



MATERIAL SAFETY DATA SHEET

Form WI04-11A Rev. 1

Part Number(s):
11-20X-XX



Product Name: KRATON™ D2104 Thermoplastic Rubber

Release Date: May 14, 2007

1. Product and Company Identification

Trade Name & Synonyms KRATON™ D2104 Thermoplastic Rubber	MSDS Code Number 2017-13
Chemical Name NA	Manufacture / Distributor GAC International Inc.
C.A.S. Number 9003-55-8	Address 355 Knickerbocker Ave. Bohemia, NY USA 11716
Grades or Minor Variant Identities NA	Information Telephone Number 1-631-419-1700
Product Use (for Canada) NA	Emergency Telephone Number 1-631-419-1700

2. Composition of Ingredients

Hazardous Components	C.A.S. Number	Exposure Limits	%
Styrene- Butadiene-Styrene Block Copolymer	9003-55-8	NA	<65
Mineral oil	8042-47-5	NA	<40
Zinc Stearate	557-05-1	NA	<1
Magnesium Carbonate	546-93-0	NA	<1
Hydrated Amorphous Silica	63231-67-4	NA	<1
Antioxidant/Stabilizers	NA	NA	<1

3. Hazard Identification

Emergency Overview					
Appearance & Odor: Solid. Essentially odorless. Health hazards: Polymer product with no unusually emergency concerns. Physical hazards: The material will burn and should not present an unusual hazard during fires. Avoid smoke from fires.					
Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)
Eye	If polymer dusts are generated they could scratch the eyes.	NA	NA	NA	NA
Skin	NA	NA	NA	NA	NA
Inhalation	If polymer dusts are generated they could cause minor irritation to the respiratory tract.	NA	NA	NA	NA
Ingestion	NA	NA	NA	NA	NA
Other	These materials are rubber compounds which are essentially non-toxic. Material is not irritating.	NA	NA	NA	NA
Medical Conditions Aggravated by Exposure NA					
Carcinogenicity (IARC, NTP) NA					
Potential Environmental Effects NA					



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4. First Aid Measures

Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects
Eye	Flush eyes with water while holding eyelids open.	NA	NA
Skin	If contact with hot material, cool the burn area by flushing with large amounts of water. Do not attempt to remove anything from the burn area or apply burn creams or ointments. Cover the burn area loosely with a sterile dressing, if available.	NA	NA
Inhalation	NA	NA	NA
Ingestion	NA	NA	NA
Other	NA	NA	NA
Note to Physicians (Treatment, Testing, and Monitoring)			
NA			

5. Fire and Explosion Data

Flashpoint & Method: °C / °F N	Flammable (Explosive) Limits in Air LEL: NA UEL: NA	Autoignition Temperature NA	Other NA
Flame Propagation or Burning NA	Properties Contributing to Fire Intensity NA	Flammability Classification Health- , Flammability- , Reactivity- NA	
Extinguishing Media Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.		Extinguishing Media to Avoid NA	
Protection and Procedures for Firefighters Material will not burn unless preheated. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus.			
Unusual Fire and Explosion Hazards NA			

6. Accidental Release Measures

Containment Techniques NA
Spill/Leak Clean-Up Procedures and Equipment Shovel and sweep up or use industrial vacuum cleaner. Avoid generating dust clouds. Place inc container for proper disposal.
Evacuation Procedures NA
Special Instructions NA
Reporting Requirements U.S. regulations may require reporting releases of this material to the environment which exceed the reportable quantity to the national response center at (800) 424-8802.



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7. Handling and Storage

Handling Practices and Warnings

Practice good housekeeping. Do not allow product to accumulate in processing area.

Handling: Potentially toxic/irritating fumes may be evolved from heated material. KRATON thermoplastic rubber has a tendency to accumulate static charge during transport, handling and processing. Reducing the velocity of transport will reduce charging. Static charge buildup can be a potential fire hazard when used in the presence of volatile or flammable mixtures. For more information, consult the KRATON rubber static electricity safety bulletin available from your sales representative.

Storage Practices and Warnings

(°C / °F). Avoid vapors from heated material. Adequate ventilation and / or engineering controls must be employed in high temperature processing to prevent exposure to potentially toxic/ irritating fumes.

8. Exposure Control/Personal Protection

Ventilation NA		Other Engineering Controls The level of protection and types of controls necessary will vary depending upon potential exposure guidelines. Appropriate measures include: adequate ventilation and /or engineering controls when material is heated in processing.
Routes of Entry:	Personal Protective Equipment (PPE) for Normal Use: PPE selections vary based on potential exposure conditions such as handling practices, concentration and ventilation. Information on the selection of eye, skin and respiratory protection for use with this material is provided below.	PPE for Emergencies: NA
Eye/Face	Chemical goggles, or safety glasses.	NA
Skin	Use protective clothing which is chemical resistant to this material. Selection of protective clothing depends on potential exposure conditions and may include gloves, boots, suits and other items. The selection (s) should take into account such factors as job task, type of exposure and durability requirements.	NA
Inhalation	If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA respiratory protection standard, 29 CFR 1910.134. Types of respirator(s) to be considered in the selection process include: Air purifying respirator for dusts and mists, supplied-air respirator.	NA
General Hygiene Considerations and Work Practices NA		
Protective Measures During Repair and Maintenance of Contaminated Equipment NA		
Other Protective Measures and Equipment NA		

9. Physical and Chemical Characteristics

Appearance Solid. Substance chemical family: Block copolymer.		Odor Essentially odorless.
Normal Physical State: <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input checked="" type="checkbox"/> Solid <input type="checkbox"/> ____ (Other)		Boiling Point °C / °F NA Melting Point °C / °F NA Freezing Point °C / °F NA
Specific Gravity or Density (H₂O=1) <1	Solubility in Water Negligible.	pH NA
Vapor Pressure (mm Hg @ 20°C) NA	Vapor Density (AIR= 1) NA	Evaporation Rate (Butyl Acetate = 1) NA
Other NA		



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10. Stability and Reactivity Data

Incompatibility (Materials to Avoid)

Avoid contact with strong oxidizing agents. Material contains residual unsaturation which can undergo exothermic oxidative degradation. Accumulation of product in areas exposed to elevated temperatures for extended periods in air may result in self-heating and auto ignition.

Hazardous Products Produced During Decomposition

At processing temperatures, some degree of thermal degradation will occur. Although highly dependent on temperature and environmental conditions, a variety of decomposition products may be present ranging from simple hydrocarbons (such as methane and propane) to toxic/irritating vapors (such as carbon monoxide and dioxide, acrolein, aldehydes and ketones). See handling section.

Hazardous Polymerization?

May Occur May Not Occur NA

Conditions to Avoid

°C / °F Shell's internal guideline is five (5) days at 200 deg F. Avoid elevated temperatures for prolonged periods of time (example: 5 days at 200 deg F).

Stability?

Stable Unstable

Conditions to Avoid

°C / °F NA Shell's internal guideline is five (5) days at 200 deg F. Avoid elevated temperatures for prolonged periods of time (example: 5 days at 200 deg F).

11. Toxicological Information

Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic or Reproductive Effects, or Structure Activity Data

Carcinogenicity: The results of a national toxicology program 2-year inhalation study with talc indicated some evidence of carcinogenic activity in the adrenal gland of male rats and clear evidence of carcinogenicity in mice. The female rat lung tumor is likely a secondary effect due to high pulmonary overload and its associated chronic toxicity. The male adrenal effect is not likely a direct effect of talc particulates.

Other information: Elastomers are high molecular weight polymers which all evidence indicates are biologically inactive.

12. Ecological Information

Toxicity, Environmental Fate, Physical/Chemical Data, or Other Data Supporting Environmental Hazard Statements

This section will be updated as ecological reviews are completed.

13. Disposal Considerations

Regulations

General recommendations: If this material becomes a waste, it would not be a hazardous waste by RCRA criteria (40CFR 261). Place in an appropriate disposal facility in compliance with local regulations.

Properties (Physical/Chemical) Affecting Disposal

NA

14. Transport Information

Regulated for shipping?

Yes No NA

Proper Shipping Name

KRATON™ D2104 Thermoplastic Rubber

Packing Group

NA

Do changes in quantity, packaging, or shipment method change product classification?

Yes No NA

Hazard Class

NA

Identification Number

NA

Other

This material is not subject to DOT regulations under 49 CFR parts 171-180.



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15. Regulatory Information

Federal Regulations

Federal Regulatory Status: Comprehensive Environmental Release, Compensation & Liability Act (CERCLA): Zinc RQ 1000 lbs reportable spill = 418667 lbs or 49978 gal.

SARA Toxic Release (TRI) (313): Zinc (Fume of dust)

Toxic Substances Control Act (TSCA) Inventory status: Component (s) of this material is (are) listed on the EPA / TSCA inventory of chemical substances.

State Regulatory Status: This material is not regulated by California Prop 65, New Jersey right-to-know chemical list of Pennsylvania right-to-know chemical list.

International Regulations

NA

Other

NA

16. Other Information

Supplier Number: 25/ 11

Supplier Release: June 1, 2000

N/A = not applicable. NA = not available, N/E = not established. N/D = not determined.