

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

DuPont Performance Elastomers L.L.C. Page 1
Material Safety Data Sheet

"KALREZ" FLUOROELASTOMER SEMIFINISHED PARTS AND SHAPES IN SYNONYM
LIST KRZ042
KRZ042 Revised 15-FEB-2007

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"KALREZ" is a registered trademark of DuPont Performance Elastomers L.L.C..

Tradenames and Synonyms

"KALREZ" 1018, 1045, 1050LF, 2035, 2037, 2044, 2085,
"KALREZ" 3018, 3035, 4001, 4079, 4079AMS, 4120,
"KALREZ" 6180, 6185, 6190, 6221, 6230, 6230A, 6235, 6375, #
"KALREZ" 6880, 6885, 7075, 7090, 8085,
"KALREZ" 8101, 8201, 8375, 8385, 8475, 8575, 8585, 8587,
"KALREZ" KLX-02001, KLX-05014,

Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont Performance Elastomers L.L.C.
Bellevue Park Corporate Center
300 Bellevue Parkway
Wilmington, Delaware 19809

PHONE NUMBERS

Product Information : 1-800-441-7515 (outside the U.S.
302-774-1000)
Transport Emergency : CHEMTREC 1-800-424-9300(outside U.S.
703-527-3887)
Medical Emergency : 1-800-441-3637 (outside the U.S.
302-774-1139)

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
PERFLUOROELASTOMER		55-97
PERFLUOROALKYLPOLYETHER		<8
ACCELERATORS AND CURATIVES		<6
FILLERS MAY INCLUDE:		
POLYAMIDE FIBERS		0-20
POLYTETRAFLUOROETHYLENE	9002-84-0	0-20
AMORPHOUS SILICA	7631-86-9	0-10
FUMED SILICA	69012-64-2	0-10
MICROCRYSTALLINE SILICA	14808-60-7	0-15
BLANC FIXE	7727-43-7	0-30
MAGNESIUM OXIDE	1309-48-4	0-5

PRESENT IN BLACK PARTS & SHAPES ONLY:

(COMPOSITION/INFORMATION ON INGREDIENTS - Continued)

CARBON BLACK	1333-86-4	0-45
PRESENT IN ALL WHITE TYPES AND BLACK TYPES 6230, 6235 AND 6375:		
TITANIUM DIOXIDE	13463-67-7	0-25
PRESENT IN REINFORCED SHEETS/SLABS ONLY: "NOMEX" HT29-42 REINFORCING SHEET HEATED ABOVE 400 DEG C (752 DEG F) CAN EVOLVE AS DEGRADATION PRODUCT:		
Hydrogen Fluoride	7664-39-3	<1

Components (Remarks)

Material is not known to contain Toxic Chemicals under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

HAZARDS IDENTIFICATION

Potential Health Effects

See Toxicological Information section for animal data.

PERFLUOROELASTOMER

No data available for perfluoroelastomer.

ADDITIONAL HEALTH EFFECTS

INHALATION Inhalation of fumes from overheating or burning "KALREZ", or from smoking tobacco or cigarettes contaminated with polymer may cause polymer fume fever, a flu-like illness with chills and fever. Symptoms may not occur for several hours after exposure, and go away in 24-48 hours even in absence of treatment.

Inhalation of low concentrations of hydrogen fluoride can initially include symptoms of choking, coughing, and severe eye, nose and throat irritation. Possibly followed after a symptomless period of 1 to 2 days by fever, chills, difficulty in breathing, cyanosis, and pulmonary edema. Acute or chronic overexposure to HF can injure the liver and kidneys. Individuals with preexisting diseases of the lungs may have increased susceptibility to the toxicity of excessive exposures to hydrogen fluoride.

PERFLUOROALKYPOLYETHER

(HAZARDS IDENTIFICATION - Continued)

Human health effects of overexposure by skin contact may include skin irritation with discomfort or rash. Eye contact may cause irritation with discomfort, tearing or blurring of vision. Inhalation of smoke or fumes from burning material may cause polymer fume fever, a flu-like illness with fever, chills, and sometimes cough, of approximately 24-48 hours duration. Smokers should avoid contamination of tobacco products, and should wash their hands before smoking. Otherwise no acceptable information is available to confidently predict the effects of excessive human exposure to this compound.

POLYTETRAFLUOROETHYLENE

Inhalation of PTFE dust may cause generalized irritation of the nose, throat and lungs with cough, difficulty breathing or shortness of breath.

Heating PTFE above 300 degrees C may liberate a fine particulate fume. Inhalation may produce polymer fume fever, a temporary flu-like condition with fever, chills, nausea, shortness of breath, chest tightness, muscle or joint ache, and sometimes cough and elevated white blood cell count. The symptoms are often delayed 4 to 24 hours after exposure. These signs are generally temporary, lasting 24-48 hours and resolve without further complications. However, some individuals with repeated episodes of polymer fume fever have reported persistent pulmonary effects. Protection against polymer fume fever should also provide protection against any potential chronic effects.

Exposure to decomposition products from PTFE heated above 400 degrees C may cause pulmonary inflammation, hemorrhage or edema. These more serious consequences of exposure may occur from extreme thermal decomposition of PTFE which can liberate fume particles, and toxic gases (carbonyl fluoride, hydrogen fluoride, and other fluorinated gases) especially under conditions of poor ventilation and/or confined spaces. These decomposition products may initially produce chest tightness or pain, chills, fever, nausea, with shortness of breath, cough, wheezing and progression into pulmonary edema. Edema may be delayed in onset and requires medical treatment. In severe cases, if medical intervention is delayed, pulmonary edema may become life threatening. Recovery is generally complete within a few days; in some rare cases, persistent lung function abnormalities have been reported.

Compared to nonsmokers, polymer fume fever symptoms appear to be more prevalent and serious in smokers. Smokers must avoid contamination of tobacco with residual polymer from their hands or from fumes, and should wash their hands before smoking.

Significant skin permeation, and systemic toxicity, after contact with the dust appears unlikely. There are no reports of human sensitization from contact with the dust.

(HAZARDS IDENTIFICATION - Continued)

If PTFE dusts contact the eye, mechanical irritation with tearing, pain or blurred vision may result.

Individuals with pre-existing diseases of the lungs or cardiovascular system may have increased susceptibility to the reduction in blood oxygen that may develop after excessive exposures to thermal decomposition products.

AMORPHOUS SILICA

Inhalation of Amorphous Silica may cause drying of mucous membranes and irritation of nose, throat, and lungs with nosebleeds, cough, difficulty breathing or shortness of breath. Based on animal experiments, long term exposures to high doses could lead to pulmonary inflammation and subsequent development of chronic lung disease. Amorphous Silica does not induce the lung effects associated with crystalline silica.

No adverse effects are expected from incidental skin contact with Amorphous Silica dust.

Eye contact with Amorphous Silica may cause eye irritation with tearing, pain or blurred vision.

Epidemiology studies have not shown any evidence of fibrosis in workers exposed to Amorphous Silica dust levels ranging from 2 to 7 mg/m³.

Increased susceptibility to the effects of Amorphous Silica may be observed in persons with pre-existing disease of the lungs.

MICROCRYSTALLINE SILICA

Eye contact with crystalline silica may cause eye irritation with discomfort, tearing, or blurring of vision.

Overexposure to airborne crystalline silica can cause silicosis. Silicosis in humans can be either of an acute or chronic nature. Acute silicosis is observed in subjects exposed to very high airborne concentrations of respirable crystalline silica over a short period of time (less than a few years) and is characterized by difficult breathing, fever, cough and weight loss that gets worse with time, leading to a progressive and fatal impairment of lung function. In contrast, chronic silicosis is observed in subjects exposed to lower concentrations of crystalline silica, takes a longer time period to develop (usually more than 10 years) and is characterized by the development of lung fibrosis and corresponding impairment of lung function. Exposed individuals may not demonstrate symptoms of lung fibrosis until after many years of exposure.

(HAZARDS IDENTIFICATION - Continued)

In addition to silicosis, epidemiology studies show limited evidence of an excess of lung cancer in occupations involving exposures to crystalline silica, such as stonecutters and granite industry workers.

Individuals with preexisting lung disease may have increased susceptibility to the adverse pulmonary effect related to crystalline silica exposures.

BLANC FIXE

HEALTH HAZARD INFORMATION:

In acute toxicity testing in animals, this compound was of very low toxicity by ingestion.

May cause eye irritation.

Prolonged excessive inhalation exposure to the dust may cause the formation of harmless nodular granules in the lung.

HUMAN HEALTH EFFECTS OF OVEREXPOSURE BY:

Eye contact may initially include mechanical eye irritation with discomfort, tearing, or blurring of vision.

Prolonged inhalation exposure to the dust may cause formation of harmless nodule granules in the lung, an affliction called "baritosis", which has no effect on lung function, and disappears if exposure is discontinued.

MAGNESIUM OXIDE

Human health effects of overexposure by inhalation, ingestion, or skin or eye contact may initially include: skin irritation with discomfort or rash; eye irritation with discomfort, tearing, or blurring of vision; or irritation of the upper respiratory passages.

TITANIUM DIOXIDE

Short-term overexposure by inhalation to Titanium Dioxide may cause irritation of nose, throat, and lungs with cough, difficulty breathing or shortness of breath.

Repeated skin contact with Titanium Dioxide may cause drying or cracking of the skin in sensitive individuals.

Eye contact with Titanium Dioxide may cause eye irritation with tearing, pain or blurred vision.

Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater

(HAZARDS IDENTIFICATION - Continued)

risk of developing lung cancer than were employees who had not been exposed to Titanium Dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium Dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study, DuPont concludes that Titanium Dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

CARBON BLACK

Immediate effects of overexposure to Carbon Black by inhalation may include irritation of the nose, throat, and lungs with cough, difficulty breathing or shortness of breath.

If particles from Carbon Black contact the eye, mechanical irritation with tearing, pain or blurred vision may result.

Significant skin permeation, and systemic toxicity, after contact with Carbon Black appears unlikely. There are no reports of human sensitization.

Epidemiologic studies demonstrate no significant risk of human cancer from exposure to Carbon Black. While some reports cite an increased incidence of pulmonary abnormalities, such as decreased pulmonary function and radiological changes among Carbon Black workers, other reports show no correlation between exposure and effects on pulmonary function or disease.

Increased susceptibility to the effects of Carbon Black may be observed in persons with pre-existing disease of the lungs.

Carcinogenicity Information

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

Material	IARC	NTP	OSHA	ACGIH
MICROCRYSTALLINE SILICA	1	X		A2
CARBON BLACK	2B			
TITANIUM DIOXIDE	2B			

DuPont controls the following materials as carcinogens:
MICROCRYSTALLINE SILICA.

FIRST AID MEASURES

First Aid

INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

If exposed to fumes from overheating or combustion, move to fresh air. Consult a physician if symptoms persist.

SKIN CONTACT

Flush skin with water after contact. Wash contaminated clothing before reuse.

EYE CONTACT

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

INGESTION

Not a probable route. However, in case of accidental ingestion, call a physician.

FIRE FIGHTING MEASURES

Flammable Properties

Fire and Explosion Hazards:

Hazardous gases/vapors produced in fire are hydrogen fluoride (HF), carbonyl fluoride, carbon monoxide, low molecular weight fluorocarbons.

Extinguishing Media

Water, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Wear self-contained breathing apparatus (SCBA) and full protective equipment.

A fire could form hydrogen fluoride fumes which react with water to form hydrofluoric acid. Wear neoprene gloves when handling refuse from a fire involving these types.

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

Shovel or sweep up. Dispose of in an approved container.

HANDLING AND STORAGE

Handling (Personnel)

See FIRST AID and PERSONAL PROTECTIVE EQUIPMENT SECTIONS.

Avoid contact with eyes, skin or clothing. Avoid breathing vapor or dust.

Storage

Keep container closed to prevent contamination. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use sufficient ventilation to keep employee exposure below recommended limits. Use local ventilation to control fumes from hot processing.

Avoid contamination of cigarettes or tobacco with perfluoroelastomer dust.

Personal Protective Equipment

EYE/FACE PROTECTION

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

RESPIRATORS: Wear a NIOSH approved respirator if there is potential for exposure to airborne dusts, mists or vapors.

RESPIRATORS

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

When temperatures exceed 400 C (752 F) and ventilation is inadequate to maintain concentrations below exposure limits, use a positive pressure air supplied respirator. Air purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING

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

Exposure Guidelines

Applicable Exposure Limits

POLYTETRAFLUOROETHYLENE

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

AMORPHOUS SILICA

PEL (OSHA) : 80 mg/m³ / % SiO₂ - 8 Hr TWA
 AEL * (DuPont) : 3 mg/m³, 8 & 12 Hr. TWA, respirable dust

FUMED SILICA

PEL (OSHA) : None Established
 AEL * (DuPont) : 1 mg/m³, 8 & 12 Hr. TWA, respirable dust

MICROCRYSTALLINE SILICA

PEL (OSHA) : Total dust, (30 mg/m³ / % SiO₂ + 2)
 Respirable dust, (10 mg/m³ / % SiO₂ + 2)
 as 8 Hr TWA's
 TLV (ACGIH) : 0.025 mg/m³, respirable dust, 8 Hr.
 TWA, A2
 AEL * (DuPont) : 0.1 mg/m³, 8 Hr. TWA, respirable dust
 0.05 mg/m³, 12 Hr. TWA, respirable dust

BLANC FIXE

PEL (OSHA) : 15 mg/m³, total dust, 8 Hr. TWA
 5 mg/m³, respirable dust, 8 Hr. TWA
 TLV (ACGIH) : 10 mg/m³, total dust, 8 Hr. TWA
 AEL * (DuPont) : 10 mg/m³, 8 & 12 Hr. TWA, total dust
 5 mg/m³, 8 & 12 Hr. TWA, respirable dust

MAGNESIUM OXIDE

PEL (OSHA) : 15 mg/m³, total dust, 8 Hr. TWA
 TLV (ACGIH) : 10 mg/m³, 8 Hr. TWA, A4
 AEL * (DuPont) : None Established

CARBON BLACK

(Applicable Exposure Limits - Continued)

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
TITANIUM DIOXIDE	
PEL (OSHA)	: 15 mg/m3, total dust, 8 Hr. TWA
TLV (ACGIH)	: 10 mg/m3, total dust, 8 Hr. TWA, A4
AEL * (DuPont)	: 10 mg/m3, 8 & 12 Hr. TWA, total dust 5 mg/m3, 8 & 12 Hr. TWA, respirable dust
Hydrogen Fluoride	
PEL (OSHA)	: 3 ppm, 8 Hr. TWA, as F
TLV (ACGIH)	: 0.5 ppm, 8 Hr. TWA, as F Ceiling 2 ppm, as F
AEL * (DuPont)	: 3 ppm, 15 minute TWA

* 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

Solubility in Water	: Insoluble
Odor	: None.
Form	: Slab, Sheet, Rod, Tubing
Color	: Black, Gray or White

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

Incompatible or can react with alkali metals, interhalogen compounds.

Decomposition

HAZARDOUS DECOMPOSITION PRODUCTS Above 204 C (399 F) small amounts of carbon monoxide and carbon dioxide. Above 400 C (752 F) small amounts of hydrogen fluoride and perfluoroolefins. Particulate matter evolved from overheating may cause polymer fume fever.

TOXICOLOGICAL INFORMATION

Animal Data

See Hazards Identification section for potential health effects.

PERFLUOROALKYLPOLYETHER

Inhalation 4 hour ALC: >19.54 mg/L in rats

Skin absorption ALD: >17,000 mg/kg in rabbits

Oral ALD: >25,000 mg/kg in rats

In animal tests the compound was a mild skin and eye irritant. A single inhalation exposure produced nonspecific effects such as respiratory irritation. Exposure to thermal decomposition products produced irritation, irregular respiration, tremors and increased liver weight.

Titanium Dioxide

Oral ALD: > 24,000 mg/kg in rats
Dermal ALD: > 10,000 mg/kg in rabbits
Inhalation 4 hour ALC: > 6.82 mg/L in rats

Animal testing indicates Titanium Dioxide is a moderate eye irritant and a slight skin irritant, but is not a skin sensitizer in animals.

Repeated and long term ingestion of Titanium Dioxide caused no significant toxicological effects.

Repeated exposure by inhalation to high doses of Titanium Dioxide caused a typical dust cell reaction.

In lifetime inhalation studies at levels up to 250 mg/m³, no compound-related clinical signs of toxicity were seen in the exposed animals. Slight pulmonary fibrosis was seen at 50 and 250 mg/m³ respirable dust levels but not at 10 mg/m³. There was no evidence of cancer in animals exposed to 10 or 50 mg/m³ respirable Titanium Dioxide. Microscopic lung tumors were seen in 17 percent of the rats exposed to 250 mg/m³ respirable Titanium Dioxide. The lung tumors seen in the rat were different from common human lung cancers, relative to anatomic type and location, occurred only at dust levels which overwhelmed the animals lung clearance mechanism and, therefore, are of questionable biological relevance for man. In lifetime animal feeding tests at levels up to 50,000 ppm, Titanium Dioxide showed no evidence of cancer or other significant adverse effects in either rats or mice. No animal data are available to define the developmental or reproductive toxicity of Titanium Dioxide. Tests have shown that Titanium Dioxide does not cause genetic damage in bacterial or mammalian cell cultures, or in animals.

CARBON BLACK

(TOXICOLOGICAL INFORMATION - Continued)

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.

Amorphous Silica

Oral LD50: >10,000 mg/kg in rats

Animal testing indicates Amorphous Silica is a mild eye irritant. It is a negligible to slight skin irritant when tested as a 50% aqueous paste. The dust is not expected to be a skin irritant. Animal testing indicates Amorphous Silica is not a skin sensitizer.

Single, repeated and long-term exposure by ingestion to Amorphous Silica caused no significant toxicological effects.

Single exposure by inhalation to Amorphous Silica caused no significant toxicological effects. Repeated exposure caused pulmonary changes including reversible inflammation. Long-term exposure caused pulmonary changes including reversible inflammation, vascular obstruction and emphysema.

Animal testing indicates Amorphous Silica does not have carcinogenic or reproductive effects. No animal data are available to define the developmental toxicity of Amorphous Silica. Amorphous Silica has not produced genetic damage in bacterial cultures. It has not been tested for genetic toxicity in mammalian cell cultures or in animals.

Crystalline Silica

(TOXICOLOGICAL INFORMATION - Continued)

Oral ALD: > 11,000 mg/kg in male rats

Crystalline Silica is not a skin irritant or a skin sensitizer in animals, but is a mild eye irritant.

Single doses of 50 mg of Crystalline Silica administered by intratracheal instillation have resulted in pulmonary fibrosis at 60 and 120 days post exposure in rats. Repeated and chronic exposures as low as 0.7 mg instillation and 12 mg/m³ by inhalation resulted in pulmonary fibrosis, inflammation, edema and emphysema in animals exposed to Crystalline Silica.

Lung tumors were observed in rats exposed for up to two years by inhalation to 12.4 or 51.6 mg/m³ Crystalline Silica. Lung tumors have been observed in other long-term inhalation exposures to concentrations as low as 1 mg/m³. Animals exposed for 29 days or up to 13 weeks and then removed from exposure and observed for up to 2 years also developed lung tumors. Lung tumors were also observed in rats administered quartz by intratracheal instillation. Crystalline Silica was positive in mammalian cell cultures for cell transformation and chromosomal effects. It was negative in cell culture assays for gene mutation in bacteria and DNA damage in mammalian cells and in a whole animal assay for chromosomal effects. Other tests for genetic damage have produced both positive and negative results.

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

BLANC FIXE

Inhalation LC50: no information found
Skin absorption LD50: no information found
Oral LD50: > 5000 mg/kg in rats (Very low toxicity by ingestion)

The compound is untested for skin or eye irritancy, and is untested for animal sensitization.

Toxic effects in animals occurring from repeated inhalation exposures are lung changes.

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

MAGNESIUM OXIDE

Inhalation 2 hour LC50: 173 mg/m³ in cats
Oral LD50: 230 mg/kg in dogs

The compound is a mild skin irritant and an eye irritant.

ECOLOGICAL INFORMATION

Ecotoxicological Information

AQUATIC TOXICITY:

No information is available. Toxicity is expected to be low based on insolubility in water.

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

DOT
Proper Shipping Name : Not regulated

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

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) - Black types only: carbon black. All white types and black types 6230, 6235 and 6375: titanium dioxide. Some types may contain: magnesium oxide, amorphous silica, polytetrafluoroethylene, crystalline silica, barium sulfate.

WARNING - SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO

(REGULATORY INFORMATION - Continued)

CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM -
Carbon Black, Crystalline Silica.

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE
LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.1% FOR
SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR
TERATOGENS) - Black types only: carbon black. All white
types and black types 6230, 6235 and 6375: titanium
dioxide. Some types may contain: magnesium oxide, amorphous
silica, crystalline silica, barium compounds.

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 Performance Elastomers Medical
Application Policy (H-69237).

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 : G. W. WORTHAM
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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