

## **Material Safety Data Sheet**

USA

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#### EUROPE

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Visit our Website at <u>www.kraton.com</u>

#### Section 1. Material/Company Identification

#### **PRODUCT NAME**

#### **Kraton Polymers SEBS G Series Products:**

(Note: This MSDS covers all alphanumeric suffixes for the following products. Suffixes designate location of manufacture, lube type, product form and/or new commercial grade):

## G1633, G1641, G1642, G1643, G1650, G1651, G1652, G1654, G1657, G1660, G1726

#### **CHEMICAL FAMILY**

Styrene-Ethylene/Butylene-Styrene Polymer

#### **PRODUCT FAMILY**

Thermoplastic Elastomer

## **CORPORATE OFFICE**

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#### Section 2. Composition

#### **COMPONENTS**

ALL THE COMPONENTS ARE NON-HAZARDOUS.

## Section 3. Hazards Identification

#### Human Health Hazards

None

## **Safety Hazards**

Electrostatic charges may be generated during handling. Risk of self-ignition of bulk product above certain temperatures (Refer to Section 10). Specifically for powder grades and accumulated polymer dust: dust explosion could occur.

#### **Environmental Hazards**

None

## Other Hazards

Not classified as hazardous.

## **Special Notes**

These components are synthetic rubber compounds, which are essentially non-toxic. Material is non-irritating. If polymer dusts are generated, they could scratch the eyes and cause minor irritation to the respiratory tract.

## Section 4. First Aid Measures

## **Symptoms and Effects**

None

#### Inhalation

If dust is inhaled, obtain medical attention.

**Skin** Flush skin with water.

**Eye** Flush eye with water.

Ingestion None

None

Advice to physicians

Treat symptoms.

#### Section 5. Fire Fighting Measures

#### Specific Hazards

Not flammable but will burn. Combustion products may include carbon monoxide and carbon dioxide.

## **Extinguishing Media**

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

## **Unsuitable Extinguishing Media**

Water in a spray may disperse fire.

## **Protective Equipment**

Full protective clothing and self contained breathing apparatus.

## Section 6. Accidental Release Measures

## Personal Precautions

Avoid generating dust.

## **Environmental Precautions**

None

## **Clean-up Methods - Small Spillage**

Shovel up and place in a labeled, sealable container for subsequent disposal as required by local, state, federal, international or country specific regulations.

## **Clean-Up Methods - Large Spillage**

Transfer to a labeled, sealable container for product recovery or disposal as required by local, state, federal, international or country specific regulations.

## **Protective Measures**

Wear appropriate personal protective equipment (refer to Section 8) when responding to spills.

## **Spill Management**

Shovel and sweep up or use industrial vacuum cleaner. Proper disposal should be evaluated based on the regulatory status of this material (refer to Section 13). Prevent entry into waterways, sewer, or confined areas.

## Section 7. Handling and Storage

## Handling

Avoid generation of dust. Take precautionary measures against static discharges, earth/ground all equipment. Do not breathe dust. Use local exhaust over processing area.

When processing Kraton Polymers products, maintain a fire watch if the material reaches 225 deg. C (437 deg. F) for Kraton IR and Kraton D (polymers and compounds), and 280 deg. C (536 deg. F) for Kraton G (polymers and compounds). The temperatures listed are indicated only for safety reasons (risk of fire and product degradation) and are not recommended for processing.

Degradation of the polymer (polymer breakdown) will start at lower temperatures depending on the specific processing conditions. Therefore, operating below these temperatures does not guarantee the absence of product degradation.

For more information about processing precautions, consult the Kraton Polymers product data documents or other technical literature available from your sales representative.

Static charge buildup can be a potential fire hazard when used in the presence of volatile, flammable vapors or in high airborne dust concentrations. For more information, consult the Kraton Polymers Static Electricity Safety Bulletin (Document Number K0073) available from your sales representative.

#### Storage

Keep container dry. Keep in a cool, well-ventilated place. Keep away from direct sunlight and other sources of heat or ignition. Avoid storage of bulk product at temperatures above ambient to minimize risk of exothermic degradation, self-heating and possible self-ignition (Refer to Section 10). Avoid storage under pressure or at elevated temperatures to minimize particulate clustering. Do not stack Flexible Intermediate Bulk Containers (FIBCs) or palletized bags.

#### Storage Temperatures

Ambient.

## **Product Transfer**

Take precautionary measures against static discharge. Earth/Ground all equipment.

## **Other Information**

Kraton Polymers have a tendency to accumulate static charge during transport, handling and processing. Reducing the velocity of material transfer will reduce the likeliness that a charge will be created. Static charge buildup can be a potential fire hazard when used in the presence of volatile, flammable vapors or in high airborne dust concentrations. For more information, consult the Kraton Polymers Static Electricity Safety Bulletin (Document Number K0073) available from your sales representative.

#### Section 8. Exposure Controls/Personal Protection

#### **Occupational Exposure**

None established for components. In the absence of occupational exposure standards for this product, it is recommended that the following be adopted:

## **Nuisance Dust TLV**

TWA (8 h) 10 mg/m3

## **Engineering Control Measures**

Use local exhaust ventilation.

#### **Respiratory Protection**

Where local exhaust ventilation is not practicable and odors are detected use a negative pressure half face respirator equipped with a cartridge designed to protect against organic vapors and if dust is also present a particulate pre-filter should also be used. For high airborne dust concentrations use a cartridge designed to be used against nuisance dust.

#### **Hand Protection**

Cloth gloves if desired.

## **Eye Protection**

Dust-tight mono goggles.

## **Body Protection**

Standard issue work clothes which may include: apron, safety shoes or boots as necessary.

## Section 9. Physical and Chemical Properties

Physical State: Solid Color: Clear or White Odor: Essentially odorless Flash Point: None Density: Typical between 880-95 kg/m3 at 20 Deg. C Specific Gravity: <1 Bulk density (for solids): Typical 300-400 kg/m3 at 20 Deg. C Solubility (In Water): Insoluble N-octanol/water partition coefficient (log Pow): Not applicable

## Section 10. Reactivity and Stability

## Stability

Stable under ambient conditions. Oxidizes exothermically above ambient temperature.

## **Conditions to Avoid**

Avoid contact with strong oxidizing agents. Accumulation of product in areas exposed to elevated temperatures for extended periods in air may result in self-heating and auto ignition. Avoid elevated temperatures in storage for prolonged periods of time.

## **Hazardous Decomposition Products**

Hazardous vapors from heated product are not expected to be generated under normal processing temperatures and conditions.

Although highly dependent on temperature and environmental conditions, a variety of thermal decomposition products may be present if the product is over heated, is smoldering or catches fire. These range from hydrocarbons (such as methane and propane) to toxic/irritating vapors (such as carbon monoxide and dioxide, acrolein, aldehydes and ketones). (Refer to Handling in Section 7).

## Section 11. Toxicological Information

## **Basis for Assessment**

Toxicological data has not been determined for this product. Information is based on a knowledge of the toxicology of similar products.

Acute Toxicity Oral Expected to be of low toxicity, LD50 > 2000 mg/kg

Acute Toxicity Dermal Expected to be of low toxicity, LD50 > 2000 mg/kg

Acute Toxicity Inhalation No data available.

**Skin Irritation** Not expected to be irritating.

**Eye Irritation** Not expected to be irritating.

**Skin Sensitization** Not expected to be a skin sensitiser.

## **Repeated Dose Toxicity**

Repeated exposure does not cause toxic effects.

## **Mutagenicity**

Not expected to be a mutagenic hazard.

This product does not contain any carcinogens as listed by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

## Section 12. Ecological Information

## **Basis for assessment**

Ecotoxicological data has not been determined for this product. The information below is based on a knowledge of the components and the ecotoxicology of similar products.

## Mobility

Floats on water. Remains on surface of soil.

## Persistence/Degradability

Not expected to be inherently biodegradable. Persists under anaerobic conditions.

## **Bioaccumulation**

Not expected to bioaccumulate.

Acute Toxicity - Fish Expected to be practically non toxic, LC/EC/IC 50 > 1000 mg/l

## **Acute Toxicity - Invertebrates**

Expected to be practically non toxic, LC/EC/IC 50 > 1000 mg/l

## Acute Toxicity - Algae

Expected to be practically non toxic, LC/EC/IC 50 > 1000 mg/l

## Acute Toxicity - Bacteria

Expected to be practically non toxic, LC/EC/IC 50 > 1000 mg/l

Sewage Treatment Expected to be practically non toxic, LC/EC/IC 50 > 1000 mg/l

## **Other Information**

Kraton Polymers products (the neat resin or the base product) are high molecular weight polymers which are non-toxic and biologically inactive.

## Section 13. Disposal Considerations

## Waste Disposal

Recover or recycle if possible, otherwise; incinerate or use a licensed landfill.

## **Product Disposal**

Same as for waste disposal.

## **Container Disposal**

Remove all packaging for recover or waste disposal.

## Local Legislation

The recommendations are appropriate for safe disposal. However, local, state, federal, international or country specific regulations should be considered. They may vary, and may be more stringent but must be compiled with.

If this material becomes a waste and has not been chemically altered it is not considered a hazardous waste as defined by RCRA (40CFR 261).

## Section 14. Transport Information

#### **US Department of Transportation Classification**

This material is not classified as hazardous under 49 CFR Parts 171-180.

## International Air Transportation Association Classification (IATA)

This material is not classified as hazardous.

## **International Maritime Organization (IMDG)**

This material is not classified as hazardous.

## UN, IMO, ADR/RID, ICAO Code

This material is not dangerous for conveyance under these codes.

#### Section 15. Regulatory Information

This regulatory information is not comprehensive. Other local, state, federal, international or country specific regulations may apply.

## INTERNATIONAL LEGISLATION

## CANADA – Workplace Hazardous Materials Information System (WHMIS):

"This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required." This is NOT a WHMIS controlled product.

## **EUROPE - EC Classification**

Not classified as dangerous.

## **UNITED STATES REGULATIONS:**

US Federal - Superfund Amendment & Reauthorization Act (SARA) Title III Not regulated. US Federal - Toxic Substances Control Act (TSCA) Inventory Status All components are listed. US State - California Safe Drinking Water Act Not regulated. US State - Toxic Enforcement Act (Proposition 65) Not regulated. US State - New Jersey Right-To-Know List Not regulated. US State - Pennsylvania Right-To-Know List Not regulated. Revision #: 19 Revision Date: June 27, 2007 Revisions since last change (discussion): Added a new product name to Section 1.

## Medical, Healthcare and Cosmetic Applications and Trademark Usage

**Kraton Polymers' products should not be used in any devices or materials intended for implantation in the human body as defined by the U.S. Food and Drug Administration under 21 CFR 812.3(d) and 21 CFR 860.3(d).** Kraton Polymers' may, in certain circumstances, be used in the following products or applications with prior written approval for each specific product or application: a. Cosmetics (exclusive of packaging or delivery applications). b. Drugs and other Pharmaceuticals (exclusive of packaging or delivery applications). b. Drugs and other Pharmaceuticals (exclusive of packaging or delivery applications). Kraton Polymers' trade names, trademarks, logos or other similar identifying characteristics should not be used in the manufacture, sale, or promotion of cosmetics, drugs, and pharmaceutical products or other medical/healthcare applications or materials. Kraton Polymers has no specific expertise in these markets and applications. Each customer or user of Kraton Polymers' is solely responsible for determining the suitability of the materials it selects for the intended purpose and acknowledges that it has not relied on any representations of Kraton Polymers regarding suitability for use in its intended cosmetics, drugs, pharmaceutical products or materials.

Please contact your Kraton Polymers Sales Representative for more details before using our products in these specific applications.

# Information on the food packaging clearances of individual products is available from Kraton Polymers at 800-457-2866.

## Other information

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## Disclaimer

The information in this document is based on our current knowledge and is intended to describe the product for the purposes of Health, Safety and Environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Advice in this document relates only to the product as originally supplied. Where other ingredients are added in the processing of this product, advice should be sought on their safe handling and use.