
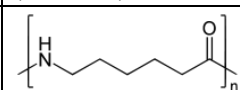


SAFETY DATA SHEET		PR/EHD/OH/F-310	 بترو رابغ Petro Rabigh
PRODUCT NAME : POLYAMIDE 6			
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier	
Product Name:	Polyamide 6
Other/Generic Names:	PA 6, Nylon 6, Polycaprolactam, Poly[imino(1-oxo-1,6-hexanediy)]
Grades:	S2700, S3200 P27Z, F32
REACH Registration Number:	Not applicable
EC Number:	Not available
CAS Number:	25038-54-4
Molecular formula:	(C ₆ H ₁₁ NO) _n
Molecular Structure (typical):	
Molecular weight range:	No applicable

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

IDENTIFIED USES:	Final product
MOST COMMON TECHNICAL FUNCTION OF SUBSTANCE (WHAT IT DOES):	No data is available
USES BY CONSUMERS ADVISED AGAINST	No data is available

1.3 Details of the supplier of the safety data sheet


Supplier	Rabigh Refining and Petrochemical Company		
Address	PLANT PO Box 101, Rabigh 21911, Kingdom of Saudi Arabia Tel: +966 12 425 0390 Free Number : 800 440 9000		
e-mail address of person responsible for this SDS	moustafa.awad@petrorabigh.com mohamed.khashab@petrorabigh.com		

Emergency telephone numbers (24-hour)	Asia Pacific (except China):	CareChem 24 +65 3158 1074	English, Cantonese, Indonesian, Japanese, Korean, Malay, Mandarin, Thai, Vietnamese
	China (Off-land)	CareChem 24 +86 512 8090 3042	English, Mandarin
	US, Canada Outside above area	ChemTrec 1-800-424-9300 +703-527-3887	English
	Europe, America, Middle East, Africa (Europe & English Speaking):	CareChem 24 +44 (0) 1235 239 670	English, Albanian, Bulgarian, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serb-Croat, Slovak, Spanish, Swedish, Turkish, Ukrainian
	Middle East & Africa (Arabic speaking):	CareChem 24 +44 (0) 1235 239 671	English, Arabic, French

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Product Definition:	Polyamide 6
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]:	Not classified. Under normal conditions of use, the material is not expected to create unusual emergency hazards.

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Classification according to Directive 67/548/EEC [DSD]:	Not Classified
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2.2 Label elements

Hazard pictograms (Labelling according Regulation (EC) No 1272/2008):	Not applicable
Signal word:	Not applicable
Hazard statements:	Not applicable
Precautionary statements	
Prevention:	Not applicable
Response:	Not applicable
Storage:	Not applicable
Disposal:	Not applicable
Supplemental label elements:	Not applicable
Special packaging requirements	
Containers to be fitted with child-resistant fastenings:	Not applicable
Tactile warning of danger:	Not applicable

2.3 Other hazards

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII:	Not applicable
Substance meets the criteria for vpvB according to Regulation (EC) No. 1907/2006, Annex XIII:	Not applicable
Other hazards which do not result in classification:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Classification of the substance or mixture

Substance/mixture			Polyamide 6		
Product/ingredient name	Identifiers	%	Classification		
			Directive 1999/45/EC	Regulation (EC) No. 1272/2008 [CLP/GHS]	Type
Polyamide 6	EC: Not available CAS: 25038-54-4 Index: Not available	100%	Not classified	Not classified	[A]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.


Type

[A] Constituent; [B] Impurity;; [C] Stabilizing additive; Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	Dust may cause mechanical irritation of the eyes. Burns may occur if contact with molten materials and require hospital treatment. Wash thoroughly with running water.
Inhalation	Not expected to require first aid measures. Inhalation of dust may irritate the upper respiratory system,
Skin contact	Dust may cause mechanical irritation of the skin. Burns may occur if contact with molten material and require hospital attention. .
Ingestion	Not expected to require first aid measures. If large amounts were swallowed, give water to drink and get medical attention.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.


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4.2 Most important symptoms and effects, both acute and delayed	
Potential acute health effects	
Eye contact	No information available
Inhalation	No information available
Skin contact	Skin absorption may cause effects similar to those described for inhalation.
Ingestion	Not expected to require first aid measures. If large amounts were swallowed, give water to drink and get medical attention.
Over-exposure signs/symptoms	
Eye contact	No specific information available
Inhalation	No specific information available
Skin contact	No specific information available
Ingestion	No specific information available
4.3 Indication of any immediate medical attention and special treatment needed	
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if eyes were exposed to large quantities or large quantities have been ingested or inhaled.
Specific treatments	No specific information

SECTION 5: Firefighting measures	
5.1 Extinguishing media	
Suitable extinguishing media	Suitable for surroundings; water, alcohol-resistant foam, dry chemical or carbon dioxide (CO ₂).
Unsuitable extinguishing media	No information available
5.2 Special hazards arising from the substance of mixture	
Hazards from the substance or mixture	Burning of the material can give off toxic gases, carbon monoxide, in addition to small quantities of hydrogen cyanide. Formation of further fission and oxidation products depends upon the fire conditions.
Hazardous thermal decomposition products	Decomposition products at and above 300C can consist of nitrogen oxides, carbon monoxide, carbon dioxide and hydrogen cyanide. Formation of further fission and oxidation products depends upon the temperature.
5.3 Advice for firefighters	
Special protective actions for fire-fighting	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Specific protective equipment for fire-fighting	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measure	
6.1 Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	Dust, and granular can be slippery, cause landslides and risk of falls
For emergency responders	Sweep and shovel up to avoid slipping.
6.2 Environmental precautions	
	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
6.3 Methods and materials for containment and cleaning up	
Small spill	Sweep and shovel up to avoid slipping.
Large spill	Sweep and shovel up to avoid slipping. Collect the material and place in clean dry and labeled containers.
6.4 Reference to other sections	
	None

SECTION 7: Handling and storage	
<i>The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1</i>	

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should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling	
Protective measures	Use appropriate personal protective equipment (see Section 8). Do not breathe dust, and avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse containers. All containers shall be properly labeled.
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.;
7.2 Conditions for safe storage, including any incompatibilities	
	Store in accordance with local regulations. Store in original containers at room temperature Use appropriate containment to avoid environmental contamination.
7.3 Specific end use(s)	
Recommendations	AVOID EXPOSURE OF (PREGNANT) WOMEN! Ventilate by appropriate method. (See "8. Exposure control/personal protection"). Install appropriate equipment and wear appropriate protective clothing. (See "8. Exposure control/personal protection") Use personal protective equipment as required. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands and face thoroughly after handling. Eating, drinking and smoking in work areas is prohibited. Contaminated work clothing should not be allowed out of the workplace.
Industrial sector specific solutions	No specific information is available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).


8.1 Control parameters				
<u>Occupational exposure limits</u>				
Product/ingredient name	Exposure limit values			
Substance	Form	TWA	STEL	Reference
Polyamide 6	Dust, mist (inhalable)	10 mg/m ³	-	OSHA, ACGIH
	Dust, mist (respirable)	3 mg/m ³	-	OSHA, ACGIH

Recommended monitoring procedures
If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Derived No Effect Levels (DNEL): No information available

Predicted No Effect Concentrations (PNEC): No information available

8.2 Exposure controls	
Appropriate engineering controls	During thermal processing and/or if operations generate dust or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
<u>Individual protection measures</u>	
Hygiene measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mist, gases or dusts. Recommended: safety glasses with side-shields particularly when handling hot melts
Skin protection Hand protection:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times

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	when handling chemical products if a risk assessment indicates this are necessary.
Body protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by specialists before handling this product.
Other skin protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved before handling this product. This is only advisory and must be evaluated on a case-to- case basis by specialists.
Respiratory protection:	In case of dust generation or handling melts, use properly fitted, air-purifying or air-fed respirators complying with an approved standard if a risk assessment indicates this is necessary or as backup to engineering controls. 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.
Environmental exposure controls:	In the case of dust emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state:	Solid under normal conditions;
Color:	Various, depending on the shade; generally white when raw (glossy/semimatt/matt)
Odor:	odorless
Odor threshold :	Not applicable
pH:	Not applicable
Melting point/freezing point range:	170 – 260 °C
Boiling point:	No data available
Flash ignition temperature:	420 °C
Evaporation rate (Butyl acetate=1.0):	Not applicable
Flammability (solid, gas):	
Burning time:	No data available
Burning rate:	No data available
Upper/lower flammability or explosive limits:	Lower: 70 – 100 g/m ³ Upper: No data available
Explosion group;	Dust, Group G (USA) or IIIB (EU 60079)
Vapor Pressure:	No data available
Vapor Specific Gravity (Air=1):	No data available
Density:	1.14 g/cm ³ (at 20 °C)
Bulk density	>400 kg/m ³
Solubility(ies):	Insoluble in water.
Partition coefficient; n-octane/water:	Not applicable
Ignition temperature:	>400 °C (ASTM D 1929; mean particle size 20 µm) 513 °C (dust cloud) >200 °C (dust layer)
Decomposition temperature range:	310 – 420 °C
Viscosity:	Not applicable
Explosive properties:	No data available
Oxidizing properties:	No data available

9.2 Other information

None

SECTION 10: Stability and reactivity


10.1 Reactivity

No specific test data related to reactivity available for this product.

10.2 Chemical stability

The product is stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

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Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Keep away from heat and flame.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, phenol and cresol.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute and chronic Toxicity: The material is not harmful if it is properly handled and processed according to the given recommendations.

SECTION 12: Ecological information

12.1 Toxicity

Acute Toxicity:

Conclusion/summary: Not available

12.2 Persistence and degradability

Conclusion/summary: Not biologically degradable

12.3 Bioaccumulative potential

Conclusion/summary: Bioaccumulation is unlikely

12.4 Mobility in soil

Conclusion/summary: Not likely

12.5 Results of PBT and vPvB assessment

Not considered either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative at levels of 0.1% or higher

12.6 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Hazardous waste: The classification of the product does not meet the criteria for a hazardous waste.


Packaging

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

SECTION 14: Transport information

The product is not regulated for transportation.		ADR/RID	ADN/ADNR	IMDG	IATA
14.1	UN number	None	None	None	None
14.2	UN proper shipping name	None	-	-	-

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14.3	Transport hazard class(es)	None	None	None	None
14.4	Packing group	None	None	None	None
14.5	Environmental hazards	None	None	None	None
14.6	Special precautions for user	Not available.	Not available.	Not available.	Not available.
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	None	None	None	None

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Substances of very high concern

No data available

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

No data available

Other EU regulations

Europe inventory:	All components are not listed and exempted.
Black List Chemicals:	Not listed
Priority List Chemicals:	No data available
Integrated pollution prevention and control list (IPPC) - Air:	According to TA Luft 2002 of Germany: Mass flow: 0.2 kg/hour or Mass concentration: 20 mg/m ³ If mass flow < 0.2 kg/m ³ , then mass concentration ≤ 150 mg/m ³
Integrated pollution prevention and control list (IPPC) - Water:	No data available

International regulations

Chemical Weapons Convention List Schedule I Chemical:	Not listed
Chemical Weapons Convention List Schedule II Chemicals:	Not listed
Chemical Weapons Convention List Schedule III Chemicals:	Not listed

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms: None

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified	-
Not classified	-
Not classified	-

Full text of abbreviated R phrases	None
Full text of classifications[DSD/DPD]	None
Version	1.3
Date of issue/ Date of revision	05/02/2018
Date of previous issue	10/02/2017

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