

## SAFETY DATA SHEET

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

#### PRODUCT:

**Product Identifier:** ThermOprime  
**Product Description:** Aerosol Primer  
**Recommended Use:** Pipe Corrosion Protection

#### COMPANY IDENTIFICATION:

**Distributor:** Continental Industries, a Division of Burndy LLC.  
1140 North 129<sup>th</sup> East Ave  
Tulsa, OK 74116 USA  
(918) 627-5210

**Manufacturer:** Berry Plastics Corporation  
2320 Bowling Green Road  
Franklin, Kentucky  
(270) 586-3261

### SECTION 2 HAZARDS IDENTIFICATION

#### EU MAIN HAZARDS:

R11 Highly flammable  
R36/38 Irritating to eyes and skin  
R45 May cause cancer  
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
R62 Possible risk of impaired fertility  
R63 Possible risk of harm to unborn child  
R65 Harmful: may cause lung damage if swallowed  
R67 Vapors may cause drowsiness and dizziness

#### Routes of Entry:

Absorption – Eye Contact – Ingestion – Inhalation – Skin Contact

#### Carcinogenic Status:

See Section 11

#### Target Organs:

Central Nervous System – Skin – Eye – Liver – Kidney – Respiratory System – Reproductive – Heart

**Health Effects:**

Eyes: Liquid, mist or vapor may cause pain, transient irritation and superficial corneal effects

Skin: Material may cause irritation. Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis. Material can be absorbed through the skin and cause effects similar to those resulting from inhalation

Ingestion: Swallowing may have the following effects:

- Abdominal pain
- Vomiting
- Central nervous system depression
- Kidney damage
- Liver damage
- Adverse heart effects
- Testis damage

Aspiration into the lungs may occur during ingestion or vomiting causing lung damage

A large dose may have the following effects:

- Systemic effects similar to those resulting from inhalation

Inhalation: Exposure to vapor may have the following effects: irritation of nose, throat and respiratory tract, central nervous system depression, dizziness, drowsiness, headache, mental confusion. Exposure to vapor at high concentrations may have the following effects: nerve damage leading to numbness and muscle weakness, lung damage, liver damage, kidney damage, testis damage and adverse reproductive effects

\*If any symptom persists or worsen please see a medical professional.

**SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

**Reportable Hazardous Substance(s) or Complex Substance(s):**

| Name                           | Common Name/Synonym | CAS # / Codes           | Percentage |
|--------------------------------|---------------------|-------------------------|------------|
| Hexane                         | -                   | 110-54-3<br>203-777-6   | 35-45%     |
| Propane                        | -                   | 74-98-6<br>200-827-9    | 30-40%     |
| Aliphatic Petroleum Distillate |                     | 64742-89-8<br>265-192-2 | 10-20%     |
| Toluene                        |                     | 108-88-3<br>203-625-9   | 1-5%       |
| Carbon Black                   |                     | 1333-86-4<br>215-609-9  | 0.1-<1%    |
| Polymers and Resins            |                     | N/A                     | 1-10%      |

\* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume. The exposure limits of this product, when allowed to enter the environment as dust particulate, are covered under the rules of 29 CFR 1910.1000, Table Z -3, "All inert or nuisance dusts, whether mineral, inorganic or organic."

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove from exposure. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately

**Eye Contact:** Immediately flood the eye with plenty of water for at least 15 minutes, holding eye open. Obtain medical attention if soreness or redness persists.

**Skin Contact:** Immediately flood the skin with large quantities of water for at least 15 minutes, preferably under a shower. Remove contaminated clothing and continue washing. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention if blistering occurs or redness persists

**Ingestion:** Do not induce vomiting, unless directed to do so by a physician. Have victim drink 1-3 glasses of water to dilute stomach contents. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately

## SECTION 5 FIRE FIGHTING MEASURES

### EXTINGUISHING MEDIA

**Appropriate Extinguishing Media:** Dry chemical type preferred, carbon dioxide, foam, water spray, or earth is recommended. Be aware of the possibility of re-ignition. Keep containers and surroundings cool with water spray.

**Inappropriate Extinguishing Media:** None known

**Unusual Fire Hazards / Combustion Products:** Vapors can travel a considerable distance to a source of ignition and flashback. Flashback can occur if air temperature exceeds flash point. Be aware of possibility of re-ignition. For aerosol products- exposure to temperature over 130F may cause containers to burst and release highly flammable gas.

**Protective Equipment for Fire-Fighting:** Wear full protective clothing and self-contained breathing apparatus

## SECTION 6 ACCIDENTAL RELEASE MEASURES

Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Wear appropriate protective clothing. Eliminate all sources of ignition. Use non sparking scoops for flammable materials. Vapors can accumulate in low areas. Consider need for evacuation. Prevent the material from entering drains or watercourses. Notify authorities if spill has entered watercourse or sewer or has contaminated soil or vegetation.

## SECTION 7 HANDLING AND STORAGE

Keep out of reach of children. Do not puncture, incinerate or place aerosol product containers in compactors. Use in well ventilated area. Use local exhaust ventilation. Avoid inhaling vapor. Avoid contact with eyes, skin and clothing. Keep container tightly closed when not in use. Do not flame cut, braze or use welding torch on container. Intentional misuse by deliberately concentrating or inhaling the vapors from this product may be harmful or fatal.

Store away from sources of heat or ignition. Storage area should be cool, dry, well ventilated, away from incompatible materials, out of direct sunlight and away from sources of ignition (heat, sparks flames, or pilot lights). Do not store above 120°F.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMIT VALUES:

#### Hexane

ACGIH: TLV 50ppm (176mg/m<sup>3</sup>) 8h TWA. (skin)  
OSHA: PEL 500ppm (1800) mg/m<sup>3</sup> 8h TWA  
Can be absorbed through skin.

#### Propane

ACGIH: TLV 1000 ppm (varies) 8h TWA  
OSHA: PEL 1000ppm (1800 mg/m<sup>3</sup>) 8h TWA

#### Toluene

ACGIH: TLV 20ppm (75 mg/m<sup>3</sup>) 8h TWA  
OSHA: PEL 200ppm 8h TWA. 300 ppm CEILING, 500 ppm 10-min peak per shift

#### Aliphatic Petroleum Distillate

ACGIH: TLV 300ppm (1370 mg/m<sup>3</sup>) 8h TWA (as VM&P naphtha 8032-32-4)  
OSHA: PEL 500ppm (2000 mg/m<sup>3</sup>) 8h TWA (as Petroleum distillates)

#### Carbon Black

ACGIH: TLV 3.5 mg/m<sup>3</sup> 8h TWA  
OSHA: PEL 3.5 mg/m<sup>3</sup> 8h TWA

#### Polymers and Resins

None assigned

#### Engineering Control Measures

Use engineering methods to prevent or control exposure. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

### PERSONAL PROTECTIVE EQUIPMENT:

#### Respiratory Protection

Wear respiratory protection if there is a risk of exposure to high vapor concentrations, aerosols or if applied to hot surfaces. A NIOSH approved full face respirator may be worn. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

#### Hand Protection

Butyl gloves are recommended.

#### Eye Protection

Chemical goggles or safety glasses with side shields. Consider the use of a face shield if splashing is possible.

#### Body Protection

If there is danger of splashing, wear overall or apron

## SECTION 9 PHYSICAL/CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Manufacturer in Section 1 for additional data.

**Physical State** Liquid  
**Color** Black  
**Odor** Light Hydrocarbon  
**pH** No data  
**Density (lbs/gal)** No data  
**Boiling Range/Point (°C/F)** No data  
**Melting Point (°C/F)** Not applicable  
**Flash Point (°F)** Est. 40 – 50 °F  
**Vapor Pressure** No data  
**Evaporation Rate** Slower than ether  
**Solubility in Water** Negligible  
**Vapor Density** Heavier than air.  
**VOC** 92 – 95%

## SECTION 10 STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions.

**Conditions to Avoid:** Heat, sparks, flames - high temperatures – sources of ignition – welding arcs – pilot lights – static electricity

**Materials to Avoid:** Strong oxidizing agents - acids - bases - reducing agents - halogens - hydrogen

**Hazardous Polymerization:** Will not occur.

**Hazardous Decomposition Products:** Oxides of carbon - hydrocarbons – phenolic vapors – aldehydes -smoke -fumes.

## SECTION 11 TOXICOLOGICAL INFORMATION

### Acute Toxicity

Toluene: Oral LD50 rat >2,000 mg/kg  
Dermal LD50 rabbit >3,000 mg/kg  
Inhalation LC50(rat) 28.1 mg/l 4hr  
Carbon Black: LD50 (rat) >8000 mg/kg

### Specific Target Organ Systemic Toxicity (single and repeat)

Toluene: Adverse effects to central nervous system, liver, kidney and heart have been observed in laboratory animal studies.  
Hexane: Exposure causes respiratory irritation, drowsiness and dizziness. Excessive exposure can cause nerve damage.

### Serious Eye damage/Eye Irritation

Toluene: Causes irritation to rabbit eyes.

### Skin Corrosion/Irritation

Toluene: Causes moderate irritation to rabbit skin.

### Respiratory or Skin Sensitization

Carbon Black: No evidence of sensitization was found in animals. No cases of sensitization in humans have been reported.  
Toluene: Did not cause sensitization in laboratory animals.

### **Carcinogenicity**

Carbon Black is classified by IARC: Group 2B possible human carcinogen. When encapsulated in the liquid matrix the risk of exposure is reduced.

Aliphatic Petroleum Distillate (as VM&P naphtha 8032-32-4): ACGIH Carcinogen Category: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)

Toluene: No evidence of carcinogenic activity in laboratory animal studies.

Hexane: Negative for mutagenicity in the Ames and the mouse lymphoma assays, with and without metabolic activation.

### **Germ Cell Mutagenicity**

Carbon Black: Not considered to be mutagenic based on in vivo studies.

Toluene: Negative Ames Test with and without metabolic activation.

### **Toxicity to Reproduction**

Carbon Black: No reproductive effects have been reported in long term animal studies.

Toluene: In laboratory studies, birth defects, increased fetal lethality and delayed fetal development have been observed in offspring of female animals exposed during pregnancy

## **SECTION 12**

### **ECOLOGICAL INFORMATION**

#### **Mobility**

Carbon Black: Mobility: Not soluble in water. Not expected to migrate. Expected to remain on soil surface.

#### **Persistence/Degradability**

Hexane: Readily biodegradable

#### **Bio-accumulation**

Carbon Black: Potential bioaccumulation is not expected because of physiochemical properties of the substance.

#### **Ecotoxicity**

Toluene: LC50 Fathead minnow (*Pimephales promelas*) 34.27 mg/l 96hr

EC50 Daphnia magna 11.5 mg/l 48 h

Carbon Black: LC50 Zebra fish >1000mg/l 96hr

EC50 Water flea >5600 mg/l 24hr

EC50 Algae >10,000 mg/l 72hr

Hexane: LC50 Rainbow trout (*Oncorhynchus mykiss*) 96 h 12.51 mg/l

EC50 Daphnia magna 48 h 21.85 mg/l

## **SECTION 13**

### **DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near to the container. Use non-sparking tools. Do not incinerate closed containers. Empty containers may contain hazardous residues. Dispose of containers with care.

## **SECTION 14**

### **TRANSPORTATION**

**DOT CFR 172.101 Data** Consumer Commodity, ORM-D (US ground shipment only)

**UN Proper Shipping Name** Aerosols

**UN Class** (2.1)

**UN Number** UN1950

**UN Packaging Group** None

#### **Classification for AIR**

#### **Transportation (IATA)**

Consult current IATA Regulations prior to shipping by air.

**SECTION 15****REGULATORY INFORMATION****EU Label Information**

Classification and labeling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments (2001/60/EC and 2006/8/EC)

**EU Hazard Symbol and Indication of Danger**

T - Toxic  
N - Dangerous for the environment  
F - Highly flammable

**R phrases**

R11 Highly flammable.  
R36/38 Irritating to eyes and skin.  
R45 May cause cancer.  
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R62 Possible risk of impaired fertility.  
R63 Possible risk of harm to the unborn child.  
R65 Harmful: may cause lung damage if swallowed.  
R67 Vapours may cause drowsiness and dizziness

**S phrases**

S 9 Keep container in a well-ventilated place.  
S16 Keep away from sources of ignition. - No smoking.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S33 Take precautionary measures against static discharges.  
S36/37 Wear suitable protective clothing and gloves.  
S45 In case of accident or if you feel unwell, seek medical advice immediately.  
S53 Avoid exposure – obtain special instructions before use.  
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

**US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS****TSCA Listing**

All ingredients have been verified for inclusion on the EPA Toxic Substance Control Act Chemical Substance Inventory.

**EINECS Listing**

All ingredients in this product have not been verified for inclusion on the European Inventory of Existing Commercial Chemical Substances (EINECS).

**DSL (Canadian) Listing**

All ingredients in this product have not been verified for inclusion on the Domestic Substance List (DSL).

**California Proposition 65**

This product contains the following materials which the State of California has found to cause cancer, birth defects or other reproductive harm: Toluene (108-88-3) - Ethylbenzene (100-41-4) - Formaldehyde (50-00-0) trace – Benzene (71-43-2)

**WHMIS Classification**

B5.D2A

This product was classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by these regulations.

**SARA Title III Sect. 311/312 Categorization**

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Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard, Fire Hazard

### SARA Title III Sect. 313

This product contains a chemical that is listed in Section 313 at or above de minimis concentrations. The following listed chemicals are present: Toluene (108-88-3) - Hexane (110-54-3)

|                   |                          |
|-------------------|--------------------------|
| <b>SECTION 16</b> | <b>OTHER INFORMATION</b> |
|-------------------|--------------------------|

#### NFPA Ratings

NFPA Code for Flammability - 4  
NFPA Code for Health - 2  
NFPA Code for Reactivity - 0  
NFPA Code for Special Hazards – None

#### HMIS Ratings

HMIS Code for Flammability - 4  
HMIS Code for Health - 2\*  
HMIS Code for Reactivity - 0  
HMIS Code for Personal Protection - See Section 8  
\* Chronic

#### Abbreviations

N/A: Denotes no applicable information found or available  
CAS#: Chemical Abstracts Service Number  
ACGIH: American Conference of Governmental Industrial Hygienists  
OSHA: Occupational Safety and Health Administration  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
STEL: Short Term Exposure Limit  
NTP: National Toxicology Program  
IARC: International Agency for Research on Cancer  
R: Risk  
S: Safety

#### THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

| Revision Date | Description       | Sections Affected |
|---------------|-------------------|-------------------|
| 9/11/14       | SDS production    | All               |
| 12/15/2014    | Formatting update | All               |
|               |                   |                   |
|               |                   |                   |
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