Material Safety Data Sheet
RUST VETO 4214

1. Chemical Product and Company Identification

Product Name	RUST VETO 4214	Emergency Phone Number	24 HOUR - (800) 424-9300 (CHEMTREC)
Company Name	Houghton International Inc. Madison & Van Buren Aves Valley Forge, PA 19482	FAX	(610) 666-1376
Website	www.houghtonintl.com	Customer Service	(888) 459-9844
Telephone	(610) 666-4000		

2. Hazardous Ingredients

Component	Cas No	% by Weight	Hazards
Aliphatic Petroleum Solvent	64742-47-8 8052-41-3	>60	TLV: 100 ppm PEL: 500 ppm STEL: N/E Other: N/E
Glycol Ether	112-34-5	1-10	TLV: N/E PEL: N/E STEL: N/E Other: 35 ppm (Mfr)
Mineral Oil	64742-52-5 64742-54-7 64742-65-0	1-10	TLV: 5 mg/m³ as oil mist PEL: 5 mg/m³ as oil mist STEL: 10 mg/m³ as oil mist Other: N/E

N/E - Not Established; N/A - Not Applicable; Mfr - Manufacturer Recommendation

3. Hazards Identification

Primary Entry Routes: EYES, SKIN, INHALATION

Acute Effects

- Inhalation: INHALATION OF MISTS MAY CAUSE HEADACHE, DIZZINESS AND IRRITATION OF THE UPPER RESPIRATORY TRACT.
- Eye: MAY CAUSE IRRITATION.
- Skin: PROLONGED OR REPEATED CONTACT MAY CAUSE IRRITATION. MAY HAVE A DEFATTING EFFECT.
- Ingestion: MAY CAUSE NAUSEA OR DISCOMFORT. ASPIRATION MAY CAUSE LUNG DAMAGE.

Continued on Next Page

3. Hazards Identification - continued

Carcinogenicity	NO COMPONENT KNOWN TO BE PRESENT IN THIS PRODUCT AT GREATER THAN 0.1% IS LISTED AS A CARCINOGEN BY IARC, NTP OR OSHA.
Medical Conditions Aggravated by LongTerm Exposure	PRE-EXISTING SKIN AND RESPIRATORY CONDITIONS MAY BE AGGRAVATED BY EXPOSURE.
Chronic Effects	UNKNOWN

HMIS:

Health	1
Flammability	2
Reactivity	0

* indicates that there may be chronic health effects present

4. First Aid Measures

Inhalation	REMOVE TO A SOURCE OF FRESH AIR.
Eye Contact	FLUSH WITH WATER FOR 15 MINUTES. CONSULT PHYSICIAN.
Skin Contact	WASH WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND LAUNDER BEFORE REUSING. CONSULT PHYSICIAN IF IRRITATION PERSISTS.
Ingestion	DO NOT INDUCE VOMITING. CONSULT PHYSICIAN.
Note to Physicians	NO SPECIFIC ANTIDOTE KNOWN. BASED ON INDIVIDUAL REACTIONS OF THE PATIENT, THE PHYSICIAN'S JUDGMENT SHOULD BE USED TO CONTROL SYMPTOMS AND CLINICAL CONDITIONS.

N/A - Not Applicable

5. Fire Fighting Measures

Flash Point	105° F (PENSKY MARTENS CLOSED CUP)
Autoignition Temperature	N/D
LEL	N/D
UEL	N/D

5. Fire Fighting Measures - continued

Extinguishing Media	USE CARBON DIOXIDE, DRY CHEMICAL OR FOAM. USE WATER TO COOL CONTAINERS EXPOSED TO FIRE.
Unusual Fire or Explosion Hazards	PRODUCT FLOATS ON WATER CREATING A POTENTIAL FLOATING FIRE HAZARD. VAPOR ACCUMULATION MAY FLASH OR EXPLODE IF IGNITED.
Fire Fighting Instructions	WEAR PROTECTIVE GEAR DURING FIREFIGHTING. DO NOT DIRECT A SOLID STREAM OF WATER INTO BURNING POOLS. THIS MAY CAUSE FROTHING AND INCREASE FIRE INTENSITY.

NFPA:

Health	1
Flammability	2
Reactivity	0
Special	N/A

N/A - Not Applicable; ND - Not Determined; > - Greater Than; < - Less Than

6. Accidental Release Measures

Spill or Release Procedures	REMOVE ALL SOURCES OF IGNITION. PROVIDE VENTILATION. APPLY DRY ABSORBENT MATERIAL AND SWEEP UP THOROUGHLY.

7. Handling and Storage

Handling Precautions	USE WITH ADEQUATE VENTILATION. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING. PROPERLY GROUND ALL EQUIPMENT.
Storage Requirements	STORE AWAY FROM SOURCES OF HEAT, IPEN FLAMES AND SPARKS. KEEP CONTAINERS CLOSED WHEN NOT IN USE. STORE IN A COOL, DRY, WELL VENTILATED AREA.

8. Exposure Controls/Personal Protection

Engineering Controls	PROVIDE GENERAL AND/OR LOCAL EXHAUST VENTILATION TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW THE EXPOSURE LIMITS IN SECTION 2.

Personal Protective Equipment

8. Exposure Controls/Personal Protection - continued

Eye/Face Protection	SAFETY GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS.
Skin Protection	RUBBER GLOVES, LONG SLEEVES TO MINIMIZE SKIN CONTACT. USE APRON OR OVERALLS IF SPLASHING IS POSSIBLE.
Respiratory Protection	REQUIRED IF THE EXPOSURE LIMITS IN SECTION 2 ARE EXCEEDED. RECOMMENDED IN MISTING CONDITIONS.
Other	EYE WASH AND SAFETY SHOWER RECOMMENDED.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, or applying cosmetics.

9. Physical and Chemical Properties

Appearance	CLEAR LIGHT AMBER COLOR LIQUID	pH (Neat)	N/A
Odor	ALIPHATIC SOLVENT ODOR	Water Solubility	INSOLUBLE
Vapor Pressure (mmHg)	N/D	Boiling Point	>350°F
Vapor Density (Air = 1)	N/D	Freezing/ Melting Point	N/D
Specific Gravity (Water = 1)	0.85 @ 60°F	Evaporation Rate (BuAc = 1)	<1

N/D - Not Determined; N/A - Not Applicable; > - Greater Than; < - Less Than

10. Stability and Reactivity

Stability	THIS PRODUCT IS STABLE AT ROOM TEMPERATURE IN CLOSED CONTAINERS UNDER NORMAL STORAGE AND HANDLING CONDITIONS.
Conditions to Avoid	KEEP AWAY FROM HEAT AND SOURCES OF IGNITION.
Chemical Incompatibilities	STRONG OXIDIZERS
Hazardous Decomposition Products	THERMAL; OXIDES OF CARBON AND SULFUR
Hazardous Polymerization	HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

11. Toxicological Information

NO DATA AVAILABLE

12. Ecological Information

NO DATA AVAILABLE

13. Disposal Considerations

Disposal	FOLLOW PERTINENT REGULATIONS FOR DISPOSAL. 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)
RCRA Hazardous Waste Number	D001-IGNITABILITY; D005 ->100PPM BARIUM

14. Transportation Information

Proper Shipping Name	NON-BULK GROUND TRANSPORTATION - NOT HAZARDOUS. BULK - COMBUSTIBLE LIQUIE, N.O.S. (STODDARD SOLVENT), NA 1993, III. AIR AND IMO - PETROLEUM DISTILLATES, N.O.S., 3, UN 1268, III.

15. Regulatory Information

TSCA Section 8(b)	ALL OF THE COMPONENTS IN THIS PRODUCT ARE ON THE TSCA INVENTORY.
CERCLA Reportable Quantity	NONE
SARA Title III, Section 313	1% GLYCOL ETHER, 2% BARIUM COMPOUND (0.3%Ba IN PRODUCT)
Ozone Depleting Substances	THIS PRODUCT WAS NOT MANUFACTURED, DOES NOT CONTAIN, AND WAS NOT PACKAGED USING ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCE AS DEFINED BY THE CLEAN AIR ACT.

16. Other Information

Prepared By GARY CARL

Title MANAGER, PRODUCT SAFETY

Disclaimer: The information presented herein has been compiled from sources considered to be dependable and is accurate as of the date issued. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use are beyond our control, Houghton International makes no warranty regarding the accuracy of such data or its suitability for any purchaser¿s use or for any consequence of its use. The data in this MSDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. Safe handling and use remains the responsibility of the purchaser and the purchaser has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. Houghton International assumes no responsibility for injury to the recipient or to third persons or for any damage to any property and the recipient assumes all such risks.

Manufacturers Name and Address:

Baltimore Tool Works, Inc.
1110 Race Street
Baltimore, Maryland 21230

Date of Preparation:

May 21, 1986

Name and Title of Contact Person:	Telephone No.:	Emergency Telephone No.:
H.D. McCarty, President	301-752-5297	301-752-5297

Product Name:	Chemical Names:	Trade Names:
Hand Tools	AISI-C1095 Steel Bars	BALTIMORE

Chemical Composition:

Component	CAS #	% Weight	Health Hazard or Nuisance Products (Fume Components)	OSHA Permissible Exposure Limits For Fumes	ACGIH Threshold Limit Value
Iron	1309-37-1	97-99	Iron Oxide Fume	10 mg/m^3	5 mg/m^3
Carbon	7440-44-0	.96	None Listed	--	--
Manganese	7439-96-5	.40	Managanese	5 mg/m^3	1 mg/m^3
Phosphorus (Maximum)	7723-14-0	.012	Phosphorus (Yellow)	0.1 mg/m^3	0.1 mg/m^3
Sulfur (Maximum)	7704-34-9	.029	Sulfur Dioxide	5 ppm	2 ppm
Silicon	7740-21-3	.20	Silicon	--	5 mg/m^3

Coating

None

Note: At room temperature, this product does not pose a health hazard. However, welding, cutting, grinding, sawing or burning may generate the health hazards or nuisances listed above.

Chemical and Physical Properties

Physical State:	Solid
Appearance:	Gray or Black (may be coated)
Odor:	None
Boiling Point:	N/A
Melting Point:	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A
Evaporation Rate:	N/A
Solubility in Water:	N/A
ph:	N/A

Personal Protective Equipment/Measures

Respiratory Equipment: Any NIOSH approved dust/mist/fume should be used if OSHA PEL is exceeded, and is recommended when this product is being heated. Respirators are considered insufficient protection against carbon monoxide fumes.

Protective Clothing:	Varies according to use.
Gloves:	Refer to local, state
Eye Protection:	and federal codes for
Ventilation Requirements	selection. Required for welding, brazing, cuttin or other heating operations.
Other:	As per welding requirements.

Fire and Explosion Hazard Data

Ignition Temperature:	N/A
Flash Point	N/A
Upper Explosive Limit:	N/A
Lower Explosive Limit:	N/A
Extinguishing Media:	N/A
Special Fire Fighting Procedures:	N/A

Reactivity Data

Stability:	Stable
Incompatabilities:	None
Hazardous Polymerization:	Does not occur
Decomposition Products:	Iron oxide, manganese, phosphorus (yellow), sulfur dioxide, silicon

Route of Exposure:

Inhalation

Effects of Overexposure: - (Acute and chronic)

Iron (Iron Oxide) - Metallic taste, irritation of eyes, nose and throat, metal fume fever, pulmonary effects, siderosis.

Manganese - Metal fume fever, dry throat, tight chest, coughing, loss of strength, insomnia, shortness of breath, low back pain, vomiting, fatique, bronchitis, pheumonitis, loss of coordination, Parkinson's disease.

Phosphorus (Yellow) - Eye and respiratory irritation, abdominal pain, nausea, jaundice, dental pain, jaw pain, salivation, eye and skin burns, anemia, physical wasting.

Sulfur (Sulfur Dioxide) - Irritation to eyes, nose and throat, runny nose, bronchial constriction, eye and skin burns.

Silicon - Coughing.

Carcinogenicity: None Known

First Aid:

Move victim to fresh air, wash eyes, apply artificial respiration, and seek a physician's help, as required.

Spill and Leak Response:

Clean Up: N/A
Disposal: Recycle as scrap metal (nonhazardous under RCRA as sold)

Precautions For Safe Handling and Use:

Welding, Cutting, etc.: This operation should be performed in areas with adequate ventilation and appropriate respiratory protection.
Handling & Storage: N/A
Other Precautions: N/A

Adequate ventilation and/or respiratory protection should be provided if exposure limits in chemical composition section are exceeded.

Use good housekeeping practices to prevent accumulations of dust and to keep airborne dust concentrations to a minimum.

All information, recommendations, and suggestions contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made by Baltimore Tool Works, Inc. with respect to the information provided.

Employers should use this information only as a supplement to other information gathered by them. Since the actual use of this product is beyond our control, and it is each employer's responsibility to assure the safety and health of their employees, Baltimore Tool Works, Inc. will not assume liability arising out of the use of this product by others.

This data sheet is provided by Baltimore Tool Works, Inc. to inform users of hazards associated with this product, so that appropriate protective measures may be taken. The data herein is based primarily upon information provided by the suppliers of the raw material and chemicals used in the manufacture of this product and the NIOSH/OSHA Pocket Guide to Chemical Hazards. The product data protective measures indicated are not necessarily the sum total of all protective measures or data. Baltimore Tool Works, Inc. makes no warranty with respect to the accuracy of the information provided by their suppliers or NIOSH/OSHA and disclaims all liability or reliance thereof.

"ZYTEL" NYLON RESINS IN SYNONYM LIST ZYT002

PL00A402 Revised 13-Jul-05 Printed 07/14/2005

Substance ID :150000000692

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"ZYTEL" is a registered trademark of DuPont.

Tradenames and Synonyms

"ZYTEL" 80G25HS BK117;
"ZYTEL" 80G33HS1L BK104, 80G33HS1L BK104W,
"ZYTEL" 80G33HS1L BKB010, 80G33HS1L NC010,
"ZYTEL" 80G33HS1L NC010W;
"ZYTEL" 80G33L BKB151, 80G33L NC010;
"ZYTEL" 80G43HS1L BK104, 80G43HS1L BKB010,
"ZYTEL" FE380005 BK151,
"ZYTEL" FE380006 BKB521, #

Company Identification

MANUFACTURER/DISTRIBUTOR
E.I. du Pont Canada Company
P.O. Box 2200
Streetsville
Mississauga, Ontario L5M 2H3

PHONE NUMBERS
Product Information : 1-800-387-2122
Medical Emergency : 1-800-441-3637 (24 hours)

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
POLYHEXAMETHYLENE ADIPAMIDE (Nylon 66)	32131-17-2	>45 WT%
GLASS FIBER		20-45 WT%
NON-REGULATED PROPRIETARY TOUGHENER		<15 WT%
NON-REGULATED LUBRICANTS, STABILIZERS, AND PIGMENTS		<5 WT%
CARBON BLACK	1333-86-4	0-2 WT%

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.

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 "ZYTEL" Molding Guide before using this product.

POLYHEXAMETHYLENE ADIPAMIDE (Nylon 66)

In general, skin irritation has not been produced in human patch tests with Nylon 66. However, a small percentage of subjects may respond to prolonged contact with redness of skin. Significant skin permeation, and systemic toxicity, after contact appears unlikely. There are no reports of human sensitization.

If particles of Nylon 66 contact the eye, mechanical irritation with tearing, pain or blurred vision may result.

GLASS FIBER

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.

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.

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
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
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:

Hazardous gases/vapors produced in fire are ammonia, carbon monoxide, traces of hydrogen cyanide, and, aldehydes.

Extinguishing Media

Water, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus.

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.

Spilled material is a slipping hazard.

Spill Clean Up

Recover undamaged and minimally contaminated material for reuse and reclamation. Shovel or sweep up.

HANDLING AND STORAGE

Storage

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 and face contact due to splashing or spraying of molten material. A full face mask 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, sanding, or sawing 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

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

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

Exposure Guidelines

Exposure Limits
"ZYTEL" NYLON RESINS IN SYNONYM LIST ZYT002

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
POLYHEXAMETHYLENE ADIPAMIDE (Nylon 66)

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

GLASS FIBER

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.

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 : >200 C (>392 F)
Solubility in Water : Insoluble
Odor : None
Form : Pellets.
Specific Gravity : >1
Color : Black, Brown, Gray, Natural Color.

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Conditions to Avoid

Temperatures above 340 C (644 F) .

Incompatibility with Other Materials

Incompatible or can react with strong acids, strong oxidizers.

Decomposition

HAZARDOUS DECOMPOSITION PRODUCTS - cyclopentanone, carbon monoxide, aldehydes.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Nylon 66
Oral LD50, rat: > 10,000 mg/kg

Nylon 66 is not a skin irritant in tests with animals.

Single exposure by ingestion to high doses caused decreased body weight. Long-term exposure caused no significant toxicological effects.

Repeated inhalation exposure caused histopathological changes of the lungs, and kidneys.

In animal testing Nylon 66 has not caused carcinogenicity. No animal data are available to define developmental, reproductive or mutagenic hazards.

Fiber Glass
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.

ECOLOGICAL INFORMATION

Ecotoxicological Information

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

Shipping Information -- Canada

This material is 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)- 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)- Carbon black.

Canadian Regulations

WHMIS Classification:

This is not a WHMIS Controlled Product.

CEPA Status : DSL: REPORTED/INCLUDED.

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

(Continued)

POLYMERS E.I. du Pont Canada Company
Box 2200, Streetsville
Mississauga, Ontario, L5M 2H3
(905) 821-3300.

End of MSDS

MATERIAL SAFETY DATA SHEET

325-89

Revision Date: 3/6/03

1. MANUFACTURER AND PRODUCT INFORMATION

Sinclair & Rush, Inc.
123 Manufacturers Drive
Arnold, MO 63010
636-282-6800

HMIS Ratings:

Health	1
Flammability	1
Reactivity	0
Personal Protection	B

Product Identification: 325-89
Description: Textured Black Plastisol

24 –Hour Emergency #: 1-800-424-9300 (CHEMTREC)

2. HAZARDOUS INGREDIENTS

This product does not contain any hazardous components at or above reportable levels.
This product does not contain any toxic chemicals subject to the reporting requirements of Section 313 of Title III, or of 40 CFR Part 372.

3. PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance and Odor: Liquid, mild odor
Boiling Point: N/A
Vapor Pressure: Unknown
Vapor Density: Unknown
Solubility in Water: Insoluble
Specific Gravity: 1.2
Melting Point: N/A
Evaporation Rate: Unknown

4. HEALTH HAZARD DATA

Routes of Entry:

Inhalation:	Fumes emitted during the fusion process can cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed.
Skin Contact:	May cause skin irritation.
Eye Contact:	May cause eye irritation.

5. FIRST AID PROCEDURES

Inhalation:	Remove to fresh air. Seek medical attention if necessary.
Ingestion:	May be necessary to induce vomiting – seek medical advice.
Skin Contact:	Wash thoroughly with soap and water.
Eye Contact:	Rinse eyes with water for at least 15 minutes. Seek medical attention if necessary.

6. FIRE AND EXPLOSION HAZARD DATA

Flash Point:	N/A
Flammable Limits:	N/A
Extinguishing Media:	CO_2, foam, dry chemical, water spray.
Special Fire Fighting Procedures:	Self-contained breathing apparatus should be worn to avoid inhalation of smoke.
Unusual Fire and Explosion Hazards:	Hydrogen chloride may be generated upon combustion of material. Extreme heat can cause pressure buildup in closed containers, which may lead to rupture or explosion.

7. REACTIVITY DATA

Stability: Stable

Hazardous Polymerization:	Will not occur.
Hazardous Decomposition:	Elevated temperatures may produce hydrogen chloride, carbon monoxide, and carbon dioxide.
Conditions to Avoid:	Open flames or prolonged exposure to temperatures above 300° F will cause thermal decomposition.

8. PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storage:	Store in a cool dry place; provide adequate ventilation during processing.
Spill or Leak Procedures:	Contain the spill – do not allow discharge into the sewer system. Soak up the spill using an inert absorbent material such as sawdust, and scoop the absorbed material into a container for disposal.
Waste Disposal Method:	Recycle, incinerate, or landfill in accordance with federal, state, and local regulations.
Engineering Measures:	Ventilation is required in processing areas to prevent inhalation of fumes from heated material.
Personal Protection:	Protective gloves and safety glasses are recommended to prevent skin and eye contact.
General Hygiene:	Observe good industrial hygiene and safety practices. Wash hands with soap and water before breaks and at the end of the day.

9. REGULATORY INFORMATION

California Proposition 65:	WARNING! This product contains a chemical known to the State of California to cause cancer. (Vinyl Chloride Monomer, CAS # 75-01-4)

10. ADDITIONAL INFORMATION

This information is furnished without warranty, express or implied – it is the responsibility of the user to determine the suitability and completeness of such information and recommendations for its own particular use. Vendor shall not be responsible for any direct, incidental, or consequential damages of whatsoever nature resulting from the publication of, use of, or reliance upon such information and recommendations.