Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 12/10/2018 Supersedes: NEW

Version: 1.0

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1. Product Identifier Product Name: 7076 CB Product Code: 201103

Product Type: Pre-Weighed Custom Cureblend
1.2. Intended Use of the Product
Use of the substance/mixture: RUBBER MIXING

#### 1.3. Name, Address, and Telephone of the Responsible Party

Company
Polymerics Inc.
2828 Second Street
Cuyahoga Falls, OH 44221
(330) 928-2210 x 225

1.4. Emergency Telephone Number

**Emergency Number** : (330) 928-2210

**E-mail Contact:** bsanderson@polymericsinc.com

# **SECTION 2: HAZARDS IDENTIFICATION**

## 2.1. Classification of the Substance or Mixture

### Classification (GHS-US)

Comb. Dust

 Acute Tox. 4 (Inhalation:dust,mist)
 H332

 Acute Tox. 5 (Oral)
 H303

 Skin Irrit. 3
 H315

 Eye Irrit. 2B
 H320

 Skin Sens. 1
 H317

 STOT SE 3
 H335

#### 2.2. Label Elements

**GHS-US Labeling** 

Hazard Pictograms (GHS-US)





Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : Comb. Dust - May form combustible dust concentrations in air

H303 – May be harmful if swallowed H315 - Causes mild skin irritation

H317 - May cause an allergic skin reaction

H320 - Causes eye irritation H332 - Harmful if inhaled

H335 - May cause respiratory irritation

**Precautionary Statements (GHS-US)**: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P271 - Use only in a well-ventilated area.

P280 - Wear eye protection, face protection, protective gloves, protective clothing.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 - If exposed or concerned: Get medical advice/attention.

12/10/2018 EN (English US) 1/7

P314 - Get medical advice and attention if you feel unwell.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

P501 - Dispose of contents/container according to local, regional, national, and international regulations.

#### 2.3. Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Aquatic Chronic 2

H402 - Harmful to aquatic life

P273 - Avoid release to the environment



#### 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	<b>Product identifier</b>	%	Classification (GHS-US)
Sulfur	(CAS No) 7704-34-9	40	Comb. Dust Flam. Solid 2, H228 Cor. To Metal 1, H290 Acute Tox. 5, H303 Skin Irrit. 3, H316 Eye Irrit. 2B, H320
Mercaptobenzothiazole (MBT)	(CAS No) 149-30-4	27	Skin Sens. 1, H317 Comb. Dust Aquatic Tox. 1, Acute, H400 Aquatic Tox. 1, Chronic, H410
Zinc bis(Dibutylthiocarbamate) (ZDBC)	(CAS No) 136-23-2	8	Skin Irrit., 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 STOT, SE, 3, H335 Aquatic Tox. 1, Acute, H400 Aquatic Tox. 1, Chronic, H410 Comb. Dust
Tetramethyl Thiuram Disulfide (TMTD)	(CAS No) 137-26-8	14	Skin Irrit. 2, H315 Eye Irrit. 2A, H320 Skin Sens. 1, H317 STOT RE 2, H373 Acute Tox. (Oral), 4, H302 Acute Tox. (Inhal.), 4, H332 Comb. Dust
Dipentamethylenethiuram Tetrasulfide (DPTT)	(CAS No) 120-54-7	11	Comb. Dust

Full text of H-phrases: see section 16

## **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of First Aid Measures

**First-aid Measures General**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

12/10/2018 EN (English US) 2/7

# 7076 CB

#### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**First-aid Measures After Inhalation**: Using proper respiratory protection, immediately move the exposed person to fresh air. Keep at rest and in a position comfortable for breathing. Seek immediate medical advice.

**First-aid Measures After Skin Contact**: Remove contaminated clothing. Rinse immediately with plenty of water (for at least 15 minutes). Call a POISON CENTER/doctor/physician if you feel unwell.

**First-aid Measures After Eye Contact**: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if conditions warrant.

**First-aid Measures After Ingestion**: Call for medical attention if you exhibit severe symptoms. Rinse mouth. Do NOT induce vomiting.

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

Symptoms/Injuries: Harmful if inhaled. Irritation to eyes, skin and respiratory tract. Exposure may produce an allergic reaction.

Symptoms/Injuries After Inhalation: Harmful if inhaled.

Symptoms/Injuries After Skin Contact: May cause an allergic reaction in sensitive individuals.

Symptoms/Injuries After Eye Contact: Causes eye irritation.

Symptoms/Injuries After Ingestion: Ingestion may be harmful or have adverse effects.

Chronic Symptoms: Repeated or prolonged skin contact may cause dermatitis and defatting.

**Note:** Chronic exposure to dust regardless of the chemical composition may cause bronchitis, emphysema, or other non-specific lung disease.

## 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1. Extinguishing Media

Suitable Extinguishing Media: Dry chemical, carbon dioxide, water spray, fog, foam.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### 5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Combustible Dust.

Explosion Hazard: Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

**Reactivity:** Reacts with strong oxidants causing fire and explosion hazard.

## 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

## 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures**: Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid generating dust. Do not get in eyes, on skin, or on clothing. Do NOT breathe (dust).

#### 6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Eliminate ignition sources. Evacuate unnecessary personnel.

## 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection. **Emergency Procedures:** Eliminate ignition sources. Ventilate area.

#### 6.2. Environmental Precautions

Do not allow to enter drains or water courses. Avoid release to the environment.

#### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** None expected to be necessary due to form of packaging (pre-weighed small bags). Avoid generation of dust during clean-up of spills.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. See Section 13.

#### 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

12/10/2018 EN (English US) 3/7

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 7: HANDLING AND STORAGE

#### 7.1. **Precautions for Safe Handling**

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

#### Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool and well-ventilated place. Store away from other materials.

**Incompatible Products:** Oxidizers. Copper and its alloys.

Prohibitions on mixed storage: Keep away from (strong) oxidizing agents.

Specific End Use(s)

**RUBBER MIXING** 

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. **Control Parameters**

No Occupational Exposure Limits (OELs) have been established for this product, however, it is good industrial hygiene practice to use the nuisance dust exposure limits (PEL 15 mg/m3 & TLV 10 mg/m3) when no other exposure limits are available. The TMTD component has a PEL & TLV of 5 mg/m3.

#### **Exposure Controls** 8.2.

: Ensure all national/local regulations are observed. Ensure adequate ventilation, **Appropriate Engineering Controls** 

especially in confined areas. Emergency eye wash fountains and safety showers

should be available in the immediate vicinity of any potential exposure.

**Personal Protective Equipment** : Insufficient ventilation: wear respiratory protection. Protective clothing. Gloves.

Safety glasses.









**Materials for Protective Clothing** 

: Chemically resistant materials and fabrics. **Hand Protection** : Wear chemically resistant protective gloves.

**Eve Protection** : Chemical goggles or safety glasses. Skin and Body Protection : Wear suitable protective clothing.

**Respiratory Protection** : None expected to be necessary if used as intended. However, use a NIOSH-

approved respirator whenever exposure may exceed established Occupational

Exposure Limits.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Information on Basic Physical and Chemical Properties

**Physical State** 

**Appearance** : Pre-weighed, Lowmelt Bags

Color : Yellow : Sulfur Odor Odor **Odor Threshold** : No data available

pН : No data available **Melting Point** : No data available **Freezing Point** : No data available **Boiling Point** : No data available **Flash Point** : No data available **Auto-ignition Temperature** : No data available **Decomposition Temperature** : No data available Flammability (solid, gas) : No data available

Specific Gravity : 1.5900

Solubility : No data available

12/10/2018 EN (English US) 4/7 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**9.2.** Other Information No additional information available

#### **SECTION 10: STABILITY AND REACTIVITY**

- **10.1 Reactivity:** Reacts with strong oxidants causing fire and explosion hazard.
- 10.2 Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- 10.3 Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- 10.4 Conditions to Avoid: Incompatible materials. Sparks, heat, open flame and other sources of ignition.
- **10.5** Incompatible Materials: Oxidizers. Corrosive to copper and its alloys. In the presence of water, it is also corrosive to steel.

Contact with acid slowly releases poisonous and flammable hydrogen sulfide (rotten egg odor) which may be fatal if inhaled.

**10.6 Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Carbon disulfide. Nitrogen compounds. Oxides of zinc. Sulfur compounds like hydrogen sulfide & carbon disulfide. Upon thermal decomposition releases sulfur dioxide (SO<sub>2</sub>) a toxic and irritating gas.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

## 11.1. Information On Toxicological Effects

Acute Toxicity: Harmful if inhaled.

•	
Sulfur (7704-34-9)	
LD50 Oral Rat	> 3000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat (mg/l)	> 9.23 mg/l/4h
TMTD (137-26-8)	
LD50 Oral Rat	1800 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat (mg/l)	3.46 mg/l/4h
Carcinogenicity	IARC Group 3 \ NTP Evidence of Carcinogenicity
MBT (149-30-4)	
LD50 Oral Rat	3800 mg/kg
LD50 Dermal Rabbit	>7940 mg/kg
Carcinogenicity	Negative
ZDBC (136-23-2)	
LD50 Oral Rat	>5000 mg/kg
LD50 Dermal Rabbit	>2000 mg/kg
Carcinogenicity	Negative

Skin Corrosion/Irritation: Causes skin irritation.

Skin Irritation: Causes eye irritation.

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Not classified **Reproductive Toxicity:** Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause respiratory irritation

Aspiration Hazard: Not classified

**Symptoms/Injuries After Ingestion:** Ingestion is likely to have adverse effects.

Chronic Symptoms: Repeated or prolonged skin contact may cause dermatitis and defatting.

**Other Symptoms after exposure:** Individuals with known allergies to sulfide drugs may also have allergic reaction to elemental sulfur. Antabuse effect (nausea, vomiting, etc.) may result from exposure to the TMTD when alcohol is consumed. Mixing with nitrosating agents may cause the formation of nitrosamines which are classified as human carcinogens.

## **SECTION 12: ECOLOGICAL INFORMATION**

# 12.1. Toxicity

**Ecology - General** : Toxic to aquatic life with long lasting effects.

Sulfur (7704-34-9)	
LC50 Fish 1	866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
LC 50 Fish 2	14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

12/10/2018 EN (English US) 5/7

# 7076 CB

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

TMTD (136-26-8)	
LC50 Fish 1	0.046 – 1.20 mg/l
EC50 Daphnia 1	<ul> <li>0.2 mg/l (Exposure time: 48 h - Species: Daphnia magna)</li> </ul>
EC50 Algae	0.14 mg/l (Exposure time: 120 h)
Toxicity to Bacteria	IC50: 3.11 mg/l (Exposure time: 3 h)
MBT (149-30-4)	
LC50 Fish	1.5 mg/l (Species: Lepomis macrochirus \ Exposure time 96 h
EC50 Invertebrate	4.1 mg/l (Species: Daphnia magna \ Exposure time 48 h)
EC50 Algae	0.25 mg/l (Exposure Time 96 h)

### 12.2. Persistence and Degradability

Degradation half-life for TMTD: 2-7 days. **12.3. Bioaccumulative Potential** 

Minimum.

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

# **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations. U.S. EPA regulations for the classification determination are listed in 40 CFR 261.3.

Product as purchased would not be considered a RCRA Hazard Waste.

## **SECTION 14: TRANSPORT INFORMATION**

**14.1** In Accordance with DOT Not regulated for transport as currently packaged in small, pre-weighed bags.

Freight Code: 171410 Rubber Accelerator NOI

Class: 70

14.2 In Accordance with IMDG Not regulated for transport14.3 In Accordance with IATA Not regulated for transport

## **SECTION 15: REGULATORY INFORMATION**

#### 15.1 US Federal Regulations

7076 CB		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
	Delayed (chronic) health hazard	
	Fire hazard	
All components listed on the United States TSCA (Toxic Substances Control Act) inventory		

### SARA Title III, Section 313:

TMTD (Thiram) CAS# 137-26-8

ZDBC as 100% Zinc Compound containing 13.1% total Zinc Metal

# **SECTION 16: OTHER INFORMATION**

**Revision date** : 12/10/2018

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard

Communication Standard 29 CFR 1910.1200.

### **GHS Full Text Phrases:**

Acute Tox. 4 (Inhalation:dust)	Acute toxicity (inhalation:dust) Category 4
Acute Tox. 5 (Oral)	Acute toxicity (oral) Category 5
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 3	Skin corrosion/irritation Category 3

12/10/2018 EN (English US) 6/7

# 7076 CB

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
Comb. Dust	Combustible Dust (May form combustible dust concentrations in air)
H303	May be harmful if swallowed
H315	Causes Skin Irritation
H316	Causes mild skin irritation
H317	May cause an allergic skin reaction
H320	Causes eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life

<u>HMIS Rating:</u> <u>Health</u> 2\* <u>Fire</u> 1 <u>Reactivity</u> 1 <u>Personal Protective Equipment</u> F

HMIS ratings vary from company to company. In order to handle this material safely, all of the information found on the SDS must be considered.

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.

SDS US (GHS HazCom)

12/10/2018 EN (English US) 7/7