

HF6601/CMR27Z **BIP PLASTEX - F100WT272**
ABS High Flow White

Properties	Units	Typical results	Test methods ISO
Physical properties			
Density	g/cm ³	1,04	ISO 1183
Flammability :			UL 94
at 3.2 mm	class	HB	
at 1.6 mm	class	HB	
Shrinkage	%	0,3 - 0,6	---
Mechanical properties			
Tensile test (50mm/min):			
Yield stress	MPa	43	ISO / DIS 527.2
Yield strain	%	3	
Tensile modulus	MPa	2,600	
Three point bend test :			
Flexural strength	MPa	70	ISO 178
Flexural modulus	MPa	2,500	
Izod Impact strength			
Notched (at +23°C, 1/4" thickness)	KJ/m ²	18	ISO 180/3A
Thermal properties			
Vicat softening temperature :			
A50	°C	108	ISO 306
B/50	°C	98	
Melt index (220°C, 10kg)	g/10mins	40	ISO 1133
Heat deflection temperature			
at 0.45 MPa	°C	97	ISO 75
at 1.8 MPa	°C	94	
Electrical properties			
Volume resistivity	ohm.m	10 ¹⁶	IEC 93
Surface resistivity	ohm	10 ¹⁵	IEC 93
Comparative tracking index	---	250 - 400	IEC 112

RAW 7035

PLASTEX INTERNATIONAL LTD.

MATERIAL SAFETY DATA SHEET

1. Substance/ preparation and company name

Product name : ABS (Acrylonitrile butadiene styrene)
Product code : HF 6601 / CMR 272

Company : PLASTEX INTERNATIONAL LTD.
Crabtree Road, Forest Vale Industrial Estate,
Cinderford, Gloucestershire GL14 2PH.

2. Composition / information on ingredients

Chemical name : Acrylonitrile - butadiene - styrene terpolymer
CAS No : 9003 - 56 - 9

3. Hazards

These materials are high - molecular weight polymers not expected to be chemically active under recommended conditions of use. Trace amounts of residual monomers, including acrylonitrile and styrene, suspected carcinogens, are present and may be released under suggested processing temperature ranges. For Hazard Communication purposes under OSHA Standard 29CFR 1910 styrene monomer is listed as a possible carcinogen based upon evaluation from IARC.

4. Physical and chemical properties

Form	pellets
Odour	Faint
Flash point	660 °F (349°C)
Ignition temperature	946 °F (505°C)
Explosion hazard	not applicable
Vapour pressure	not applicable
Melting point	103 - 128°C
Boiling point	not applicable
Solubility in water	insoluble
Density	~ 1.02 - 1.17
Bulk density	~ 650 kg m ⁻³
Viscosity	not applicable

PLASTEX INTERNATIONAL LTD.**5. Fire, Explosion & Reactivity Hazard Data**

FIRE AND EXPLOSION HAZARD : Hazards from burning are intense heat and very high levels of dense, black smoke containing carbon monoxide, carbon dioxide and hydrogen cyanide.

EXTINGUISHING MEDIA : Dry Chemical, water spray, carbon dioxide, foam, water fog or spray.

CONDITIONS TO AVOID : Do not exceed 288°C. Purgings should be collected only as small, flat thin shapes or in thin strands to allow for rapid cooling. Precautions should be taken against auto-ignition of hot, thick masses of the plastic. Quench in water. Grinder dust is an explosion hazard.

REACTIVITY : Stable.

INCOMPATIBILITIES : Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS : Styrene monomer, ammonia, acrylamide, aromatic and aliphatic hydrocarbon fragments and carbon monoxide may be present. Primary toxic products of combustion and carbon monoxide, and hydrogen cyanide. Carbon dioxide, and asphyxiant, is also produced.

6. Health Hazard Data.**SIGNS AND SYMPTOMS OF OVEREXPOSURE IN THE WORKPLACE**

EYES(dust) : May cause transient eye irritation by mechanical abrasion.
SKIN : None Known.
INHALATION : None Known.
INGESTION : None Known.

EMERGENCY & FIRST AID PROCEDURES :

EYES : In case of contact, immediately flush with plenty of low pressure water for at least 15 minutes. Remove any contact lenses to ensure thorough flushing. Call a physician.

SKIN : Wash with soap and running water. **MOLTEN RESINS :** If molten material comes in contact with the skin, cool under a running stream of water. Do not attempt to remove the resin from the skin. Removal could result in severe tissue damage. Get medical attention.

INHALATION : Remove to fresh air. Treat any irritation symptomatically. Call a physician.

INGESTION : If swallowed, do not induce vomiting. Call a physician.

NOTE TO PHYSICIAN : No specific antidote. Supportive care. Treatment based on judgement of the physician in response to reactions of the patient.

TOXICITY INFORMATION

Oral LD50 (Rat) : > 5 mg/kg

PLASTEX INTERNATIONAL LTD.

The oral LD50 represents the product containing maximum concentration of controlled ingredients.

EXPOSURE LIMITS : N/A

CARCINOGENIC STATUS

OSHA REGULATED : Not Regulated

NATIONAL TOXICOLOGY PROGRAM : Not Tested

INTERNATIONAL AGENCY FOR RESEARCH ON CANCER : Listed

The Carcinogenic Status classifications do not apply to the product which has not been tested or reported on by the listed agencies, but rather to trace amounts of styrene monomer in the product. For Hazard communication purposes under OSHA STANDARD 29 CFR 1910.1200, styrene monomer is listed as a possible carcinogen based upon an evaluation by IARC. Neither the current epidemiology data from workers exposed to styrene monomer nor the current data from long term animal toxicology studies provides an adequate basis to conclude that styrene monomer is carcinogenic.

Certain heavy metal salts, present as colour pigments and based upon cadmium, chromium, copper, lead, or mercury metals, may be present in some colour codes. Those ingredients are essentially mixed into the plastic and are unlikely to contribute either to pollution of soils and waters or to personnel handling hazards.

7. Precautions For Safe Handling And Storage.

STORAGE, HANDLING AND SHIPPING : Instruct all pertinent personnel to read and become familiar with labels and instructions on the packages. Avoid storing containers near foodstuffs due to the possibility of odour and taste contamination of the food. Do not store containers near heating devices, hot pipes, etc. The head-space of boxes, bulk-trucks or hopper cars may accumulate low concentrations of residual monomers which can be toxic or explosive. Open all containers under conditions of good ventilation, away from flames or ignition sources; and avoid breathing the trapped fumes. With proper ventilation these products can be stored or processed without exposing employees to an unacceptable monomer levels. The gaseous emissions from the vents of a vented-barrel presses and extruders should not be discharged into a closed process-waste water system (no open trenches or manholes), or can be trapped by a suitable catalytic conversion device (consult the manufacturer of such device to determine its suitability with these plastics.)

SPILLS/LEAKS/RELEASES : For spills, leaks or releases of the pellets, remove from all floor areas to allow for stable footing and preventing slips by personnel.

SOIL RELEASE : Collect for re-use or appropriate disposal.

WATER RELEASE : Notification of government agency may be appropriate.

AIR RELEASE : Not likely to be released to the air.

WASTE DISPOSAL : Landfill waste plastic if codes permit, or incinerate if codes and equipment permit. Incineration equipment should be capable of handling large volumes of dense, black smoke and withstand the corrosive effects of acid gases. These pellet materials are not considered hazardous waste under title 40, CFR Part 261 reference Sections 261.31, 32, 33(e) and 33(f).

PLASTEX INTERNATIONAL LTD.**8. Applicable Control Measures.****APPROPRIATE HYGIENIC PRACTICES :**

Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling, and before eating, drinking, or smoking.

PERSONAL PROTECTIVE EQUIPMENT :**Safety glasses**

Appropriate respirator selected and used in accordance with OSHA Subpart required when exposure to airborne contaminant is likely to exceed acceptable limits. Appropriate protective clothing when handling molten product

WORK PRACTICES :

Eye wash fountains and safety showers should be easily accessible.

ENGINEERING CONTROLS :

Adequate ventilation should be provided to keep vapour or dust concentrations below acceptable exposure limits.

PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE :

Avoid ignition sources and static electricity.