

Application

Washing MachinePparts(Tub), Automotive Parts, Housewares

Feature

SEETEC M1600 is a heterophasic polypropylene copolymer for injection molding applications. SEETEC M1600 exhibits a

Properties

Physical	Method	Condition	Unit	Value
Melt Index	ASTM D1238	230°C/2.16kg	g/10min	25
Density	ASTM D1505	-	g/cm ³	0.9

Mechanical	Method	Condition	Unit	Value
Tensile Strength at Yield	ASTM D638	50mm/min	kgf/cm ²	270
			MPa	0
			psi	0
Elongation at Break	ASTM D638	50mm/min	%	100
Flexural Modulus	ASTM D790	-	kgf/cm ²	12500
			MPa	0
			psi	0
IZOD Impact strength	ASTM D256	23°C	kg-cm/cm	7
			J/m	68.6
			ft-lb/in	1.3
Rockwell Hardness	ASTM D785	R-Scale	-	100

Thermal	Method	Condition	Unit	Value
Vicat Softening Point	ASTM D1525	1kgf	°C	152
Heat Deflection Temperature	ASTM D648	4.6kg/cm ²	°C	105
			°C	105
			°F	221

1) The listed values should be used for referential purpose only.

MATERIAL SAFETY DATA SHEET (SEETEC PP)

● SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<input checked="" type="checkbox"/> SUBSTANCE:	SEETEC M1600		
<input type="checkbox"/> MSDS NO:	LGCD-3043E		
<input type="checkbox"/> COMPANY IDENTIFICATION			
COMPANY:	LG Chem,LTD, Daesan Plant		
ADDRESS:	679 Daejuk-Ri, Daesan-Eup, Seosan-Si, Chungnam, Korea		
<input type="checkbox"/> PLANT:	PP(82-41-661-2622)		
<input type="checkbox"/> CREATION DATE:	01/01/2006	REVISION No.	0

● SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

<input type="checkbox"/> COMPONENT	POLYPROPYLENE
<input type="checkbox"/> TRADE NAMES/ SYNONYMS:	PP
<input type="checkbox"/> CHEMICAL FAMILY	Aliphatic compounds / Hydrocarbons / Polymer
<input type="checkbox"/> CAS NUMBER:	9010-79-1
<input type="checkbox"/> PERCENTAGE (%):	> 99

● SECTION 3 HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4)

HEALTH	FIRE	REACTIVITY
1	1	0

PHYSICAL AND CHEMICAL HAZARDS / FIRE AND EXPLOSION HAZARD

Material can form flammable mixtures or can burn only upon heating to temperatures at or above the flash point.

Flammable / toxic gases will form upon decomposition.

Toxic gases will form upon combustion.

Material in form of dust is subject to explosions.

Product can accumulate static charges which can cause an incendiary electrical discharge.

● SECTION 4 FIRST AID MEASURES

- **INHALATION:** In case of adverse exposure to vapours and/ or aerosoles formed at elevated temperatures, immediately remove the affected victim from exposure.
- **SKIN CONTACT:** First aid is normally not required. Exposure to molten resin may cause thermal burns.
- **EYE CONTACT / INGESTION:** First aid is normally not required.
Process vapors may irritate eyes.
Flush eyes with water for 15 minutes. Get medical attention.

● SECTION 5 FIRE FIGHTING MEASURES

- **FIRE FIGHTING PROCEDURES:**
Use water spray to cool fire exposed surfaces and to protect personnel.
Extinguish the fire by cooling with water spray.
- **SPECIAL FIRE PRECAUTIONS:**
Respiratory and eye protection required for fighting personnel.
- **HAZARDOUS COMBUSTION PRODUCTS:**
Carbon Monoxide(CO), carbon dioxide, and unidentified organic compounds

● SECTION 6 ACCIDENTAL RELEASE MEASURES

- **AFTER SILLAGE/LEAKAGE:**
Sweep, shovel, vacuum into container for disposal or reuse.

● SECTION 7 HANDLING AND STORAGE

- **PRECAUTIONS:**
Keep away from excessive heat and open flame.

● SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROL MEASURES

Local exhaust ventilation of process equipment may be needed to control aerosol exposures to below the recommended threshold exposure limit.

PERSONAL PROTECTION

Where contact may occur, wear safety glasses with side shields.

Where contact may occur with hot materials, wear thermal resistant gloves, arm protection and face shield.

Where processing this material. Adequate ventilation is required.

The use of local exhaust ventilation is recommended to control process emissions near the source.

Where overexposure by inhalation may occur and engineering, work practice or other means of exposure reduction are not adequate, approved respirators may be necessary.

● SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION:	These are indicative values only. Please refer also to the product specification sheet.
PHYSICAL STATE:	Solid (translucent to white pellets)
ODOR	Slight waxy odor
MOLECULAR WEIGHT	NOT available
BOILING POINT RANGE:	NOT available
FREEZING POINT:	NOT available
MELTING POINT	130 - 170°C
AUTOIGNITION TEMPERATURE	> 350 °C
FLASH POINT	> 340 °C
VAPOR PRESSURE	NOT available
SPECIFIC GRAVITY (water=1):	0.89 – 0.92
WATER SOLUBILITY:	Insoluble

● SECTION 10 STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION? No

CONDITIONS TO AVOID : Keep away from heat, sparks and flame.

POLYMERIZATION : Product will not undergo polymerization.

HAZARDOUS DECOMPOSITION PRODUCTS : At elevated temperatures the material will begin to decompose, producing fumes that can contain carbon dioxide, carbon monoxide,

ketones, acrolein, aldehydes,
unidentified organic compounds.

INCOMPATIBLE MATERIALS : Oxidizing materials.

● SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE:

INHALATION : Negligible hazard at ambient temperature(-18 to 38 °C)
Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

SKIN CONTACT: Negligible hazard at ambient temperature(-18 to 38 °C)
Particulates may scratch eye surfaces/ cause mechanical irritation.

INGESTION : Minimal toxicity

CHRONIC:

None known

● SECTION 12 DISPOSAL CONSIDERATIONS

The following advice only applies to the product as supplied.
Combination with other materials may well indicate another route of disposal.
Care should in any case be taken to ensure compliance with EC, national and local regulations.
Suitable routes of disposal of this product are incineration in appropriate incinerators with energy recovery, disposal in landfills or appropriate recycling methods.

● SECTION 13 TRANSPORT INFORMATION

LAND (railroad/road, such as RID/ADR)

ADR/RID CLASS. ITEM : None

DANGER NUMBER :

DANGER LABEL :

Max. Kg EXEMPT :

TRANSPORT DOCUMENT NAME :

EMPTY CONTAINERS :

SUBSTANCE ID NUMBER :

INLAND WATERWAYS (such as AND/R)

AND/R CLASS, ITEM : None

TREMCARD NO :

SEA (IMDG)

UN NUMBER :

IMO CLASS : None

MFAG NUMBER :

EMS NUMBER :
MARINE POLLUTANT : No
RISK LABEL :

IMDG CODE PAGE NO :
PACKAGING GROUP :
SUBSIDIARY RISK :

AIR (ICAO/IATA)

ICAO/IATA CLASS : None
PASSENGER PACKING INSTRUCTION :
PASSENGER MAX. QUANTITY / PACK :
CARGO PACKING INSTRUCTION :
CARGO MAX. QUANTITY /PACK :

TREMCARD (ROAD)

● **SECTION 14 REGULATORY INFORMATION**

CLASSIFICATION AND LABELLING ACCORDING TO EEC DIRECTIVES

CLASSIFICATION/SYMBOL : Not regulated

GOVERNING DIRECTIVE : According to the EEC directives, the product does not require classification and labelling.

This material is not considered hazardous under the OSHA Harzad Communication Standard CFR Title 29, part1910.1200 or the WHMIS Canadian legislation.

● **SECTION 15 OTHER INFORMATION**

Note 1 · Always ensure adequate ventilation of the workplace.

· Local exhaust ventilation of process equipment may be needed.

· Avoid breathing vapors or fumes.

Note 2 · Incorrect operation of processing equipment can cause thermal degradation of the polymer and a potential danger through inclusion of bubbles of air or other gases in material subsequently subjected to high temperatures.

Note 3 · Avoid sources of ignition such as heat or flames.