

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Micronized Rubber Powder
 Product form : Mixture (Powder)
 Synonyms : PolyDyne® / MicroDyne® / Recycled Vulcanizate Particle Rubber / Reprocessed Ground Rubber

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Tires, plastics, industrial rubber, asphalt, construction, coatings and consumer goods.

1.3. Details of the supplier of the safety data sheet

Lehigh Technologies
 120 Royal Woods Ct. SW
 Tucker, GA 30084
 T +1-678-495-2204 - F +1-678-495-2201

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Carc. 1A H350
 Comb. Dust

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

May form combustible dust concentrations in air
 H350 - May cause cancer.

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P280 - Wear protective gloves, protective clothing, chemical goggles, & face protection.
 P308+P313 - If exposed or concerned: Get medical advice/attention.
 P405 - Store locked up.
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%
Product made up of the mixture of the following rubbers:	1,3-Butadiene, homopolymer	(CAS No) 9003-17-2
	Styrene-butadiene copolymer	(CAS No) 9003-55-8
	1,3-Butadiene, 2-methyl-, homopolymer	(CAS No) 9003-31-0
	Silica: Crystalline, quartz	(CAS No) 14808-60-7
		0 – 0.5*

The hazardous components listed below are no longer bioavailable due to the vulcanization process.

Name	Product identifier	%
Carbon Black	(CAS No) 1333-86-4	3 - 35*
Extracts, petroleum, heavy paraffinic distillate solvent	(CAS No) 64742-04-7	10 - 30*

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1,4-Benzenediamine, N1-(1,3-dimethylbutyl)-N4-phenyl-

(CAS No) 793-24-8

1 - 5*

*In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing if pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Get medical attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : May cause cancer.
- Symptoms/injuries after inhalation : May cause minor respiratory irritation.
- Symptoms/injuries after skin contact : May cause minor skin irritation.
- Symptoms/injuries after eye contact : May cause mild eye irritation.
- Symptoms/injuries after ingestion : May cause minor gastrointestinal irritation.
- Chronic symptoms : May cause cancer.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical. Class A fire extinguisher. Carbon dioxide. Foam.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : May form combustible dust concentrations in air. Keep away from ignition sources.
- Explosion hazard : Product is not explosive.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

- Precautionary measures fire : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if solid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Sweep or shovel spills into appropriate container for disposal.
- Methods for cleaning up : Wear suitable protective clothing. Wear suitable respiratory protective equipment. Sweep or shovel spills into appropriate container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

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6.4. Reference to other sections

See Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures. Do not handle until all safety precautions have been read and understood. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep the container tightly closed. Store in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Reprocessed ground rubber for tires, plastics, industrial rubber, asphalt, construction, coatings and consumer goods.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Micronized Rubber Powder		
OSHA PEL (TWA) (mg/m ³)	5 Respirable fraction; 15 Total Dust	
OSHA PEL (TWA) (mppcf)	15 Respirable fraction; 50 Total Dust	
1,3-Butadiene, homopolymer (9003-17-2)		
Remark (ACGIH)	OELs not established	
Remark (OSHA)	OELs not established	
Styrene-butadiene copolymer (9003-55-8)		
Remark (ACGIH)	OELs not established	
Remark (OSHA)	OELs not established	
1,3-Butadiene, 2-methyl-, homopolymer (9003-31-0)		
Remark (ACGIH)	OELs not established	
Remark (OSHA)	OELs not established	
1,4-Benzenediamine, N1-(1,3-dimethylbutyl)-N4-phenyl- (793-24-8)		
Remark (ACGIH)	OELs not established	
Remark (OSHA)	OELs not established	
Extracts, petroleum, heavy paraffinic distillate solvent (64742-04-7)		
Remark (ACGIH)	OELs not established	
Remark (OSHA)	OELs not established	
Silica: Crystalline, quartz (14808-60-7)		
ACGIH	ACGIH OEL TWA	0.025 mg/m ³ (respirable fraction)
OSHA	OSHA PEL (TWA)	50 µg/m ³ (8 hr) (respirable fraction)
OSHA	Regulatory reference (OSHA)	29 CFR § 1910.1053

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment : Gloves. Protective goggles. Wear labcoat with full coverage clothing.



Hand protection : Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection : Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles. Chemical goggles and face shield must be worn in combination.

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Skin and body protection : Wear long sleeves.
Respiratory protection : Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Powder.
Color : Black.
Odor : Vulcanized Rubber Smell.
Odor Threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : 246.11 °C (475 °F)
Auto-ignition temperature : 371.11 °C (700 °F)
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : 1.14 (+/- 0.03)
Solubility : Water: Nil
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : No data available

9.2. Other information

Other properties : Percent Volatile: <1% primarily water.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid dust formation. Dust can form an explosive mixture with air.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Carbon black (1333-86-4)

LD50 oral rat > 15400 mg/kg

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Carbon black (1333-86-4)	
LD50 dermal rabbit	> 3 g/kg
Extracts, petroleum, heavy paraffinic distillate solvent (64742-04-7)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
Zinc oxide (1314-13-2)	
LD50 oral rat	> 5000 mg/kg
1,4-Benzenediamine, N1-(1,3-dimethylbutyl)-N4-phenyl- (793-24-8)	
LD50 oral rat	3580 mg/kg
LD50 dermal rabbit	> 7940 mg/kg
Silica: Crystalline, quartz (14808-60-7)	
LD50 oral rat	500 mg/kg
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Carbon black (1333-86-4)	
IARC group	2B - Possibly carcinogenic to humans
Silica: Crystalline, quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects	: May cause cancer.
Symptoms/injuries after inhalation	: May cause minor respiratory irritation.
Symptoms/injuries after skin contact	: May cause minor skin irritation.
Symptoms/injuries after eye contact	: May cause mild eye irritation.
Symptoms/injuries after ingestion	: May cause minor gastrointestinal irritation.
Chronic symptoms	: May cause cancer.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No information available.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Micronized Rubber Powder	
Bioaccumulative potential	No information available.

12.4. Mobility in soil

Micronized Rubber Powder	
Ecology - soil	No information available.

12.5. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

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SECTION 14: Transport information

In accordance with DOT

Not hazardous for transport

Additional information

Other information : No supplementary information available.

Transport by sea

Not hazardous for transport

Air transport

Not hazardous for transport

SECTION 15: Regulatory information

15.1. US Federal regulations

Micronized Rubber Powder	
All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb 2019, as amended Feb 2021 or are otherwise exempt, or regulated by other agencies such as FDA or FIFRA	
SARA Section 311/312 Hazard Classes	Physical hazard - Combustible dust Health hazard - Carcinogenicity

15.2. International regulations

No additional information available.

15.3. US State regulations

⚠ WARNING: This product can expose you to 1,3-Butadiene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

1,3-Butadiene (106-99-0)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	Yes	Yes	Yes	0.4 µg/day

Carbon black (1333-86-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	No	No	Not available

Lead monoxide (1317-36-8)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	No	No	Not available

1,3-Butadiene (106-99-0)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

Carbon black (1333-86-4)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

Silica, amorphous, precipitated and gel (112926-00-8)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List

Zinc Oxide (1314-13-2)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

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Lead monoxide (1317-36-8)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Massachusetts - Right To Know List

Sulfur (7704-34-9)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

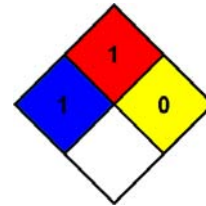
Cadmium oxide (1306-19-0)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Indication of changes : Revision 2.0: Revised SDS.
Revision date : 06/02/2021
Other information : Author: JLJ.

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 1 - Must be preheated before ignition can occur.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1
Flammability : 1
Physical : 0
Personal protection :

This information 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