42-5, Sinjang 6-gil, jangchenon-myeon,Gumi-si

KYUNG SANG BUK-DO, KOREA

TEL: 054-472-0431 FAX: 054-472-0432

MATERIAL SAFETY DATA SHEET

PBT RESIN

GRADE: PBT PT1000

1. IDENTIFICATION

PRODCUT NAME	PBT PT1000
PRODUCT DISCRIPTION	PBT(POLYBUTYLENE TEREPHTHALATE)
IPRODUCT USAGE	MAY BE USED TO PRODUCE MOLDED OR EXTRUDED ARTICLES OR AS A COMPONENTS OF OTHER INDUSTRIAL PRODUCTS.
MANUFACTURER' S NAME	POLYMERTECH CO., LTD.
MANUFACTURER INFORMATION	42-5, Sinjang 6-gil, jangchenon-myeon,Gumi-si, KYUNG SANG BUK-DO, KOREA TEL : 054-472-0431 FAX : 054-472-0432

2. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	%
PBT(POLY(1,4-BUTYLENE TEREPHTHALATE)	26062-94-2	100
OTHERS(ADDITIVES)		0~3

3. HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4) : HEALTH=1 FIRE=1 REACTIVITY=0

EC CLASSIFICATION (CALCULATED) : No classification assigned.

EMERGENCY OVERVIEWS :

Solid pellets with slight or no odor. Spilled pellets create slipping hazard.

Can burn in a fire creating dense toxic smoke. Molten plastic can cause severe thermal burns.

Fumes produced during melt processing may cause eye, skin and respiratory tract irritation.

Secondary operations, such as grinding, sanding or sawing, can producs dust which may present an explosion or respiratory hazard.

POTENTIAL HEALTH EFFECTS :

EYE :	Product may cause irritation or injury due to mechanical action.
SKIN :	Pellets not likely to cause skin irritation.
INGESTIO :	Not acutely toxic.
INHALATIO:	Pellet inhalation unlikely due to physical form.
CHRONIC / CARCINOGENICITY :	
NTP :	Not Tested
OSHA :	Not Regulate
IARC :	Not Listed



4. FIRST AID MEASURES

MEDICAL RESTRICTIONS	
	Remove contract lenses at once. Immediately flush eyes well with copious
EYE	quantities of water or normal saline for at least 15-20 minutes. If irritation
	persists, seek medical attention.
SKIN	seek medical attention if rash or burn occurs.
INGESTIO	Not probable. If a large amount is swallowed, seek medical attention.
INHALATIO	Not Likely to be inhaled due to physical form.
MELT PROCESSING	

For molten plastic skin contact, cool rapidly flush water and immediately seek medical attention. Do not attempt removal of plastic without medical assistance. Do not use solvent for removal.

For processing fume inhalation irritation, leave contaminated area and breathe fresh air. If coughing, difficult breathing or any other symptoms develop seek medical attention at once, even if symptoms develop at a later time.

For skin contact with fume comdiesate, immediately eash thoroughly with soap and water. If irritation develops seek medical attention.

5. FIRE FIGHTING MEASURES

FIRE FIGHTING :

Approved pressure demand breathing apparatus and pritective clothing should be used for all fires. Water spray is the preferred extinguishing medium. This product will melt but will not be carried on the surface for water.

EXTINGUISHING MEDIA :

Water spray and foam, Water is the best extinguishing medium. Carbon dioxide and dry chemical are not generally recommended because their lack of cooling capacity may permit re-ignition. HAZARDOUS COMBUSTION PRODUCTS :

Hazardous combustion products may include intense heat, dense black smoke, carbon monoxide, carbon dioxide, oxides of phosphorus, hydrogen xyanide, hydrocarbon fragments, hydrogen

fluoride, carbonyi fluoride	fluoride, carbonyi fluoride and fluorocarbon fragments.	
FLASH POINT	Not Applicable	
LOWER FLAMMABLE LIMIT	Not Established	
UPPER FLAMMABLE LIMIT	Not Established	
AUTOIGNITION	Not Established	
CONDITIONS OF FLAMMABIL	Requires a continuous flame source to ignite and sustain combustion.	
EXPLOSION DATA		
IMPACT SENSITIVITY	Not sensitive to mechanical impact.	
STATIC DISCHARGE	Not sensitive to static discharge. (See Section 7)	

6. ACCIDENTAL RELEASE MEASURES

GENERAL :

Sweep or gather up material and place in preper container for disposal or recovery. (See Section 13)

7. HANDLING AND STORAGE

HANDLING :

Follow recommendations on label and in processing guide. Prevent contact with skin and eyes. Use good industrial hygiene proctices. Provide adequnte ventilation. Secondary operations such as grinding, sanding or sawing may produce a dust explosion hazard. Use aggressive housekeeping activities to prevent dust accumulation; employ bonding, grounding, venting and explosion relief provisions in accordance with accepted engineering practices.

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STORAGE :
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Store in a dry place away from moisture, excessive heat and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS :

A continuous supply of fresh air to the workplace together with removal of processing fumes through exhaust systems is recommended. Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, duct work amd othwr suricaces using appropriate personal protection. For piwders and residual dusts refer to Section 7. PERSONAL PROTECTION :

EYE/FACE	Wear safety glasses with side shields or chemical goggles. In addition, use	
	full face shield when cleanning processing fume condensates from hoods,	
	ducts and other surfaces.	
RESPIRATORY	When handling fumes are not adequstely controlled, use respirator approved	
	for protection from organic vapors and acid gases. When dust or powder	
	from secondary operations, such as grinding, sanding or sawing, are not	
	adequately controlled use respirator approved for protection from dust.	

9. PHYSICAL AND CHEMICAL PROPERTIES		
PHYSICAL STATE	Solid	
COLOR AND APPEARAN	Plastic pellet with slight odor	
BOILING POINT	Not Applicable	
MELTING POINT (℃)	200~ 230	
VAPOR PRESSURE (mm)	Negligible	
VAPOR DENSITY (Air=1)	Not Applicable	
SPECIFIC GRAVITY	1.31 ~ 1.44(water = 1)	
WATER SOLUBILITY	Insoluble	
SOLVENT SOLUBILITY	Slightly soluble in strong polar slovent or chlorinated solvents	
% VOLATITLES	Negligible	
Ph	Not Applicable	
ODOR THRESHOLD	Not Established	
EVAPORATION RATE	Negligible	
COEFFICIENT WATER / OIL DISTRIBUTIO: Not Established		
COMMENT	This product does not exhibit a sharp melting point, but	
	softens gradually over a wide temperature range.	

10. STABILITY AND REACTIVITY

STABILITY	Stable under recommended conditions of Section 7
IRFACTIVITY I	Not reactive under recommended conditions of handling, storage, processing and use.
CONDITIONS TO AVOID	
Do not exceed melt temperatu	re recommendations in product literature
In order to avoid autolgnitic should	on/hazardous decomposition of hot thick meases of plastic, purgings
be collected in small, flat	shapes or thin strands to allow for rapid cooling and quenching in water.
Do not allow product to rema	in in barrel at elevated temperatures for extended periods of time
HAZARDOUS DECOMPOSITION :	
Major decomposition gases are	e oxidized hydrocarbons (probably carbon monoxide) and steam.
Minor components in decomposition gas may be aldehyde, phenolic compounds, etc.	

11. TOXICOLOGICAL INFORMATION

Not Available

12. ECOLOGICAL INFORMATION

Not expected to present any significant ecological problems.

13. DISPOSAL CONSIDERATIONS

RCRA HAZARDOUS WASTE :

Products is not a RCRA hazardous waste.

WASTE DISPOSAL :

Recycling is encouraged. Landfill or incinerate in accourdance with federal, state and local

requirements. Collected processing fume condensates and incinerator ash should be tested to

determine waste classification.

14. TRANSPORT INFORMATION

DOT HAZARD CLASS	Not Regulated
PROPER SHIPPING NAME	Not Regulated
IDENTIFICATION NUMBER	Not Listed
TDGA	Not Listed

15. REGULATORY INFORMATION

Listed below are chemical substances subject to supplier notification requirements.		
U.S. REQULATIONS :		
TSCA INVENTORY STATU	This product complies with the Chemical Substance Inventory	
	requirements of the US EPA TSCA.	
CERCLA SECTION 103 (40CFR302	: Not Listed	
SARA SECTION 313 (40CFR372.6	5 : Not Listed	
SARA HAZARD CATEGORIES, SARA	SECTIONS 311/312 (40CFR370.21)	
ACUTE	Not Listed	
CHRONIC	Not Listed	
FIRE	Not Listed	
REACTIVE	Not Listed	
SUDDEN RELEASE	Not Listed	
STATE REQULATIONS		
California Proposition 65 :	Not Listed	
EUROPEAN REGULATIONS		
EC NUMBER	Not assigned	

16. OTHER INFORMATION

The information submitted in this MSDS is based on our current knowledge and experience.

Because it is not possible to anticipate all conditions of use additional safety precautions may be

required, we make no warranty.

ABBREVIATIONS :	
ACGIH	American Conference of Governmental Industrial Hygienist
DOT	Department of Transportation
EC : E	uropean Communities
EPA	Environmental Protection Agency
IARC	International Agency for Research on Cancer
NOISH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
RTECS	Registry of Toxic Effects of Chemical Substances
CAS #	Chemical Abstracts Service Number
RCRA	Resource Conservation and Recovery Act

PBT RESINS