

Safety Data Sheet

TERLURAN® GP-22 NATURAL

Revision date : 2011/12/02
Version: 2.0

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(30057689/SDS_GEN_US/EN)

1. Product and Company Identification

Company

Styrolution America LLC
25846 SW Frontage Road
Channahon, IL 60410, USA

24 Hour Emergency Response Information

For Chemical Emergency
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887
(collect calls accepted)

Synonyms:

ACRYLONITRILE BUTADIENE STYRENE

2. Hazards Identification

Emergency overview

CAUTION:

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

INGESTION MAY CAUSE GASTRIC DISTURBANCES.

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

Use with local exhaust ventilation.

Wear NIOSH-certified chemical goggles.

Eye wash fountains and safety showers must be easily accessible.

Wear protective clothing.

State of matter: solid

Colour: The colour is derived from the trade name.

Odour: faint specific odour

Potential health effects

Primary routes of exposure:

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:

Contact with molten product may cause thermal burns. The resin in pelleted form poses a low hazard. No other known acute effects.

Irritation / corrosion:

Irritation is possible when the product comes in contact with the skin, respiratory tract or the eyes.

Sensitization:

No data was available concerning sensitizing properties. The chemical structure does not suggest such an effect.

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Chronic toxicity:

Repeated dose toxicity: Product poses a low hazard under typical manufacturing and use conditions.

Medical conditions aggravated by overexposure:

Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product. See MSDS section 11 - Toxicological information.

Signs and symptoms of overexposure:

No significant reaction of the human body to the product known.

Potential environmental effects

Aquatic toxicity:

The product has not been tested. The statement has been derived from the structure of the product.

Terrestrial toxicity:

No data available concerning terrestrial toxicity.

Degradation / environmental fate:

In accordance with the required stability the product is not readily biodegradable. The product has not been tested. The statement has been derived from the structure of the product.

Bioaccumulation / bioconcentration:

Discharge into the environment must be avoided.

3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
9003-56-9	> 98.0 %	Styrene-acrylonitrile-butadiene copolymer
100-42-5	< 0.1 %	Styrene

4. First-Aid Measures

General advice:

Immediately remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek immediate medical attention.

If swallowed:

Ingestion is not likely in the available physical form. If ingested, seek medical attention.

Note to physician

Treatment: Treat according to the symptoms under clinical conditions.

5. Fire-Fighting Measures

Flash point: > 400 °C

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Autoignition:	> 400 °C	(DIN 51794)
Lower explosion limit:		As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:		As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Flammability:	not highly flammable	
Self-ignition temperature:		not self-igniting

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Hazards during fire-fighting:

carbon dioxide, carbon monoxide, hydrogen cyanide,
The substances/groups of substances mentioned can be released in case of fire.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions:

Avoid inhalation. Sources of ignition should be kept well clear.

Environmental precautions:

This product is not regulated by RCRA. This product is not regulated by CERCLA ("Superfund").

Cleanup:

Reclaim for processing if possible. After decontamination, spill area can be washed with water.

For small amounts: Sweep/shovel up.

For large amounts: Sweep/shovel up. Vacuum up spilled product.

Further information:

High risk of slipping due to leakage/spillage of product.

7. Handling and Storage

Handling

General advice:

Ensure adequate ventilation.

Protection against fire and explosion:

No explosion proofing necessary.

Storage

General advice:

Protect against moisture. Avoid extreme heat. Avoid all sources of ignition: heat, sparks, open flame.

Storage stability:

Avoid prolonged storage at high temperatures.

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8. Exposure Controls and Personal Protection

Components with workplace control parameters

Styrene	OSHA	TWA value 100 ppm ; CLV 200 ppm ; max. conc. 600 ppm ;
acrylonitrile	ACGIH	TWA value 20 ppm ; STEL value 40 ppm ;
	OSHA	TWA value 2 ppm ; STEL value 10 ppm ; OSHA Action level 1 ppm ; Skin Designation ; The substance can be absorbed through the skin.
	ACGIH	TWA value 2 ppm ; Skin Designation ; The substance can be absorbed through the skin.
butadiene	OSHA	TWA value 1 ppm ; STEL value 5 ppm ; OSHA Action level 0.5 ppm ;
Styrene	ACGIH	TWA value 2 ppm ;
	OSHA	TWA value 100 ppm ; CLV 200 ppm ; max. conc. 600 ppm ;
	ACGIH	TWA value 20 ppm ; STEL value 40 ppm ;

Advice on system design:

Provide local exhaust ventilation to control dusts/vapours.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) particulate respirator. Wear respiratory protection if ventilation is inadequate. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

Wear gloves to prevent contact during mechanical processing and/or hot melt conditions.

Eye protection:

Safety glasses with side-shields. Wear splash goggles to protect from hot molten substance/product.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

Wear protective clothing to prevent contact during mechanical processing and/or hot melt conditions. Avoid inhalation of dust. Wash soiled clothing immediately.

9. Physical and Chemical Properties

Form:	pellets
Odour:	faint specific odour
Colour:	The colour is derived from the trade name.
pH value:	not soluble
softening temperature:	> 100 °C (DIN EN ISO 306)
onset of boiling:	The substance / product decomposes therefore not determined.
Vapour pressure:	not applicable
Density:	approx. 1.04 g/cm ³ (20 °C, 1 bar) (DIN 53479)
Relative density:	1.06 - 1.08
Bulk density:	approx. 600 kg/m ³ (20 °C, 1 bar) (DIN 53466)
Vapour density:	not applicable, The product is a non-volatile solid.

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Partitioning coefficient n-octanol/water (log Pow):	not applicable
Viscosity, dynamic:	not applicable
Solubility in water:	not relevant
	insoluble

10. Stability and Reactivity

Conditions to avoid:

Avoid extreme heat. Avoid all sources of ignition: heat, sparks, open flame.

Substances to avoid:

strong oxidizing agents

Hazardous reactions:

No hazardous reactions known.

Decomposition products:

Hazardous decomposition products: hydrogen cyanide, monomers, hydrocarbons, gases/vapours, cyclic low molecular weight oligomers, oxides, Gaseous products of degradation can be given off if the product is greatly overheated.

Thermal decomposition:

approx. 300 °C

To avoid thermal decomposition, do not overheat.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

not fire-propagating

11. Toxicological information

Acute toxicity

Information on: acrylonitrile

Assessment of acute toxicity:

Of high toxicity after short-term inhalation. Of high toxicity after short-term skin contact. Of high toxicity after single ingestion.

Information on: Styrene

Assessment of acute toxicity:

Of moderate toxicity after short-term inhalation. High concentrations in the air may cause narcosis. Virtually nontoxic after a single skin contact. Virtually nontoxic after a single ingestion. Harmful: may cause lung damage if swallowed.

Information on: Styrene, acrylonitrile, 1,3-butadiene decomp.

Oral:

No data available concerning acute toxicity.

Dermal:

No data available concerning acute toxicity.

Irritation / corrosion

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Information on: acrylonitrile
Assessment of irritating effects:
Irritating to skin. May cause severe damage to the eyes.

Information on: Styrene
Assessment of irritating effects:
Eye contact causes irritation. Skin contact causes irritation.

Information on: Styrene, acrylonitrile, 1,3-butadiene decomp.
Assessment of irritating effects:
Thermal decomposition products of the substance can irritate the eyes, skin, and respiratory tract.

Skin:

Prolonged contact with the product can result in skin irritation.

Eye:

Similar findings as for skin apply to eyes.

Sensitization

Information on: Styrene
Assessment of sensitization:
Skin sensitizing effects were not observed in animal studies.

No data available concerning sensitizing effects.

No data available concerning sensitizing effects.

Repeated dose toxicity

Information on: Styrene
Assessment of repeated dose toxicity:
The substance may cause deafness after repeated inhalation.

Carcinogenicity

Information on: acrylonitrile
The substance caused cancer in animal studies.
IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).
Information on: Styrene
IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). NTP listed as reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Information on: acrylonitrile
Animal studies gave no indication of a fertility impairing effect at doses which were not toxic to the parental animals.

Other Information:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

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12. Ecological Information

Degradability / Persistence Biological / Abiological Degradation

Evaluation: The polymer component of the product is poorly biodegradable.
The insoluble fraction can be removed by mechanical means in suitable waste water treatment plants.

Bioaccumulation

The product will not be readily bioavailable due to its consistency and insolubility in water.

Other adverse effects:

No data can be given due to the product's insolubility in water.

13. Disposal considerations

Waste disposal of substance:

This product is not regulated by RCRA. This product is not regulated by CERCLA ('Superfund'). Incinerate in a licensed facility. Do not discharge substance/product into sewer system. Dispose of in accordance with national, state and local regulations.

Container disposal:

Dispose of in accordance with national, state and local regulations.

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

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EPCRA 311/312 (Hazard categories): Not hazardous;

EPCRA 313:

<u>CAS Number</u>	<u>Chemical name</u>
100-42-5	Styrene

State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
MA, NJ, PA	100-42-5	Styrene

CA Prop. 65:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

16. Other Information

Recommended use: for industrial processing only

HMIS III rating

Health: 1 Flammability: 1 Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

MSDS Prepared by:

Styrolution NA Product Regulations
Info_North_America@styrolution.com
MSDS Prepared on: 2011/12/02

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IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use.

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STYROLUTION WILL NOT MAKE ITS PRODUCTS AVAILABLE TO CUSTOMERS FOR USE IN THE MANUFACTURE OF MEDICAL DEVICES WHICH ARE INTENDED FOR PERMANENT IMPLANTATION IN THE HUMAN BODY OR IN PERMANENT CONTACT WITH INTERNAL BODILY TISSUES OR FLUIDS.

END OF DATA SHEET

SAFETY DATA SHEET



Revision Date 21-Sep-2015

Version 1

1. IDENTIFICATION

Product identifier

Product Name ABS GP22 025.000:1 YELLOW

Other means of identification

Product Code SB13631408

Recommended use of the chemical and restrictions on use

Recommended Use Colorant / Additive or base polymer used for manufacture of plastic components.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

Clariant Corporation
BU Masterbatches
85 Industrial Drive
Holden, MA 01520
Phone: 508-829-6321

Information of the substance/preparation:

Product Safety: Product Stewardship: 1-517-629-7703 / 1-704-331-7710 (8:00 a.m. - 6:00 p.m. EST
Monday - Friday)

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION**GHS Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity	Category 1B
Reproductive toxicity	Category 2

GHS Label elements**Danger****Hazard statements**

May cause cancer

Suspected of damaging fertility or the unborn child

**Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

May form combustible dust concentrations in air if converted to small particles during further processing, handling, or by other means

Other Information

May be harmful if swallowed

Unknown acute toxicity

2.97738% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS**Substance**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS No.	Weight-%	Trade Secret
2-Propenenitrile, polymer with ethenylbenzene	9003-54-7	15 - 40	*
Titanium oxide (TiO ₂)	13463-67-7	10 - 30	*
Benzene, ethenyl-	100-42-5	0.1 - 1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**Description of first aid measures**

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. In case of burns, immediately cool affected skin for as long as possible with cold water. Removal of solidified molten material from skin requires medical assistance.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. If symptoms persist, call a physician.
Ingestion	Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms	The most important known symptoms and effects are described in Section 11.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Flash point	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Self ignition	No information available
Ignition temperature	No information available
Minimum Ignition Energy	No information available
Impact Sensitivity	No information available
Hazardous combustion products	Carbon monoxide. Carbon dioxide (CO ₂). Hydrogen chloride. Hazardous decomposition products due to incomplete combustion. Oxides of sulfur. Nitrogen oxides (NO _x). Hazardous Organic Compounds. Aldehydes. Hydrogen cyanide. Hazardous metal fumes and oxides. Acrylonitrile. Styrene.
Suitable extinguishing media	Water spray (fog). Carbon dioxide (CO ₂). Foam. Dry chemical.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
<u>Specific hazards arising from the chemical</u>	
Combustible material. In the event of fire and/or explosion do not breathe fumes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Avoid creating dust. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Runoff may pollute waterways. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.	
Explosion data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
Protective equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Avoid creating dust. Take precautionary measures against static discharges. With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. Following product recovery, flush area with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. Wear protective clothing to prevent contact during mechanical processing and /or hot melt conditions. Do not smoke in areas where polymer dust is present.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep in an area equipped with sprinklers.

Incompatible materials Strong oxidizing agents. Strong acids. Strong bases. Finely powdered metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium oxide (TiO ₂) 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Benzene, ethenyl- 100-42-5	STEL: 40 ppm TWA: 20 ppm	TWA: 100 ppm (vacated) TWA: 50 ppm (vacated) TWA: 215 mg/m ³ (vacated) STEL: 100 ppm (vacated) STEL: 425 mg/m ³ Ceiling: 200 ppm	IDLH: 700 ppm TWA: 50 ppm TWA: 215 mg/m ³ STEL: 100 ppm STEL: 425 mg/m ³

Appropriate engineering controls

Engineering Controls

Showers
Eyewash stations
Ventilation systems. Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment

Eye/face protection	Safety glasses with side-shields for product as sold. If in a molten state, wear Face Shield in addition to safety glasses.
Hand Protection	Nitrile gloves. Butyl Rubber gloves. PVC gloves. Neoprene gloves. Heat resistant gloves are recommended when handling molten materials.
Skin and body protection	Clothing suitable to prevent skin contact for molten material.
Respiratory protection	Use NIOSH/MSHA approved respirators following manufacturer's recommendations where dust may be generated. When processed at elevated temperatures, adequate ventilation and/or respiratory protection is required. Refer to Section 5 (Hazardous Combustion Products) and Section 8 (Occupational Exposure Limits) to determine respiratory protection and follow manufacturer's recommendations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid	Odor	No significant odor
Appearance	pellets	Odor threshold	No information available
Color	Varies		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Minimum Ignition Energy	No information available	
Impact Sensitivity	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

10. STABILITY AND REACTIVITY

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated

Chemical stability

Stable.

Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

To avoid thermal decomposition, do not overheat. Heating can release hazardous gases. Do not exceed recommended processing temperature. Avoid open flames, sources of ignition and excessive heat. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases. Finely powdered metals.

Hazardous Decomposition Products

Hazardous Organic Compounds. Acrylonitrile. Hydrogen cyanide. Styrene. Hydrogen chloride. Aldehydes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	Not an expected route of exposure. Inhalation of dust in high concentration may cause irritation of respiratory system.
Eye contact	Not an expected route of exposure.
Skin Contact	Not an expected route of exposure.
Ingestion	Not an expected route of exposure.

Numerical measures of toxicity - Component Information

The information provided on the hazardous ingredient(s) listed below applies to the individual ingredient(s) in their pure form. The form of the ingredient(s) provided to you is either liquid or encapsulated in plastic and as a consequence the values presented by this data may not be representative of the finished product. No data exists on the finished product. Individual component information is listed below

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-Propenenitrile, polymer with ethenylbenzene 9003-54-7	= 1,800 mg/kg (Rat)	> 2,000 mg/kg (Rat)	-
Titanium oxide (TiO2) 13463-67-7	> 5,000 mg/kg (Rat)	> 2,000 mg/kg (Rat)	> 6.8 mg/L (Rat) 4 h
Benzene, ethenyl- 100-42-5	= 1,000 mg/kg (Rat)	> 20,000 mg/kg (Rat)	= 11.8 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Propenenitrile, polymer with ethenylbenzene 9003-54-7	-	Group 3	-	-
Titanium oxide (TiO2) 13463-67-7	-	Group 2B	-	X
Benzene, ethenyl- 100-42-5	-	Group 2B	Reasonably Anticipated	X

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 4849 mg/kg
ATEmix (dermal) 5390 mg/kg mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity	No information available
Persistence and degradability	No information available.
Bioaccumulation	No information available.
Other adverse effects	No information available
Ozone depletion potential (ODP)	No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
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14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA

All components of this product are listed or excluded from listing on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) Inventory

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Benzene, ethenyl- 100-42-5	1000 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Benzene, ethenyl- 100-42-5	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**Revision Date** 21-Sep-2015**Revision Note**

No information available

Disclaimer

This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications.

End of Safety Data Sheet