attention. If molten polymer contacts skin, cool immediately with cold and clean water. Do not attempt to peel the solidified polymer from skin, and get medical attention for thermal burn.
Eye	Immediately flush with plenty of clean water for at least 15 minutes.

	If redness, itching or burning sensation develops, do not rub eyes and immediately get medical attention.
Ingestion	If swallowed, wash out mouth thoroughly and give water to drink. Seek immediate medical attention. Speed is essential. Do not induce vomiting, unless instructed by medical personnel.
4.2 Most important symptoms and effects, both acute and delayed	Expected to cause burns to skin. Irreversible dermatitis will occur if you do not wash affected skin immediately and thoroughly.
4.3 Indication of any immediate medical attention and special treatment needed	Not available

Section 5: Firefighting measures

5.1 Extinguishing media	
Suitable	Water, dry chemical and carbon dioxide
Unsuitable	None.
5.2 Special hazards arising from the substance or mixture	May produce harmful gasses, primary CO, CO2 and small amount of HCN and NH3.
5.3 Advice for firefighters	Remove containers from fire or cool them with water spray. Firefighters should wear an approved self-contained breathing apparatus and full protective clothing.
5.4 Special protective device to protect the fire fighters.	Put protective equipment such as self-contained breathing apparatus and firefighter suit etc.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	For large-scale spills, ensure full personal protection is worn (see Section 8). Stop leak if possible without personal risk.
6.2 Environmental precautions	Prevent from contaminating soil and/or from entering, sewage, drainage systems and/or bodies of water.
6.3 Methods and material for containment and cleaning up	Sweep up to prevent slipping on polymer pellets and collect into suitable containers for disposal.
6.4 Reference to other sections	For recommended personal protective equipment, see Section 8. For disposal considerations, see Section 13.
6.5 Precautions measures to prevent secondary hazards	Remove combustible materials and ensure adequate ventilation.

Section 7: Handling and storage

- | | |
|---|--|
| 7.1 Precautions for safe handling | At molding process, avoid inhalation of vapours from machine and contacting with molten polymer. Reinforcing material and polymer dust may cause irritation and redness of skin and eye.
After handling, wash with soap and plenty of clean water.
Not to eat, drink and smoke in work areas.
Remove contaminated clothing and protective equipment before entering eating areas. |
| 7.2 Conditions for safe storage, including any incompatibilities | In case of pellet, transfer of polymer pellets will produce static electricity. This should be reduced or eliminated as much as possible since they provide a source of ignition for flammable vapour or gasses that may be present in an industrial area or can shock operators. |
| 7.3 Specific end use(s) | No additional information available. |

Section 8: Exposure controls/personal protection

8.1 Control parameters

EU limit values	Not available.
US limit values	As particulates not otherwise regulated (Polyamide 6/66/12): OSHA 15 mg/m ³ (TWA); total dust 5 mg/m ³ (TWA); respirable dust
Other: human health (DNELs, DMELs)	Not available.
Other: environmental (PNEC)	Not available.

8.2 Exposure controls

Engineering controls	Adequate ventilation should be maintained at handling. Additionally, local exhaust ventilation recommended at molding process.
Personal protective equipment	Respiratory: Unnecessary under normal processing. Hand protection: At treating hot polymer or molding process, heat-resistant leather gloves should be required.. Eye protection: Safety goggles should be worn. At treating hot polymer or molding, face shield should be recommended. Skin protection: Safety shoes or boots. Chemical resistant clothes
Environmental exposure controls	Do not empty into drains or the aquatic environment.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	White pellets
Odour	Slight Odour
Odour threshold	Not applicable.

pH	Not applicable.
Melting/freezing point	Not tested.
Initial boiling point/range	Not tested.
Flash point	Not tested.
Evaporation rate	Not applicable for solid.
Flammability (solid, gas)	Not tested.
Flamm. or expl. limits	Not applicable for solid.
Vapour pressure	Not applicable for solid.
Vapour density	Not applicable for solid.
Relative density	Not tested.
Solubilities	Water solubility: Negligible
Partition coeff. (K_{ow})	Not applicable.
Auto-ignition temp.	Not tested.
Decomposition temp.	Not tested.
Viscosity	Not applicable for solid.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2 Other information	Not available

Section 10: Stability and reactivity

10.1 Reactivity	No additional information available.
10.2 Chemical stability	Stable under recommended storage and handling conditions.
10.3 Possibility of hazardous reactions	No additional information available.
10.4 Conditions to avoid	Avoid heat, flames, sparks and other sources of ignition and high temperature.
10.5 Incompatible materials	Strong acids, bases and oxidizing agents
10.6 Hazardous decomposition products	Primary CO, CO ₂ and small amount of HCN, NH ₃

Section 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity	Not classified (Lack of data)
Skin corrosion/irritation	Not classified (Lack of data)
Serious eye damage/irritation	Not classified (Lack of data)
Respiratory or skin sensitisation	Not classified (Lack of data)
Germ cell mutagenicity	Not classified (Lack of data)

Carcinogenicity	Not classified (Lack of data)
Reproductive toxicity	Not classified (Lack of data)
STOT-single exposure	Not classified (Lack of data)
STOT-repeated exposure	Not classified (Lack of data)
Aspiration hazard	Not classified (Lack of data)

Section 12: Ecological information

12.1 Toxicity	No additional information available
12.2 Persistence and degradability	No additional information available
12.3 Bioaccumulative potential	No additional information available
12.4 Mobility in soil	No additional information available
12.5 Results of PBT and vPvB assessment	No additional information available
12.6 Other adverse effects	No additional information available

Section 13: Disposal considerations

13.1 Waste treatment methods	<p>Disposal must be in accordance with current national and local regulations. Chemical residues generally count as special waste. General EU requirements are given in Directive 2008/98/EC.</p> <p>Packaging may contain residues of the product and should be treated accordingly. Do not dump this material into sewers, on the ground, or into any body of water.</p>
-------------------------------------	--

Section 14: Transport information

14.1 UN Number	The mixture is not classified.
14.2 UN proper shipping name	The mixture is not classified.
14.3 Transport hazard class(es)	The mixture is not classified.
14.4 Packing group	The mixture is not classified.
14.5 Environmental hazards	Not classified as environmentally hazardous.
14.6 Special precautions for user	No dangerous good in sense of transport regulations.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	EU Directive 67/548/EEC (Dangerous Substances Directive), and 1999/45/EC (Dangerous Preparations Directive) with amendments. This product (mixture) does not legally require an SDS based on Regulation 1907/2006 (REACH). The SDS format, however, is utilized to supply information required according to Article 32 of REACH. Personal protective equipment (PPE): 89/686/EEC. European occupational exposure limits: 2000/39/EC. Protection of health and safety of workers: 98/24/EC.
15.2 Chemical safety assessment	Not done.

Section 16: Other information

Revision,	Rev2; Section 1: Update emergency phone number.
References	Annex VI of Regulation 1272/2008 on <i>Harmonised Classification and Labelling for Certain Hazardous Substances</i> . Existing Chemical Substances Information System (ESIS) available at the European Chemical Bureau website: http://esis.jrc.ec.europa.eu/ Supplier safety data sheets. EU Indicative Occupational Exposure Limit Values (IOELVs): Directives 2000/39/EC, 2006/15/EC and 2009/161/EU.
Basis of classification	The mixture is self-classified on the basis of available information on the ingredients.
Training advice	Not necessary

Disclaimer:

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of UBE INDUSTRIES, LTD. The data on this sheet related only the specific material designated herein. UBE INDUSTRIES, LTD. assumes no legal responsibility for use or reliance upon these data.