3M™ Scotch-Weld™ Hot Melt Adhesive 3748-TC Off-White, 5/8 in x 2 in, 11 lb case

A high performance hot melt adhesive for bonding many plastics including polyethylene and polypropylene. It has excellent thermal shock, good heat resistance, good electrical properties, and it is non-corrosive to copper. Designed for use through 3M™ Scotch-Weld™ Hot Melt Applicator, TC.

GTIN(UPC/EAN) : 0 00 21200 82584 2
3M Id : 62-3748-9830-2

Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Value</th>
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<tbody>
<tr>
<td>Color</td>
<td>Off-White</td>
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<tr>
<td>Product Form</td>
<td>Pound</td>
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<tr>
<td>Trademark Name 1</td>
<td>3M</td>
</tr>
<tr>
<td>Trademark Name 2</td>
<td>Scotch-Weld</td>
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</table>
3M™ Scotchkote™ Pipeline Protection Products

Additional Information

Major oil and gas companies around the world have selected Scotchkote coatings to be their primary corrosion defense for protecting their pipeline investment. Scotchkote fusion bonded epoxy coating is tough. Durable. Field-proven. It's more than just a superior pipe coating - it's a vital element in the gas and oil pipeline network.

Scotchkote fusion bonded epoxy coating has proven so reliable, in fact, that more than 62,000 miles (100,000 km) of pipe treated with Scotchkote coating has been installed throughout the world. Typical pipeline applications include internal and external coatings for natural gas, petroleum, water and sewage, as well as pipe systems for refineries, petrochemical plants, power plants and paper mills.

Worry-Free Service From Day One:
From the moment a pipe is coated with our Scotchkote™ fusion bonded epoxy coating and installed in the ground or in the sea, maximum corrosion protection is assured. The unique chemical characteristics of our coating are carefully engineered for optimum protection of metal - even in the harshest environments: saltwater, wastewater, petrochemicals and corrosive gases. Scotchkote fusion bonded epoxy coating protects against soil stress, bacteria and fungus attack, soil acids, alkalis - all the corrosive elements associated with underground or underwater use. The coating's excellent physical properties minimize damage during transit, installation and operation. It requires very low levels of cathodic protection, even after extended periods of time.

The Features You Demand:
Resists cathodic disbondment
Helps keep protective current density requirements low
Good chemical resistance
High adhesion and toughness
Balanced application characteristics for all pipe sizes and types
Can be machined by grinding or cutting to meet tolerance requirement
Easy visual inspection of coating articles
Can be painted with alkyd paint, acrylic lacquer, acrylic enamel, or moisture curing polyurethane for color coding and UV protection
Will not sag, cold flow or become soft in storage
Lightweight for lower shipping costs
Long-term storage under most climatic conditions
Protects over normal service temperature range
Resists direct burial soil stress
Resists abrasive action of light slurries
Long-term performance in varying service environments
3M™ Scotch-Weld™ Hot Melt Adhesive 3748-TC Off-White, 5/8 in x 2 in, 11 lb case

Packaging

3M Id: 62-3748-9830-2

Minimum Order Quantity: 11.0 LBS

Case Quantity: 11.0 LBS

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>Metric</th>
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<tbody>
<tr>
<td>Length</td>
<td>11.4 INCH</td>
<td>0.290 MTR</td>
</tr>
<tr>
<td>Width</td>
<td>8.2 INCH</td>
<td>0.208 MTR</td>
</tr>
<tr>
<td>Height</td>
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<td>0.183 MTR</td>
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<tr>
<td>Gross Weight</td>
<td>11.7710 LBS</td>
<td>5.3392 KG</td>
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</tbody>
</table>
Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION


MANUFACTURER: 3M
DIVISION: Industrial Adhesives and Tapes Division
ADDRESS: 3M Center
St. Paul, MN  55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 12/05/2008
Supercedes Date: 03/06/2006
Document Group: 10-9990-2

Product Use:
  Intended Use: hot-melt adhesive
  Specific Use: hot melt adhesive

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
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<tr>
<td>POLYPROPYLENE</td>
<td>9003-07-0</td>
<td>15 - 40</td>
</tr>
<tr>
<td>HYDROCARBON RESIN</td>
<td>69430-35-9</td>
<td>10 - 30</td>
</tr>
<tr>
<td>STYRENE-BUTADIENE POLYMER</td>
<td>Trade Secret</td>
<td>10 - 30</td>
</tr>
<tr>
<td>ETHYLENE-PROPYLENE POLYMER</td>
<td>9010-79-1</td>
<td>5 - 25</td>
</tr>
<tr>
<td>POLYETHYLENE</td>
<td>9002-88-4</td>
<td>5 - 20</td>
</tr>
<tr>
<td>POLYOLEFIN WAX</td>
<td>Mixture</td>
<td>7 - 13</td>
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</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Waxy Solid
Odor, Color, Grade: off-white, mild resinous odor
General Physical Form: Solid
Immediate health, physical, and environmental hazards: May cause thermal burns.
Autoignition temperature 626 °F
Flash Point 536 °F [Test Method: Cleveland Open Cup]
Flammable Limits - LEL Not Applicable
Flammable Limits - UEL Not Applicable

5.2 EXTINGUISHING MEDIA
Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

5.3 PROTECTION OF FIRE FIGHTERS
Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Not applicable.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Reclaim undamaged product. Collect as much of the spilled material as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING
Avoid skin contact with hot material. Keep out of the reach of children.

7.2 STORAGE
Store under normal warehouse conditions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS
Not applicable. Use in a well-ventilated area.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection
Avoid eye contact.
The following eye protection(s) are recommended: Indirect Vented Goggles.

8.2.2 Skin Protection
Wear appropriate gloves, such as Nomex, when handling this material to prevent thermal burns. Avoid skin contact with hot material.
8.2.3 Respiratory Protection
Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing
Not an expected route of exposure.

8.3 EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
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<tr>
<td>POLYOLEFIN WAX</td>
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<td>TWA, as fume</td>
<td>2 mg/m3</td>
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<tr>
<td>POLYOLEFIN WAX</td>
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<td>POLYPROPYLENE</td>
<td>CMRG</td>
<td>TWA, as respirable dust</td>
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<td>POLYPROPYLENE</td>
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<td>TWA, as total dust</td>
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SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Waxy Solid
Odor, Color, Grade: off-white, mild resinous odor
General Physical Form: Solid
Autoignition temperature: 626 ºF
Flash Point: 536 ºF [Test Method: Cleveland Open Cup]
Flammable Limits - LEL: Not Applicable
Flammable Limits - UEL: Not Applicable
Boiling point: Not Applicable
Density: 0.92 - 0.94
Vapor Density: Nil
Vapor Pressure: Nil
Specific Gravity: 0.92 - 0.94 [Ref Std: WATER=1]
pH: Not Applicable
Melting point: No Data Available
Solubility in Water: Nil
Evaporation rate: Not Applicable
Volatile Organic Compounds: Not Applicable
Percent volatile: 0 % weight
VOC Less H2O & Exempt Solvents: No Data Available
Viscosity: 4,000 - 6,000 centipoise [@ 190 ºC]

SECTION 10: STABILITY AND REACTIVITY