1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information
Trade name : Plexco® Flame Retardant Polyethylene Tubing
Use : Pneumatic Tubing or Fiber Pathway
Company : Performance Pipe, A Division of Chevron Phillips Chemical Company LP
10001 Six Pines Drive
The Woodlands, TX 77380

Emergency telephone:
Health: 866.442.9628 (North America)
1.832.813.4984 (International)
Transport:
North America: CHEMTREC 800.424.9300 or 703.527.3887
Asia: +800 CHEMCALL (+800 2436 2255) China: 0532.8388.9090
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Chemcare Asia: Tel: +65 6848 9048 - Mob: +65 8382 9188 - Fax: +65 6848
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group
E-mail address : MSDS@CPChem.com
Website : www.CPChem.com

2. HAZARDS IDENTIFICATION

Emergency Overview

Form: plastic    Physical state: Solid    Color: Black

GHS Classification
Not a dangerous substance according to Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

GHS-Labeling
Not a dangerous substance according to Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Carcinogenicity:
IARC Group 2B: Possibly carcinogenic to humans
Carbon Black 1333-86-4
Antimony oxide 1309-64-4
NTP Reasonably anticipated to be a human carcinogen
Decabromobiphenyl Oxide 1163-19-5
ACGIH Suspected human carcinogen: Human data are accepted as adequate in quality but are conflicting or insufficient to classify the

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agent as a confirmed human carcinogen E OR, the agent is carcinogenic in experimental animals at dose(s), by route(s) of exposure, at site(s), of histologic type(s), or by mechanism(s) considered relevant to worker exposure. The A2 is used primarily when there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals with relevance to humans.

Antimony oxide 1309-64-4

Components are encapsulated within the product matrix.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Synonyms | Polyethylene Plastic Plexco® Tubing |
| Molecular formula | Mixture |

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

4. FIRST AID MEASURES

| General advice | Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. |
| If inhaled | Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice. |
| In case of eye contact | Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. |
| If swallowed | Induce vomiting immediately and call a physician. Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. |

5. FIRE-FIGHTING MEASURES

| Flash point | Not applicable |
| Autoignition temperature | Not applicable |

| Unsuitable extinguishing media | High volume water jet. |
| Specific hazards during fire fighting | Do not allow run-off from fire fighting to enter drains or water courses. |
| Special protective equipment for fire-fighters | Wear self contained breathing apparatus for fire fighting if necessary. |
Further information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Fire and explosion protection: Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Hazardous decomposition products: Carbon Dioxide. Carbon oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up: Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling
Advice on safe handling: Avoid formation of respirable particles. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion: Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Storage
Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Basis</th>
<th>Value</th>
<th>Control parameters</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuisance Dust</td>
<td>OSHA Z3</td>
<td>TWA</td>
<td>15 mg/m3</td>
<td>Total dust</td>
</tr>
<tr>
<td></td>
<td>OSHA Z3</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>(respirable dust)</td>
</tr>
</tbody>
</table>

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Control as Particulate Not Otherwise Classified (PNOC). The ACGIH Guideline* for respirable dust is 3.0 mg/m\(^3\) and 10.0 mg/m\(^3\) for total dust. The OSHA PEL for respirable dust is 5.0 mg/m\(^3\) and 15.0 mg/m\(^3\) for total dust.

* This value is for inhalable (total) particulate matter containing no asbestos and < 1.0% crystalline silica.

**Engineering measures**

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal protective equipment**

- **Respiratory protection**: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure.

- **Hand protection**: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

- **Eye protection**: Eye wash bottle with pure water. Safety glasses.

- **Skin and body protection**: Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear as appropriate: Lightweight protective clothing.

- **Hygiene measures**: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Appearance**

- **Form**: plastic
- **Physical state**: Solid
- **Color**: Black

**Safety data**

- **Flash point**: Not applicable
- **Lower explosion limit**: Not applicable
- **Upper explosion limit**: Not applicable
- **Oxidizing properties**: No
- **Autoignition temperature**: Not applicable

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**MATERIAL SAFETY DATA SHEET**

**Plexco® Flame Retardant Polyethylene Tubing**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular formula</td>
<td>Mixture</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Pour point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**10. STABILITY AND REACTIVITY**

Chemical stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions:
- Conditions to avoid: Heating above recommended processing temperature. No data available.
- Other data: No decomposition if stored and applied as directed.

**11. TOXICOLOGICAL INFORMATION**

**Acute oral toxicity**
- LD50: 7,950 mg/kg
- Species: rat

**Acute inhalation toxicity**
- Acute toxicity estimate: 1.13 mg/l
- Test atmosphere: dust/mist
- Method: Calculation method

**Aspiration toxicity**
- No aspiration toxicity classification.
### 12. ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elimination information (persistence and degradability)</td>
<td></td>
</tr>
<tr>
<td>Biodegradability</td>
<td>This material is not expected to be readily biodegradable.</td>
</tr>
<tr>
<td>Additional ecological information</td>
<td>An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

### 13. DISPOSAL CONSIDERATIONS

The information in this MSDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.</td>
</tr>
<tr>
<td>Contaminated packaging</td>
<td>Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.</td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.). Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the MSDS and the bill of lading.

**US DOT (United States Department of Transportation)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**IMO / IMDG (International Maritime Dangerous Goods)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**IATA (International Air Transport Association)**

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NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**ADR (Agreement on Dangerous Goods by Road (Europe))**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**RID (Regulations concerning the International Transport of Dangerous Goods (Europe))**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

### 15. REGULATORY INFORMATION

**National legislation**

**SARA 311/312 Hazards** : Chronic Health Hazard

**SARA 302 Reportable Quantity** : This material does not contain any components with a SARA 302 RQ.

**SARA 302 Threshold Planning Quantity** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 304 Reportable Quantity** : This material does not contain any components with a section 304 EHS RQ.

**SARA 313 Ingredients** : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Clean Air Act**

**Ozone-Depletion Potential** : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
US State Regulations
Pennsylvania Right To Know:
- Carbon Black 1333-86-4
- Antimony oxide 1309-64-4
- Decabromobiphenyl Oxide 1163-19-5

New Jersey Right To Know:
- Carbon Black 1333-86-4
- Antimony oxide 1309-64-4
- Decabromobiphenyl Oxide 1163-19-5

California Prop. 65 Ingredients:
WARNING! This product contains a chemical known in the State of California to cause cancer.

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

Notification status
Europe REACH: Not in compliance with the inventory
United States of America US.TSCA: On TSCA Inventory
Canada DSL: All components of this product are on the Canadian DSL list.
Australia AICS: On the inventory, or in compliance with the inventory
New Zealand NZIoC: On the inventory, or in compliance with the inventory
Japan ENCS: On the inventory, or in compliance with the inventory
Korea KECI: On the inventory, or in compliance with the inventory
Philippines PICCS: On the inventory, or in compliance with the inventory
China IECSC: On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

NFPA Classification:
- Health Hazard: 0
- Fire Hazard: 0
- Reactivity Hazard: 0
Further information

Legacy MSDS Number : 8214

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this MSDS pertains only to the product as shipped.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>AICS</td>
<td>Australia, Inventory of Chemical Substances</td>
</tr>
<tr>
<td>DSL</td>
<td>Canada, Domestic Substances List</td>
</tr>
<tr>
<td>NDSL</td>
<td>Canada, Non-Domestic Substances List</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration</td>
</tr>
<tr>
<td>EC50%</td>
<td>Effective Concentration 50%</td>
</tr>
<tr>
<td>EOSCA</td>
<td>EOSCA Generic Exposure Scenario Tool</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Chemical Substances</td>
</tr>
<tr>
<td>MAK</td>
<td>Germany Maximum Concentration Values</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System</td>
</tr>
<tr>
<td>IC50</td>
<td>Inhibition Concentration 50%</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>IECSC</td>
<td>Inventory of Existing Chemical Substances in China</td>
</tr>
<tr>
<td>ENCS</td>
<td>Japan, Inventory of Existing and New Chemical Substances</td>
</tr>
<tr>
<td>KECl</td>
<td>Korea, Existing Chemical Inventory</td>
</tr>
<tr>
<td>UVCB</td>
<td>Unknown or Variable Compositon, Complex Reaction Products, and Biological Materials</td>
</tr>
<tr>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
</tr>
</tbody>
</table>