

MATERIAL SAFETY DATA SHEET

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT

MSDS CODE AND NAME : 6310
DATE ISSUED : 08/01/2007
DATE PRINTED : 08/01/2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL IDENTITY

MSDS CODE AND NAME
6310

Chemical Name and/or Family or Description
 Polypropylene homopolymer

COMPANY INFORMATION

Flint Hills Resources, LP
 P. O. Box 2917
 Wichita, KS 67201-2917
 USA

TELEPHONE NUMBERS - 24 HOUR EMERGENCY ASSISTANCE

CHEMTREC (US) 800-424-9300
 CHEMTREC (US - Direct Dial) 703-527-3887
 CARECHEM (Canada & Mexico) +44-208-762-8322 (UK)
 CARECHEM (Europe) +44-208-762-8322 (UK)

TELEPHONE NUMBERS - GENERAL ASSISTANCE

24 HR (7 DAYS) Polymers 800-333-7210 (x-8612)
 24 HR (7 DAYS) EPS 866-400-4343
 24 HR (7 DAYS) Base Chemicals & Aromatics 800-835-1121
 8-5 (M-F, CST) MSDS Assistance 316-828-7988
 Email: msdsrequest@fhr.com

2. COMPOSITION AND INFORMATION ON INGREDIENTS

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION ARE AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1 % OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0 % OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0 % OR GREATER. THIS IS NOT INTENDED TO BE COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES' RIGHT TO KNOW AND OTHER REGULATORY INFORMATION.

Product and/or Component(s) Carcinogenic According to:

OSHA IARC NTP OTHER NONE X

Composition:

Chemical Name	CAS Number	Exposure Limits	Range In %
1-Propene, homopolymer modifiers/additives	9003-07-0		>99.0
Particulates not otherwise classified (PNOC)	CBI	10 (mg/m ³) TWA-ACGIH (INHALABLE PARTICULATE)	<1.0
		3 (mg/m ³) TWA-ACGIH (RESPIRABLE PARTICULATE)	
Particulates not otherwise regulated (PNOR)		15 (mg/m ³) TWA-OSHA (TOTAL DUST)	
		5 (mg/m ³) TWA-OSHA (RESPIRABLE FRACTION)	

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3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Appearance:
 Translucent pellets
Odor:
 Odorless

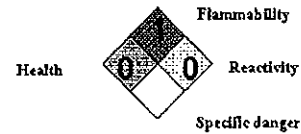
WARNING STATEMENT

CAUTION! MAY CAUSE EYE IRRITATION.

Hazardous Material Information System (United States)

Health	0
Flam	1
Reactivity	0
Personal protection	0

National Fire Protection Association NFPA (United States)



POTENTIAL HEALTH EFFECTS

Primary Route of Exposure

Eye X Skin X Inhalation X Ingestion

Effects of Overexposure

Acute:

Eyes: Product may contain residual amounts of dust or small particulates which may cause eye irritation or abrasion experienced as mild discomfort and slight excess redness of the eye.
Skin: Product may contain residual amounts of dust or small particulates that may cause skin irritation or abrasion experienced as local redness with possible mild discomfort.
Inhalation: Dust may cause irritation of the nose and throat. Overexposure to high concentrations of dust may cause respiratory irritation, experienced as coughing and difficulty breathing. Product not volatile at ambient temperatures. Vapors or mist in high concentrations, as generated from spraying or heating in an enclosed space, may cause minimal irritation.
Ingestion: May cause abdominal discomfort, nausea, and diarrhea.
Sensitization Properties: Unknown

Chronic:

Prolonged or repeated Inhalation of dust or particulates may impair lung function or cause lung damage.

Medical Conditions Aggravated by Exposure:

There is no evidence that this product aggravates an existing medical condition.

Other Remarks:

None

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4. FIRST AID MEASURES

Eyes:

Flush eyes with plenty of water for several minutes. Remove larger particles from the eye as one would any foreign object. Get medical attention if eye irritation persists or particulates are difficult to remove from the eye.

Skin:

Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

Ingestion:

None considered necessary.

Inhalation:

If irritation, headache, or drowsiness occurs, remove to fresh air.

Other Instructions:

None

5. FIRE-FIGHTING MEASURES

Ignition Temperature - AIT (degrees C):

570 (1058°F)

Flash Point (degrees C):

>343 (>650°F)

Flammable Limits % (Lower-Upper):

Not determined.

Recommended Fire Extinguishing Agents And Special Procedures:

Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards:

Hazardous melting and dripping may occur at elevated temperatures. May burn at or above flash point, and airborne dust may explode if ignited. See National Fire Protection Association Bulletin 654, "Dust Explosion Prevention, Plastics Industry 1975".

Special Protective Equipment for Firefighters:

No special equipment or procedures required.

6. ACCIDENTAL RELEASE MEASURES (Transportation Spills: CHEMTREC (800)424-9300)

Procedures in Case of Accidental Release, Breakage or Leakage:

Avoid the generation of dust clouds. Place in appropriate containers for disposal or recycle. Avoid breathing dust. Pressure demand air supplied respirators should always be worn when the airborne concentration of the contaminant or oxygen is unknown. Otherwise, wear respiratory protection and other personal protective equipment as appropriate for the potential exposure hazard. Wear gloves, goggles, and protective clothing to avoid contact with eyes, skin, or clothing. Use vacuuming or sweeping compound for clean up. Do not dry sweep or use methods that increase dusting. Prevent entry into sewers and waterways.

If spilled when molten, allow to solidify. Sweep up released material. Clean up dust or fines with a special industrial vacuum cleaner.

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7. HANDLING AND STORAGE

Precautions to be Taken In

Handling:

Practice good housekeeping and clean up spills immediately, as this product can present a serious slipping hazard. The handling of this product during loading, unloading, and fabrication may generate nuisance dusts. Take necessary precautions to prevent exposure to these dusts. When unloading bulk vehicles, do not use metal sampling devices, such as a grain thief, due to the risk of static shock and potential ignition hazards. Pneumatic handling systems, augers, and other unloading devices should be free of contaminants.

Storage:

Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment (Type)

Eye/Face Protection:

Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact. Heat resistant face shield recommended when handling hot material.

Skin Protection:

Protective clothing such as coveralls or lab coats should be worn. Launder or dry-clean when soiled. Gloves and boots resistant to chemicals and petroleum distillates also recommended. Heat protective clothing should be worn when handling heated materials.

Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation:

Local exhaust ventilation recommended if generating vapor, dust, or mist. If exhaust ventilation is not available or inadequate, use MSHA or NIOSH approved respirator as appropriate. It is recommended that adequate ventilation be provided at external extrusion points where the product is at elevated temperatures.

Exposure Limit for the Total Product:

None established for product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Translucent pellets

Odor:

Odorless

Boiling Point (degrees C):

Not applicable.

Melting/Freezing Point (degrees C):

Softening Point: 160-164 (320-327°F)

Specific Gravity (water=1):

0.900 - 0.905

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pH:

Not applicable.

Vapor Pressure:

Not applicable.

Viscosity:

Not applicable.

VOC Content:

Non-volatile.

Vapor Density (Air=1):

Not applicable.

Solubility in Water (%):

Insoluble

Other:

None

10. STABILITY AND REACTIVITY

This Material Reacts Violently With:

Air Water Heat Strong Oxidizers Others None of these X

Comments:

This product is softened by oxidizing agents (i.e. nitric acid, free halogens), hydrocarbons (i.e. benzene, gasoline, petroleum ether), and by chlorinated hydrocarbons.

Products Evolved When Subjected to Heat or Combustion:

At processing temperatures some degree of thermal degradation will occur. A variety of decomposition products may occur including, simple hydrocarbons, to toxic and irritating gases such as carbon, carbon monoxide, carbon dioxide, acids, ketones, and aldehydes. Some special film grades may also release fluorinated organic substances.

Hazardous Polymerizations:

DO NOT OCCUR

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)**Oral:**

LD50 > 5.00 g/kg (rat) practically non-toxic

Dermal:

LD50 > 2.00 g/kg (rabbit) practically non-toxic

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

See "Other", below.

Other:

Product may contain dust or particulates that may cause eye irritation or abrasion.

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12. ECOLOGICAL INFORMATION

Aquatic Toxicity:

Not determined.

Mobility:

Not determined.

Persistence and Biodegradability:

Not determined.

Potential to Bioaccumulate:

Not determined.

Remarks:

None

13. DISPOSAL CONSIDERATIONS:

Waste Disposal Methods:

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Remarks:

None

14. TRANSPORT INFORMATION

Transportation

DOT:

Proper Shipping Name:

Not regulated.

Hazard Class:

Not regulated.

Identification Number:

Not regulated.

Packing Group:

Not regulated.

Label Required:

Not regulated.

IMDG

Proper Shipping Name:

Not regulated.

ICAO

Proper Shipping Name:

Not regulated.

TDG

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Proper Shipping Name:
Not regulated.

Hazard Class:
Not regulated.

Identification Number:
Not regulated.

Label Required:
Not regulated.

15. REGULATORY INFORMATION

Federal Regulations:

SARA Title III:

Section 302/304 Extremely Hazardous Substances

Chemical Name	CAS Number	Range in %	TPQ	RQ
None.				

Section 311 Hazardous Categorization:

Acute	Chronic	Fire	Pressure	Reactive	N/A X

Section 313 Toxic Chemical

Chemical Name	CAS Number	Concentration
None.		

CERCLA 102(a)/DOT Hazardous Substances:

Chemical Name	CAS Number	Range in %	RQ
None.			

States Right-to-Know Regulations:

Chemical Name	State Right-to-know
None.	

California Prop. 65:

The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

Chemical Name	CAS Number
None.	

INTERNATIONAL REGULATIONS:

TSCA Inventory Status:

This product, or its components, are listed on, or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

WHMIS Classification:

Not regulated.

Canadian Inventory Status:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

EINECS Inventory Status:

This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

Australian Inventory Status:

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This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

Japan Inventory Status:

This product, or its components, are listed on or are exempt from the Japanese Ministry of International Trade and Industry (MITI) Inventory.

16. OTHER INFORMATION 08/01/2007.

None

Date Issued: 08/01/2007.

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. Adequate training and instruction should be given by you to your employees and affected personnel. Appropriate warnings and safe handling procedures should be provided by you to handlers and users. Additionally, the user should review this information, satisfy itself as to its suitability and completeness, and pass on the information to its employees or customers in accordance with the applicable federal, state, provincial or local hazard communication requirements. This MSDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, vendor neither assumes nor retains any responsibility for any damage or injury resulting from abnormal use, from any failure to adhere to appropriate practices, or from any hazards inherent in the nature of the material.