SECTION 1. IDENTIFICATION

Product Identifier RUBBER CRUMB

Other Means of Identification Recycled rubber tire

Product Family Lost Circulation Material

Recommended Use Drilling Fluid Additive.

Supplier Identifier **Prairie Mud Service, 738 6th Street, Estevan, SK S4A 1A4 306-634-3411**

Emergency Phone No. **306-634-3411**

SECTION 2. HAZARD IDENTIFICATION

Classification

Self-reactive - Type E

Label Elements

Signal Word:
WARNING!
If ignited by excessive heat or open flame, this product will burn causing release of toxic and irritating smoke.
Powder or dust may form explosive concentrations when mixed in sufficient quantities of air.
Precautionary Statement(s):
Prevention:
Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.
Keep or store away from clothing and other combustible materials.
Keep only in original container.
Keep cool.
Ground and bond container and receiving equipment.
Wear protective gloves/eye protection/face protection.
Response:
In case of fire: Use to extinguish.
Storage:
Store in a well-ventilated place. Keep cool.
Store away from other materials.
Disposal:
Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Natural rubber	9006-04-6	60-100	
Mineral oil, petroleum extracts, heavy paraffinic	64742-04-7		

distillate solvent			
Carbon black	1333-86-4		
Talc, Containing No Asbestos or Crystalline Silica	14807-96-6		
Zinc oxide	1314-13-2		
SULFUR	7704-34-9		

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove to fresh air. Drink water to clear throat. Blow nose to remove dust.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and non-abrasive soap. If irritation occurs and/or persists, seek medical attention.

Eye Contact

Do not rub eyes; may cause particles to scratch eye. Immediately flush contaminated eye(s) with lukewarm, gently running water for at least 5-15 minutes while holding the eye(s)open. Take care not to rinse contaminated water into unaffected eye. Natural saline solution may be used for flushing if available. If eye irritation persists, transport victim to medical facility.

Ingestion

NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Since the effect of ingestion of rubber has not been determined, only seek immediate medical help if large quantities have been ingested.

First-aid Comments

If ignited by excessive heat or open flame, this product will burn causing release of toxic and irritating smoke. Smoke may contain noxious compounds and acrid compounds of sulfur. During fire conditions, smoke is irritating to the eyes and respiratory tract.
Powder or dust may form explosive concentrations when mixed in sufficient quantities of air.

Immediate Medical Attention and Special Treatment

Special Instructions

This product is a mechanical irritant and is not expected to have any chronic effects for a single exposure. Treat exposure by removing source of irritation and treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxde, foam, sand, water (recommended).

Specific Hazards Arising from the Product

Will burn when exposed to excessive heat or flame.
Unidentified hydrocarbons in smoke, oxides of sulfur and carbon.

Special Protective Equipment and Precautions for Fire-fighters

Fight fire from upwind. During combustion, irritating and/or toxic gases and aerosols from decomposition products may be present. Move containers from fire area or cool with water spray, if possible.
Firefighters must wear a full-body encapsulating chemical protective suit with positive-pressure self-contained breathing apparatus (SCBA).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

Release of powdered rubber into the environment may cause particulate to form an explosive mixture in air.

Methods and Materials for Containment and Cleaning Up

If release of ground rubber results in the formation of dust, remove all sources of heat and/or ignition. Provide immediate and adequate ventilation. Contain spilled material for disposal or recycling. If sweeping is necessary, use dust suppression such as water. Do not dry sweep dust accumulation or use compressed air for cleanup. Material may be re-used in process if clean, otherwise collect in approved containers and dispose according to the requirements in Section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

When handling product, minimize dust formation. Keep away from sources of heat, flame or ignition. Add water to any spilled product before attempting a cleanup. Wash thoroughly after handling and launder contaminated clothing before re-use.

Conditions for Safe Storage

Ground all transfer and storage equipment and use only non-sparking tools and equipment. Store in a cool, dry, well-ventilated area away from ignition sources/sparks.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

(Natural rubber)
ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. 10 mg/m³ (total dust)
OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. TWA = Time-Weighted Average. 15 mg/m³
(mineral oil, petroleum extracts, heavy paraffinic distillate solvent)
OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. TLV® = Threshold Limit Value. 5 mg/m³ (mist)
(carbon black)
ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. 3.5 mg/m³
OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. TWA = Time-Weighted Average. 3.5 mg/m³
(zinc oxide)
ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. 10 mg/m³
OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. TWA = Time-Weighted Average. 5 mg/m³ (total dust)
(sulfur)
ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. 10 mg/m³.

Appropriate Engineering Controls

Use general or local exhaust ventilation to maintain exposure below the exposure limits. If heated during processing, provide adequate non-sparking ventilation to minimize fumes in the workplace.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety glasses with side shields when contact is possible. Contact lenses are not recommended. Ensure an eyewash station and safety shower are available in immediate work area.

Skin Protection

As supplied, the extender oil is bound in a polymer matrix and exposure to skin should only be trace quanties or less. If prolonged contact is involved, care should be taken to minimize exposure by preventing contact with skin. Impervious footwear is required by work site rules. Frequent washing of exposed areas is recommended. Safety shower is recommended in the workplace area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Black Granules. Particle Size: Not available
Odour	Mild Rubber
Odour Threshold	Not available
pH	Not applicable
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not applicable
Evaporation Rate	Not applicable
Upper/Lower Flammability or Explosive Limit	Not applicable (upper); ~ 25% (lower)
Vapour Pressure	Not applicable
Vapour Density (air = 1)	Not applicable
Relative Density (water = 1)	0.95 - 1.40
Solubility	Insoluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	370 - 450 ºC
Decomposition Temperature	Not available
Viscosity	Not available (kinematic)

Other Information

Physical State	Solid
Molecular Formula	Not available
Molecular Weight	Not available
Bulk Density	Not available
Surface Tension	Not available
Critical Temperature	Not available
Electrical Conductivity	Not available
Vapour Pressure at 50 deg C	Not available
Saturated Vapour Concentration	Not available

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability

This product is stable and is not reactive.

Conditions to Avoid

Avoid strong oxidizing agents.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide, hydrogen, hydrogen sulphide, pentadiene, benzene, xylene, carbon, ash, oxides of sulphur and nitrogen, zinc oxide, and numerous unidentified organic compounds.

SECTION 11. TOXICOLOGICAL INFORMATION

This product is a mechanical irritant and is not expected to have any chronic effects for a single exposure.

Acute Toxicity

ACGIH TLV-TWA 0.0001 mg/m³ (inhalable, skin, sen) DTLVS* The Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs) booklet issues by American Conference of Governmental Industrial Hygienists (ACGIH),

Cincinnati, OH, 1996 Volume(issue)/page/year: TLV/BEI,2010

Skin Corrosion/Irritation

Not a skin irritant. There is evidence that contact with ground rubber may aggravate pre-existing dermatitis.
May cause slight irritation.

Serious Eye Damage/Irritation

May cause general irritation such as occurs when foreign object enters the eye. Redness, ichiness and tearing may result.
Can cause mechanical irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Based on animal tests.
Inhalation of fine particles may cause mild irritation of the respiratory tract. Fumes generated during processing may also be mildly irritating to the eyes and respiratory tract.
Not a likely route of exposure.

Ingestion

The acute effects of ingestion of rubber have not been determined.
Not a likely route of exposure.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Prolonged contact with untreated naphthenic/aromatic oils caused skin cancer in mice when applied over a two year period.

Carcinogenicity

Untreated naphthenic/aromatic oils are classified as carcinogenic to humans by IARC. Some countries require the "R45" designation due to the presence of this oil.
Some rubber contains nitrosamines which have also been shown to be carcinogenic to animals in the laboratory.

Reproductive Toxicity

Development of Offspring

Does not cause harm to the unborn child. This product is not known to contain any components at >=0.1% that have been shown to cause reproductive toxicity. Therefore, based upon the available data and the known hazards of the components, this product is not expected to be a reproductive toxin.

Germ Cell Mutagenicity

Researchers have investigated the potential for extracts from rubber materials to induce genetic changes in in vitro systems; however, results appear to be inconclusive as to their relevance to human exposure since they were conducted using solvent extracts of tire rubber.

SECTION 12. ECOLOGICAL INFORMATION

Environmental fate of this material is not available.

Ecotoxicity

The ecological risk associated with the use of ground rubber in playgrounds has been investigated in several studies by evaluating the impact of leachates on aquatic life. In the majority of these studies, zinc was identified as the most likely toxic constituent. Aging of the rubber material and dilution from natural systems in which the species live is likely to prevent toxic effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Place used and contaminated material and packaging into suitable containers. Dispose of in accordance with federal, provincial and local government regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

WHMIS 1988 Classification

Not a WHMIS controlled product.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

SECTION 16. OTHER INFORMATION

NFPA Rating	**Health - 0 Flammability - 1 Instability - 0**
Phone No.	(306) 634-3411
Date of Preparation	June 14, 2021
Disclaimer	This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.