FLINT HILLS

SAFETY DATA SHEET

1. Identification

Product identifier Polypropylene Homopolymer

Other means of identification

SDS number 30020

Product code FHR PolypropHomo US EN

Synonyms 11RT55V; 11T55V; 21N2A; 41N7A; H0500HN; P4C4T-189; P4C5B-030; P4C5B-075; P4C5B-076;

* P4C5B-121; P4C5B-181B; P4C5K-123A; P4C5N-046; P4C5N-046B; P4C5T-013; P4C5T-027B; * P4C5T-195X; P4C5Z-027; P4C6B-024B; P4C6B-024D; P4C6B-134; P4C6B-134A; P4C6B-134B; * P4C6B-134F; P4C6B-134J; P4C6B-194; P4C6B-224; P4C6S-193A; P4C6T-063; P4C6U-220X; P4C6Z-022 * P4C6Z-059; P4C5B-225; P4G2K-214X; P4G2K-215X; P4G2K-216X; P4G2T-077D; P4G2Z-026; P4G2Z-159; * P4G2Z-192; P4G2Z-198; P4G2Z-211X; P4G3B-146; P4G3N-206; P4G3T-150X; P4G3Z-039; * P4G3Z-039A; P4G3Z-050; P4G3Z-050F; P4G4A-053; P4G4B-036; P4G4B-125A; P4G4K-038; * P4G4K-205; P4G4K-219; P4G4T-017; P4G4T-017A; P4G4Z-011; P4G4Z-011A; P4G6Z-221; * P4G8Z-080; P4G8Z-210X; P4H6N-222; P4M3R-209X; P9G8Z-036

Recommended use Industrial manufacture of packaging, housewares, textiles and construction.

Recommended restrictions This material is not intended for use in the manufacture of any form of implanted medical or

surgical device. Take precautionary measures against static discharge.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer/Supplier Flint Hills Resources Longview, LLC

118 Huntsman Way

Longview, TX

75602

United States

Supplier Flint Hills Resources, LP

4111 E. 37th St. North

Wichita, KS 67220-3203 United States

Telephone Numbers - 24

hour Emergency Assistance

Chemtrec (US) 800-424-9300 (CCN:8586)

 Chemtrec (US - Direct Dial)
 703-527-3887

 Carechem24 (US/Canada)
 866-928-0789

 Carechem24 (Mexico)
 52 555 004 8763

 Carechem24 (Brazil)
 55 113 711 9144

 Flint Hills Resources, LP
 432-296-1674

(after business hours)

Telephone numbers 8-4:45

(M-F, CST)

 Customer Service
 316-828-5190

 SDS Assistance
 316-828-7988

SDS Assistance E-mail msdsrequest@fhr.com

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

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Combustible dust **OSHA** defined hazards

Label elements

None. Hazard symbol Warning Signal word

Hazard statement May form combustible dust concentrations in air if converted to small particles during further

processing, handling, or by other means.

Precautionary statement

Prevention Not applicable. Response Not applicable. Storage Not applicable. Disposal Not applicable.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information

Prevent dust accumulations to minimize explosion hazard. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Observe good industrial hygiene practices.

Take off contaminated clothing and wash before use. In case of fire: Use appropriate media to

extinguish.

Store away from incompatible materials.

Dispose of waste and residues in accordance with local authority requirements.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Polypropylene	9003-07-0	98 - 100

Composition comments

Other components may be present but do not meet reporting requirements or fall below reportable

levels.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists. Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists. Eye contact

Ingestion Rinse mouth. Get medical attention if symptoms occur. Most important Dusts may irritate the respiratory tract, skin and eyes.

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed

General information

Treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Apply extinguishing media carefully to avoid creating airborne dust. Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

Unsuitable extinguishing

Specific hazards arising from

the chemical

Do not use water jet as an extinguisher, as this will spread the fire.

Explosion hazard: Avoid generating dust: fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. During fire, gases

hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Polypropylene Homopolymer SDS US Fire fighting equipment/instructions Specific methods General fire hazards

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

May form combustible dust concentrations in air.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Use only non-sparking tools. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Ensure adequate ventilation, Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

7. Handling and storage Precautions for safe handling Avoid discharge into drains, water courses or onto the ground.

Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Explosion-proof general and local exhaust ventilation. Static electricity and formation of sparks must be prevented. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. To maintain product quality, do not store in heat or direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Biological limit values

US. OSHA Table Z-3 (29 CFR 1910.1000)

Additional components	Туре	Value	Form
Dust	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
US. ACGIH Threshold Limit Values Additional components	Туре	Value	Form
Dust	TWA	3 mg/m3	Respirable particles.
		10 mg/m3	Inhalable particles.

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No biological exposure limits noted for the ingredient(s).

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Appropriate engineering

controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). Eye/face protection

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Skin protection

Wear suitable protective clothing. Other

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure

> limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved respirator

if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Solid. Physical state **Form** Pellets. Color Colorless. Odor Mild to none. Not available. Odor threshold Not applicable. Ηq

290 - 330 °F (143.33 - 165.56 °C) Melting point/freezing point

Initial boiling point and boiling

range

Not available.

> 650.0 °F (> 343.3 °C) Pensky-Martens Closed Cup Flash point

Evaporation rate Not applicable. Combustible dust. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

Not applicable.

(%)

Flammability limit - upper

Not applicable.

(%)

Explosive limit - lower (%) Not applicable. Explosive limit - upper (%) Not applicable. Vapor pressure Not applicable. Vapor density Not applicable. Not available. Relative density

Solubility(ies)

Solubility (water) Insoluble.

Partition coefficient Not applicable.

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature** Not applicable. Viscosity

Other information

Density 0.89 - 0.91 g/ml @ 77°F (25°C)

Polypropylene Homopolymer SDS US **Dust explosion properties**

Kst 101 bar.m/s (NFPA 68) (as polypropylene)

St class 1 (NFPA 68) (as polypropylene) Weak explosion.

Minimum explosible concentration (MEC) 30 g/m³ (with median mass particle size of 25 μm - NFPA 68) (as polypropylene)

Minimum ignition

energy (MIE) - dust

25 - 400 mJ (NFPA 68) (as polypropylene)

cloud

Minimum ignition temperature (MIT) dust cloud

788 °F (420 °C) (no antioxidant; NFPA 499) (as polypropylene)

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with

incompatible materials. Minimize dust generation and accumulation.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system. Skin contact Dust or powder may irritate the skin.

Eve contact Dust may irritate the eyes.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic. Dust or powder may irritate the skin. Skin corrosion/irritation

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Not classifiable as to carcinogenicity to humans. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Polypropylene (CAS 9003-07-0) 3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

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12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

Not inherently biodegradable.

Bioaccumulative potential

Not likely to bioaccumulate.

Mobility in soil

The product is insoluble in water.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

This material, as supplied, when discarded or disposed of, is not a hazardous waste according to

Federal Regulations (40 CFR 261).

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose in accordance with applicable regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and Not applicable.

the IBC Code

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Toxic Substances Control

All components of the mixture on the TSCA 8(b) inventory are designated "active".

Act (TSCA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard categories

Combustible dust

SARA 313 (TRI reporting)

Not regulated.

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Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

16. Other information, including date of preparation or last revision

Issue date20-August-2018Revision date20-March-2020

Version # 04

Further information Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the

Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

HMIS® ratings Health: 0

Flammability: 0 Physical hazard: 0

NFPA ratings



Disclaimer

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