

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

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| COMMON NAME: | PVC Pipe and Fittings | |
| CHEMICAL NAME: | Not Applicable. Formulation, see section 3. | |
| FORMULA: | Mixture | |
| PRODUCT CAS NO.: | Mixture, see section 3. | |
| Recommended Use: | Drain Waste Vent and Pressure Pipe and Fittings | |
| SUPPLIER: | Charlotte Pipe and Foundry Company (Plastics Division) | |
| ADDRESS: | 4210 Old Charlotte Highway | |
| CITY, STATE, ZIP: | Monroe, NC 28110 | |
| PHONE: | +1-704-372-3650 | EMERGENCY PHONE: +1-704-372-3650 |

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Toxic and irritating gases and fumes may be given off during burning or thermal decomposition. Avoid generating dust. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.



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| GHS Status | This material is hazardous in accordance with the hazard communication standard, 29 CFR 1910.1200 |
| Classification of the substance or mixture | Skin irritation – Category 2 Eye irritation – Category 2 A Specific target organ toxicity – single exposure – Category 3 |
| GHS label pictogram | Warning |
| Signal word | Warning |
| Hazard statements | Causes serious eye irritation. |



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Causes skin irritation.
May cause respiratory irritation

Precautionary statements

Prevention

Avoid breathing dust/fume/gas/mist.

Response

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

Keep away from intense heat, flames.

Disposal

Dispose of in accordance with local regulations.

Hazards not otherwise classified

None known.

Relevant routes of exposure

Skin, eyes, inhalation.

Inhalation

Melted product is flammable and produces intense heat and dense smoke during burning. Irritating gases and fumes may be given off during burning or thermal decomposition.

Skin contact

Gases and fumes evolved during thermal processing or decomposition can cause skin irritation.

Eye contact

Dust can cause eye irritation. Gases and fumes evolved during thermal processing or decomposition can cause eye irritation.

Ingestion

No data available.

3. HAZARDOUS INGREDIENTS: COMPOSITION/INFORMATION

| INGREDIENT | % WEIGHT | PEL-OSHA | TLV-ACGIH | NIOSH REL |
|-------------------------------------|----------|---|---|------------------|
| Polyvinyl chloride CAS 9002-86-2 | >80% | None established Particulates not otherwise classified: 15 mg/m3 | 1 mg/m3 (respirable fraction) Particulates not otherwise classified: 10 mg/m3 (inhalable fraction) | None established |
| Titanium dioxide CAS 13463-67-7 | 0-5% | 15 mg/m3, total dust | 10 mg/m3 TWA | None established |

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Consult a physician.

SKIN CONTACT: Rinse with water. Remove contaminated clothing and shoes. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes before reuse.

INHALATION: If vapors from excessive heating, burning or decomposition products are inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing, such as collar, tie, belt, or waistband. In case of inhalation of decomposition

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products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance.

INGESTION: Wash out mouth with water. Remove dentures, if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Loosen tight clothing, such as collar, tie, belt, or waistband. Consult a physician.

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under surveillance for 48 hours

Specific treatments: None known

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: No data. Decomposition products may be combustible.

FLAMMABLE LIMITS: LEL: No Data UEL: No data

EXTINGUISHING MEDIA: Water, foam, dry chemical. Do not use CO2 on Class A fires, as a lack of cooling capacity may result in re-ignition.

FIRE AND EXPLOSION HAZARDS: Solid does not readily release flammable vapors. Thermoplastic polymers can burn. Smoke, Carbon Monoxide, Carbon Dioxide, Aldehydes, Hydrogen Chloride, Tin. Irritating and/or toxic substances will be emitted during burning, combustion, or decomposition. Run-off water from firefighting may have corrosive effects.

PROTECTIVE MEASURES FOR FIRE FIGHTERS: Firefighters must wear a NIOSH-approved, full-facepiece self-contained breathing apparatus (SCBA) operated in positive pressure mode and full turnout or bunker gear with additional chemical protective clothing as necessary to protect against thermal decomposition products.

SPECIAL PROTECTIVE ACTIONS FOR FIRE FIGHTERS: If there is a fire, promptly isolate the scene by removing all persons from the vicinity of the incident. No action shall be taken involving any personal risk or without suitable training

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency measures

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| For non-emergency personnel | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| For emergency responders | If specialized clothing is required to deal with decomposition products or fumes from burning or excessive heating, take note of information in Section 8 on suitable and unsuitable materials. See also information in "for non-emergency personnel." |
| Environmental precautions | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). |

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Methods and materials for containment and clean-up

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| Small spill | Avoid dust generation. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. See Section 1 for emergency contact information. |
| Large spill | Move containers from spill area. Approach release from upwind. Prevent entry into sewers, waterways, basements, and confined areas. Avoid dust generation. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. See Section 1 for emergency contact information. |

7. HANDLING AND STORAGE

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| Conditions for safe storage, including any incompatibilities | Store in a dry place away from direct sunlight, heat, and incompatible materials. Avoid intense heat and flames. |
| Precautions for safe handling | |
| Protective measures | Put on appropriate personal protective equipment (see Section 8). Do not handle until all safety precautions have been read and understood. Do not get particles, vapors or fumes in eyes, on skin, or on clothing. Do not ingest. If during normal use, the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. |
| Advice on general occupational hygiene | Employees must wash hands and face before eating, drinking, or smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information on hygiene measures. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below recommended and statutory limits.

RESPIRATORY PROTECTION: Cutting or sanding this product can generate dust. Used a properly fitted particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and the safe working limits of the respirator. A NIOSH-approved N95 single use or P95 multiple use respirator will protect the employee from at least 95% of airborne particles. Follow the respirator manufacturer's instructions for proper use. If adhesives or other substances are used with this product, refer to the product manufacturer's safety data sheet for applicable respiratory protective measures.

SKIN PROTECTION: Chemical-resistant, impervious gloves complying with an approved standard should be worn when handling this or any chemical product, if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures containing several substances, the protection time of the gloves cannot be accurately estimated. If adhesives or other substances are used with this product, refer to the product manufacturer's safety data sheet for applicable skin protective measures.

BODY PROTECTION: Personal protective equipment for the body should be selected on the task being performed and the risks involved, and should be approved by a specialist before handling this product. If adhesives or other substances are used with this product, refer to the product manufacturer's safety data sheet for applicable skin protective measures.

EYE/FACE PROTECTION: Safety eyewear complying with an approved standard must be used when a risk assessment indicates this is necessary to avoid exposure to dust. Particulates and dust can be formed when cutting, grinding or sanding this product. If contact with dust or particulates is possible, the following should be worn unless the assessment indicates a

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higher degree of protection: safety glasses with side shields. If adhesives or other substances are used with this product, refer to the product manufacturer's safety data sheet for applicable eye and face protective measures.

9. PHYSICAL AND CHEMICAL PROPERTIES

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|--------------------------------------|------------------------------|
| APPEARANCE: | Solid. White/grey |
| ODOR: | Not applicable. |
| ODOR THRESHOLD: | Not available |
| BOILING POINT: | Not available |
| FLASH POINT: | Not applicable |
| FLAMMABILITY: | Melted product is flammable. |
| AUTOIGNITION TEMPERATURE: | Not applicable |
| DECOMPOSITION TEMPERATURE: | Not available |
| LOWER/UPPER EXPLOSION LIMITS: | Not available |
| VAPOR PRESSURE: | Not available |
| LIQUID DENSITY: | Not available |
| SPECIFIC GRAVITY: | Approximately 1.4 |
| MELTING POINT: | Not available |
| pH: | Not available |
| SOLUBILITY: | Insoluble |
| % VOLATILE: | Not available |
| VISCOSITY: | Not available |

10. STABILITY AND REACTIVITY

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| Stability: | Stable at normal temperatures and pressures. |
| Reactivity: | Stable at normal temperatures and pressures. |
| Conditions to avoid: | Heat, flames, sparks and other sources of ignition. |
| Incompatible materials/conditions: | Consult the Charlotte Pipe and Foundry chemical resistance guide. |
| Hazardous decomposition products: | Hydrogen chloride, carbon oxides, small amounts of benzene and aromatic and aliphatic hydrocarbons, phosgene. |
| Hazardous polymerization: | Not available. |

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

No toxicological data is available for the finished product.



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SENSITIZATION: No data available.

MUTAGENICITY: No data available.

DEVELEPMENTAL: No data available.

Fertility: No data available.

CARCINOGENICITY: On the date of preparation of this SDS, this product does not contain ingredients classified by the International Agency for Research on Cancer, National Toxicology Program Report, or OSHA at 29 CFR 1910, Subpart Z, as a carcinogen.

REPRODUCTIVE TOXICITY: Not available

TERATOGENICITY: Not available

SPECIFIC TARGET ORGANS – SINGLE EXPOSURE: Not available

SPECIFIC TARGET ORGANS – REPEATED EXPOSURE: Not available

ASPIRATION HAZARD: Not available

INFORMATION ON THE LIKELY ROUTES OF EXPOSURE:

Potential acute health effects

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| Eye contact | No known significant effects or critical hazards. Dust can cause eye irritation. |
| Inhalation | Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. |
| Skin contact | Skin irritant. |
| Ingestion | No known significant effects or critical hazards. |

Symptoms related to the physical, chemical, and toxicological characteristics

| | |
|--------------|--|
| Eye contact | No data available. |
| Inhalation | No data available |
| Skin contact | Adverse symptoms may include irritation. |
| Ingestion | No data available |

Immediate, delayed and chronic effects from short term exposure

Short term exposure

| | |
|-----------------------------|--------------------|
| Potential immediate effects | No data available. |
| Potential delayed effects | No data available |

Long term exposure

| | |
|-----------------------------|--------------------|
| Potential immediate effects | No data available. |
| Potential delayed effects | No data available |

Potential chronic effects

| | |
|-----------------|--|
| General | No data available. |
| Carcinogenicity | Not listed by OSHA, IARC or NTP. See section 11. |

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12. ECOLOGICAL INFORMATION

Numerical measures of toxicity

No data available

Persistence and degradability

Does not biodegrade over time.

Bioaccumulative potential

No data available

Mobility in soil

No data available.

Other adverse effects: No known significant or critical hazards.

13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste should not be disposed of to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste and packaging should be recycled when possible. Incineration or landfill should only be considered when recycling is not feasible. This material must be disposed of in a safe way.

14. TRANSPORT INFORMATION

| | |
|-------------------------------|---------------|
| PROPER SHIPPING NAME: | Not Regulated |
| HAZARD CLASS: | Not Regulated |
| IDENTIFICATION NUMBER: | Not Regulated |
| SHIPPING LABEL: | Not Regulated |
| PACKING GROUP: | Not Regulated |

15. REGULATORY INFORMATION

United States

TSCA 8(b):

All ingredients are listed on the U.S. Toxic Substances Control Act inventory.

Airborne unbound particles of titanium dioxide of respirable size are listed as being carcinogenic per California Proposition 65.

16. OTHER INFORMATION

Date of Preparation: 11 December 2013

Key To Acronyms:

CAS: Chemical Abstracts Service

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| | |
|--------------------|---|
| CFR: | Code of Federal Regulations |
| HEPA | High-Efficiency Particulate Air (filter) |
| IARC: | International Agency for Research on Cancer |
| LD50 | Lethal dose to 50% of exposed laboratory animals |
| LC50 | Lethal concentration to 50% of exposed laboratory animals |
| LEL: | Lower Explosive Limit |
| mg/l | Milligrams per liter |
| NIOSH: | National Institute for Occupational Safety and Health (US) |
| NTP: | National Toxicology Program |
| OSHA: | Occupational Safety and Health Administration (US) |
| PEL: | Permissible Exposure Limit |
| TSCA | Toxic Substances Control Act |
| TLV: | Threshold Limit Value – American Conference of Governmental Industrial Hygienists (ACGIH) |
| TWA: | Time Weighted Average |
| UEL: | Upper Explosive Limit |
| ug/ m ³ | Micrograms per cubic meter |

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