SAFETY DATA SHEETS

This SDS packet was issued with item:

071455450

N/A

TECHNOLOGIES Date of issue: 09/19/2016 Revision date: 05/12/2015 Version: 1.0

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

Product identifier

: Micronized Rubber Powder Product name

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, industrual rubber, asphalt, construction, coatings and consumer goods.

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

Emergency telephone number

No additional information available

SECTION 2: Hazards identification

Classification of the substance or mixture 2.1.

GHS-US classification

Comb. Dust

Label elements 2.2.

GHS-US labeling

Signal word (GHS-US) Warning

: May form combustible dust concentrations in air Hazard statements (GHS-US)

Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/Information on ingredients

Substance

Not applicable

3.2. **Mixture**

Name		Product identifier	%
Product made up of the mixture	1,3-Butadiene, homopolymer	(CAS No) 9003-17-2	42 – 60*
of the following rubbers:	Styrene-butadiene copolymer	(CAS No) 9003-55-8	
	1,3-Butadiene, 2-methyl-, homopolymer	(CAS No) 9003-31-0	

The hazardous components listed below are no longer bioavailable due to the vulcanization process. As a consequence, the mixture itself does not meet the criteria for classification as hazardous under the OSHA Hazard Communication Standard (29 CFR §1910.1200).

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*
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

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.

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: IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact First-aid measures after eye contact

lenses if present and easy to do so. Continue rinsing if pain, blinking, or irritation develops or

persists, get medical attention. Continue rinsing.

: IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison First-aid measures after ingestion

control center. Get medical attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation. Symptoms/injuries after skin contact : May cause skin irritation.

Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.

Symptoms/injuries after ingestion May cause gastrointestinal irritation.

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.

Advice for firefighters 5.3.

Precautionary measures fire : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any Firefighting instructions

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.

Wear suitable protective clothing. Wear suitable respiratory protective equipment. Sweep or Methods for cleaning up

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.

Reference to other sections

See Sections 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

: Handle in accordance with good industrial hygiene and safety procedures. Do not handle until Precautions for safe handling

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.

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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/m³)	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)	ark (ACGIH) OELs not established		
Remark (OSHA)	OELs not established		

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.

Skin and body protection

: Wear long sleeves.

Respiratory protection

 Use NIOSH (or other equivalent national standard) -approved dust/particulate respirator. 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 Boiling point : No data available

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: 246.11 °C (475 °F) Flash point 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 : No data available Explosive properties Oxidizing properties : No data available : No data available **Explosion limits**

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 : Not classified Skin corrosion/irritation : Not classified Serious eye damage/irritation Not classified Respiratory or skin sensitization Not classified. Germ cell mutagenicity Not classified : Not classified. Carcinogenicity Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause respiratory irritation. Symptoms/injuries after skin contact : May cause skin irritation.

Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.

Symptoms/injuries after ingestion : May cause gastrointestinal irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No information available.

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential

Micronized Rubber Powder	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.

SECTION 14: Transport information

In accordance with DOT

Not hazardous for transport

Additional information

Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Micronized Rubber Powder		
All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventor or are exempt		
SARA Section 311/312 Hazard Classes	None	

15.2. International regulations

No additional information available.

15.3. US State regulations

WARNING! This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

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)	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

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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

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

: Revision 1.0: New SDS Created. Indication of changes

Revision date : 09/19/2016 Other information : Author: MDT.

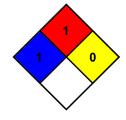
NFPA health hazard : 1 - Exposure could cause irritation but only minor residual

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

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