Material Safety Data Sheet

Section 1

MSDS: Polybutylene Terephthalate (PBT) Glass Filled

Dynamic Polymer Solutions
Telephone Numbers: (810) 324-1451
Chemtrec - Transportation Emergency:
(800) 424-9300

MATERIAL IDENTIFICATION

PRODUCT NAME:	DYN-PCABS		
CHEMICAL NAME:	Polycarbonate Acrylonitrile Butadiene Styrene		
CAS NO.:	Polycarbonate	25971-63-5	< 50%
	Acrylonitrile Butadiene Styrene	9003-56-9	< 50%
	Carbon Black (if Black)	1333-86-4	< 2.0 – 4.0%
PRODUCT USE:	Engineered Thermoplastics		

Section 2

HAZARDOUS INGREDIENTS **(Additives not hazardous by 29 CFR 1910.1200)**

Identity	CAS Number	Concentration

Section 3

HEALTH HAZARD DATA

Acute or immediate effects:
Routes of entry and systems: Inhalation, skin contact, eye contact

Ingestion:	Not a likely route of exposure due to physical form. May cause gastrointestinal discomfort
Skin:	Gases and fumes evolved during the thermal processing or decomposition of this material may irritate the skin.
Eye:	Gases and fumes evolved during the thermal processing or decomposition of this material may irritate the eyes. Mechanical irritation of the eye from dusts may occur.
Inhalation:	Gases and fumes evolved during the thermal processing or decomposition

	of this material may irritate the respiratory tract

Section 4

EMERGENCY FIRST AID

Eyes:	Flush eyes with plenty of water. Seek a physician or ophthalmologist for follow-up if irritation is present or persists.
Skin:	Wash affected areas with soap and water. See a physician if thermal burn occurs.
Inhalation:	Move to an area free from risk of further exposure. Give oxygen or artificial respiration as needed (to be administered by authorized medical personnel only).
Ingestion:	If material is ingested, do not induce vomiting. Contact a physician
Chronic Effects:	None known
Medical Conditions generally aggravated by this material:	None known

Section 5

FIRE AND EXPLOSION HAZARD DATA

Flash Ignition Temperature:	> 842F (450C)
Unusual Fire/Explosion Hazards:	During a fire, irritating and toxic gases and aerosols may be generated by thermal decomposition and combustion (see Section 10). Dust from flaked material or secondary operations (regrinding, etc.) may form explosive dust air mixtures. Vent storage bins, conveyors, dust collectors etc. (see Section 7).
Hazardous Combustion Products:	
Special Fire Fighting Instructions:	Full emergency equipment with self-contained breathing apparatus must be worn by firefighters.
Extinguishing Media:	Water, foam, CO2, dry chemical

Section 6

ACCIDENTAL RELEASES

Spill or Release: If molten material is spilled, allow it to solidify. For both solidified material and pellets, remove mechanically by a method that minimizes the generation of airborne dust and place in an appropriately marked container.

Section 7

STORAGE CONDITIONS

NORMAL HANDLING
Storage Temperature (Min/Max): Max 200F (93C)
Shelf Life: Not established
Special Sensitivity: Moisture

STORAGE RECOMMENDATIONS: When handling flaked material or during secondary operations, vent storage bins, conveyors, dust collectors, etc. Ground handling equipment. Keep open flames, sparks and heat away from dusty areas. Maintain highest standards of housekeeping to prevent accumulation of dust. Material should be stored in a clean, dry environment in sealed containers. Material must be dried before processing.

Section 8

PROTECTION INFORMATION

Eye:	Safety glasses are recommended as a good industrial hygiene and safety practice.
Skin:	None required, but fabric gloves are recommended when handling molten material.
Ventilation:	Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits (If indicated in Section 2 or 3). Local mechanical exhaust ventilation should be used at sources of air contamination, such as open process equipment, or during purging operations, to capture gases and fumes that may be emitted. Standard reference sources regarding industrial ventilation (i.e. ACGIH Industrial Ventilation) should be consulted for guidance about adequate ventilation. In the event of thermal decomposition from overheating, the product (decomposition begins at 716F (380C)),

	evacuate the work area, shut down equipment, and provide general ventilation to the room prior to reoccupying.
Respirator:	NIOSH/MSHA approved dust respirator is recommended if the airborne dust concentration is near or exceeds the nuisance dust exposure limits.
Additional Protective Measures:	The greatest potential for injury occurs when working with molten polymeric resins, such as during a purge of a molding machine, extruder, and the like. During this type of operation it is essential that all workers in the immediate area wear eye protection and skin protection (sleeves, gloves, etc.) as protection from thermal burns. Purging's should be collected as small flat thin shapes or thin strands to allow for rapid cooling. Precautions should be taken against auto-ignition of hot thick masses of the plastic. Quench with water. Grinder dust is an exposure hazard.

Section 9

PHYSICAL/CHEMICAL DATA

Appearance:	Pellets with a slight tint
Odor:	Slight
Melting Point:	428 – 446F (220 – 230C)
Solubility in Water:	Insoluble
Volatile Content %:	Negligible
Specific Gravity:	Approx. 1.2

Section 10

HAZARDOUS REACTIVITY

Stability at Room Temperature:	Stable
Materials to Avoid:	None known
Conditions to Avoid:	None Known
Decomposition Temperature:	Begins at 716F (380C)
Decomposition Products:	Carbon monoxide, carbon dioxide, Bisphenol A, diphenyl carbonate, phenol and phenol derivatives, traces of aliphatic and aromatic hydrocarbons, aldehydes, and acids.

Section 11

TOXICOLOGICAL INFORMATION

Toxicity Data for: Bisphenol A Polycarbonate
Acute Toxicity
Other Acute Effects: Gases and fumes evolved during thermal decomposition of similar products have caused respiratory irritation in mice.

Section 12

ECOLOGICAL INFORMATION

No ecotoxicological information available

Section 13

DISPOSAL

Waste Disposal: Material may be incinerated or landfilled in compliance with federal, state/provincial, and local regulations.

Section 14

TRANSPORT INFORMATION

DOT Hazard Class:	Non-Regulated
Technical Shipping Name:	Bisphenol A Polycarbonate
Freight Class Bulk:	Plastic Materials, Pellets
Freight Class Package:	Plastic Materials, O/T Exp., Pellets
Product Label:	GP 003

Material Safety Data Sheet

Section 15

REGULATORY INFORMATION

OSHA Status: This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, thermal processing and decomposition fumes from this product may be hazardous as noted in Section 3.

SARA TITLE III:
Section 302 – Extremely Hazardous Substances:
Section 311/312 Hazard Categories:
Section 313 Toxic Chemicals:
RCRA Status: IF discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

United States TSCA Status: On TSCA Inventory

STATE RIGHT TO KNOW LAWS – The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements, contact the appropriate agency in your state

Component Name CAS Number	Concentration	State Code
Bisphenol A Polycarbonate NJTSRN (31765300002) - 8136P	> 1.0%	NJ4, PA3
Bisphenol A Polycarbonate 25971-63-5	As needed	NJ4, PA3
Residual Methylene Chloride 75-09-2	< 3 ppm	CA1, MA1

CA1 = This chemical is known to the state of California to cause cancer.
MA1 = Massachusetts Hazardous Substance List
NJ4 = New Jersey Other – included in 5 predominant ingredients. 1%
NJTSRN = New Jersey Trade Secret Registry Number
PA3 = Pennsylvania Non-hazardous present at 3% or greater.

HMIS Rating
0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Health	0
Flammability	1
Reactivity	0
PPE	
# Acute *Chronic	

Section 16

MISCELLANEOUS INFORMATION

The information set forth herein has been gathered from standard reference materials and/or supplier test data and is, to the best knowledge and belief of Dynamic Polymer Solutions, accurate and reliable. Such information is offered solely for your consideration, investigation and verification, and it is not suggested or guaranteed that the hazard precautions or procedures mentioned are the only ones that exist. Dynamic Polymer Solutions makes no warranties, expressed or implied, with respect to the use of such information or the use of the specific material identified herein in combination with any other material or process, and assumes no responsibility therefore.

END OF MSDS