The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

"RYNITE" THERMOPLASTIC POLYESTER RESINS ON SYNONYM LIST RYN006
RYN006 Revised 13-APR-2007

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"RYNITE" is a registered trademark of DuPont.

Tradenames and Synonyms

"RYNITE" FR530 BK507,
"RYNITE" FR530 BK507A
"RYNITE" FR530 BL5003
"RYNITE" FR530 NC010
"RYNITE" FR530 NC010A
"RYNITE" FR530 WT504,
"RYNITE" FR530L NC010,
"RYNITE" FR530L NC010A

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont Engineering Polymers
1007 Market Street
Wilmington,DE 19898

PHONE NUMBERS
Product Information : 1-(800)-441-7515
Transport Emergency : 1-(800)-424-9300
Medical Emergency : 1-(800)-441-3637

COMPOSITION/INFORMATION ON INGREDIENTS

\# Components

Material	CAS Number	%
POLYETHYLENE TEREPHTHALATE	25038-59-9	>35
FIBERGLASS		<40
BROMINATED AROMATIC COMPOUND		<20
PLASTICIZERS, LUBRICANTS, STABILIZERS, ANTIOXIDANTS		<10
PIGMENTS		<10
* SODIUM ANTIMONATE	15432-85-6	<5
* ZINC COMPOUND	1314-98-3	<5
CARBON BLACK	1333-86-4	<1

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

(COMPOSITION/INFORMATION ON INGREDIENTS - Continued)

Components (Remarks)

Additives in this product do not present a respiration hazard unless the product is ground to a powder of respirable size and the dust is inhaled. All dusts are potentially injurious to the respiratory tract if respirable particles are generated and inhaled in sufficiently high concentrations. Good industrial hygiene practices, as with all dusts, should include precautions to prevent inhalation of respirable particles.

HAZARDS IDENTIFICATION

Potential Health Effects

ADDITIONAL HEALTH EFFECTS

Read the datasheet for this product or the molding guide for this resin family.

During drying, purging and molding, small amounts of hazardous gases and/or particulate matter my be released. These may be irritating to the eyes, upper respiratory tract and lungs. Cutting, sawing, similar processing can release respirable fibers and respirable dusts.

POLYETHYLENE TEREPHTHALATE

Eye contact with Polyethylene Terephthalate particles may cause mechanical irritation with discomfort, tearing, or blurring of vision.

Patch tests with humans resulted in no skin irritation or skin sensitization.

Decomposition products caused by overheating Polyethylene Terephthalate may cause skin, eye or respiratory tract irritation.

FIBERGLASS

The mechanical action of the sharp fibers from Fiber Glass may cause skin irritation with discomfort or rash.

Eye contact with Fiber Glass particles may cause mechanical eye irritation with discomfort, tearing, or blurring of vision.

Inhalation of Fiber Glass particles may cause irritation of the upper respiratory passages, with coughing and discomfort.

(HAZARDS IDENTIFICATION - Continued)

Results from epidemiology studies suggest no causal relationship between Fiber Glass exposure and cancer. One epidemiology study does indicate a slight increase in lung cancer deaths. The evidence that fiber glass is related to these increased lung cancer deaths is considered weak.

Individuals with preexisting diseases of the lungs may have increased susceptibility to the toxicity of excessive exposures.

SODIUM ANTIMONATE

The compound is not a skin irritant, is a mild eye irritant, and is untested for animal sensitization. The effects in animals from exposures by inhalation, ingestion, or skin contact have not been determined. No animal test reports are available to define carcinogenic, mutagenic, embryotoxic, or reproductive hazards.

Human health effects of overexposure by inhalation, ingestion, or skin or eye contact may initially include: no acceptable information is available to confidently predict the effects of excessive human exposure to this compound.

Carcinogenicity Information

The following components are listed by IARC, NTP, OSHA or ACGIH as carcinogens.

Material	IARC	NTP	OSHA	ACGIH
CARBON BLACK	2B			

FIRST AID MEASURES

First Aid

INHALATION
No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary. If exposed to fumes from overheating or combustion, move to fresh air. Consult a physician if symptoms persist.

SKIN CONTACT
The compound is not likely to be hazardous by skin contact, but cleansing the skin after use is advisable. If molten polymer gets on skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Obtain medical treatment for thermal burn.

EYE CONTACT
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

(FIRST AID MEASURES - Continued)

No specific intervention is indicated as compound is not likely to be hazardous by ingestion.

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point : Not Applicable

Fire and Explosion Hazards:

Will not burn without external flame. Like most organic materials in powder form, dust generated from this product may form a flammable dust-air mixture. Potential for a dust explosion may exist. Minimize the generation and accumulation of dust. Keep away from sources of ignition.

Large molten masses may ignite spontaneously in air. Water quenching of such masses is good practice.

Hazardous gases/vapors produced in fire are carbon monoxide, hydrogen bromide.

Extinguishing Media

Water, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Spill Clean Up

Spilled material is a slipping hazard.

Sweep up to avoid slipping hazard.

HANDLING AND STORAGE

Handling (Personnel)

See FIRST AID and PERSONAL PROTECTIVE EQUIPMENT SECTIONS.

Handling (Physical Aspects)

Minimize the generation and accumulation of dust.

Storage

Store in a cool, dry place. Keep containers tightly closed to prevent moisture absorption and contamination.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

VENTILATION When hot processing this material, use local and/or general exhaust ventilation to control the concentration of vapors and fumes below exposure limits.

In cutting or grinding operations with this material, use local exhaust to control the concentration of dust below exposure limits.

Personal Protective Equipment

Eye/Face Protection

Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye or face contact due to splashing or spraying of molten material. A full face mask positive-pressure air-supplied respirator provides protection from eye irritation.

Respirators

A NIOSH/MSHA approved air-purifying respirator with an organic vapor cartridge with a dust/mist filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

During grinding, sawing, routing, drilling or sanding operations use a NIOSH/MSHA approved air-purifying respirator with dust/mist cartridge or canister if airborne particulate concentrations are expected to exceed permissible exposure levels.

Protective Clothing

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

If there is potential contact with hot/molten material, wear heat resistant clothing and footwear.

Wear leather or cotton gloves when grinding, sawing, routing, drilling or sanding.

Exposure Guidelines

Exposure Limits

"RYNITE" THERMOPLASTIC POLYESTER RESINS ON SYNONYM LIST RYN006

PEL (OSHA)	: Particulates (Not Otherwise Regulated) 15 mg/m3, 8 Hr. TWA, total dust 5 mg/m3, 8 Hr. TWA, respirable dust

Other Applicable Exposure Limits

POLYETHYLENE TEREPHTHALATE

PEL (OSHA)	: None Established
TLV (ACGIH)	: None Established
AEL * (DuPont)	: 10 mg/m3, 8 Hr. TWA, total dust 5 mg/m3, 8 Hr. TWA, respirable dust

FIBERGLASS

PEL (OSHA)	: None Established
TLV (ACGIH)	: 5 mg/m3, 8 Hr.TWA, inhalable particulate A4
AEL * (DuPont)	: 5 mg/m3 total dust - 8 Hr. TWA, non-respirable fiber (> 3 microns in diameter) non-fibrous particulate.

SODIUM ANTIMONATE

PEL (OSHA)	: 0.5 mg/m3, 8 Hr. TWA, , as Sb
TLV (ACGIH)	: 0.5 mg/m3, compounds as Sb - 8 Hr TWA
AEL * (DuPont)	: None Established

CARBON BLACK

PEL (OSHA)	: 3.5 mg/m3, 8 Hr. TWA
TLV (ACGIH)	: 3.5 mg/m3, 8 Hr. TWA, A4
AEL * (DuPont)	: 0.5 mg/m3, 8 & 12 Hr.TWA, (Polynuclear Aromatic Hydrocarbon Content <0.1%) Includes Channel, Lamp, and Thermal Black

* AEL is DuPont’s Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Melting Point	: 250-255 C (482-491 F)
Solubility in Water	: Negligible
Odor	: None
Form	: Pellets
Specific Gravity	: >1

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Reacts with other polymers (polycarbonate, polyacetal, etc,) at melt temperatures.

Decomposition

Decomposes with heat.

Decomposition temperature: 329 C (624 F)

Hazardous gases or vapors can be released, including carbon monoxide, aldehydes, and, acrolein.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Polyethylene Terephthalate
Oral ALD: > 10,000 mg/kg in rats

Polyethylene Terephthalate is not a skin irritant, but is a mild eye irritant.

Toxic effects from short exposures by inhalation resulted in no adverse effects.

Toxic effects from short exposures by ingestion resulted in no adverse effects.

Animal testing indicates that Polyethylene Terephthalate does not have carcinogenic, mutagenic, developmental or reproductive effects.

Fiber Glass

(TOXICOLOGICAL INFORMATION - Continued)

Skin irritation and mild eye irritation occurs in animals, but these effects are attributed primarily to mechanical damage rather than a chemical effect.

The effects in mice from single exposure by intratrachael instillation with Fiber Glass include an inflammatory response. Repeated inhalation exposures invoked pulmonary macrophage reactions similar to biologically inert dusts.

Tests in some animals with Fiber Glass demonstrate carcinogenic activity. However, these studies were by artificial implantation or injection of fine glass fibers into the chest, abdominal cavity, or trachea and are judged to be irrelevant to industrial exposure. Chronic inhalation exposure of animals to fiber glass at low concentrations produced minimal fibrosis in one study and no adverse effects in a different study.

No animal test reports are available to define mutagenic, developmental, or reproductive hazards.

CARBON BLACK

Oral ALD, rat: > 25,100 mg/kg

Repeated inhalation exposure of animals to Carbon Black caused inflammation of the respiratory tract, lungs and emphysema.

Repeated exposure to high doses of Carbon Black by ingestion or skin contact caused no significant toxicological effects.

No adequate studies have been conducted in animals to define the carcinogenicity of Carbon Black by ingestion. In several skin painting studies using various Carbon Blacks no carcinogenicity was observed. Tests by inhalation for carcinogenicity in rats show significant increases in lung tumors in female rats but not male rats. In another study using female mice exposed by inhalation to Carbon Black there was no increase in the incidence of respiratory tract tumors. Researchers conducting the rat inhalation studies believe that these effects probably result from the massive accumulation of small dust particles in the lung which overwhelm the normal lung clearance mechanisms. This represents "lung overload" phenomenon, rather than a specific chemical effect of the dust particle in the lung.

Tests have shown that this material does not cause genetic damage in bacterial or mammalian cell cultures. Tests in animals for genetic toxicity have produced mostly negative results. No animal data are available to define developmental or reproductive toxicity.

(TOXICOLOGICAL INFORMATION - Continued)

SODIUM ANTIMONATE

Inhalation 4 hour LC50: 11.5 mg/L in rats
Skin absorption LD50: no information found
Oral LD50: > 25,000 mg/kg in rats

Slightly toxic by inhalation (4 hour LC50 1,000 - 5,000 ppm; 8 - 40 mg/L).
Very low toxicity by ingestion (oral LD50 > 5,000 mg/kg).

ECOLOGICAL INFORMATION

Ecotoxicological Information

AQUATIC TOXICITY:

No information is available. Negligible solubility. Do not discharge to streams, ponds, lakes or sewers.

DISPOSAL CONSIDERATIONS

Waste Disposal

Preferred options for disposal are (1) recycling, (2) incineration with energy recovery, and (3) landfill. The high fuel value of this product makes option 2 very desirable for material that cannot be recycled, but incinerator must be capable of scrubbing out acidic combustion products. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

TRANSPORTATION INFORMATION

Shipping Information

Not regulated in transportation by DOT/IMO/IATA.

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status : In compliance with TSCA Inventory requirements for commercial purposes.

State Regulations (U.S.)

STATE RIGHT-TO-KNOW

(REGULATORY INFORMATION - Continued)

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated.

SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1 % OR MORE (0.01% FOR SPECIAL HAZARDOUS SUBSTANCES)- Carbon Black.

WARNING - SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM- None.

The State of California, under Proposition 65, regulates Carbon Black - airborne, unbound particles of respirable size as a carcinogen. In this product, carbon black is not supplied in the form regulated in California.

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (O.1% FOR SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR TERATOGENS)- Antimony Compound, Zinc Compound, Carbon Black.

OTHER INFORMATION

Additional Information

MEDICAL USE: CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications see DuPont CAUTION Bulletin No. H-50102.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS : REGULATORY AFFAIRS
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# Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS