



Product Data

Q-17 ADHESIVE FAMILY

Issue Date: 11/03/2010

Purpose

This product is intended as a replacement for reactive adhesives. It eliminates many of the problems associated with such competitive products and can be applied with the same pumps, laminating rollers, roll coaters, and hot melt equipment.

Composition

The product is composed of saturated resins, plasticizers, adhesion promoters, and pre-cured elastomers.

Detail

This is a new concept in laminating adhesives and was formulated to overcome some of the major disadvantages of traditional moisture-cures. Eliminated is the requirement for a pre and post-curing and for "dwell time" during processing and prior to shipping.

When used with a heated roll coater, no curing or charring occurs and thus costly clean-ups, shut downs and start-ups can be minimized or eliminated altogether.

When the material is used on doors, it can be applied directly to the stile and rail before clamping. This can be done with a typical hot melt pump and nozzle.

The product has an indefinite shelf life due to stability of the compound.

When a lighter color and adhesion are required to non-polar materials, the company recommends its Q17CX. If other substrates are involved the Q17-10 and Q17-20 series may be better choices. The Q17CX-20 is designed for adhesion to plastic window frames and the Q17CW-20 is the bright white variant also having excellent adhesion to olefinic materials.

Disadvantages of Traditional Laminating Adhesives & PURs

- Low solids content results in higher costs through evaporation (30-40% at times)
- Flammable, contaminating and possible hazardous ingredients.
- Prohibited in some states due to solvent content.
- Generally toxic dictating the use of special protective equipment.
- Usually contain fillers, which are abrasive to commercial pumps.
- Rated hazardous by OSHA (Standard 29CFR 1910.1200)
- Extremely low viscosity and may penetrate surfaces and form a weak bond line.
- Moisture curing types generally exhibit open times from 45 seconds up to 4 to 5 minutes.

Advantages of Q-17 Family of Products

- 100% solids content with no volatile or contaminating ingredients
- Require no clean-up when roller coater is shut down
- No toxic fumes discharged and thus no need for protective equipment.
- Instantaneous bond thus negating the need for extended cure time
- Not affected by plasticizer migration from vinyl films
- When applied to door stiles and rails, the wood has been known to separate within minutes when pulled apart.
- When applied with a roller coater, the material can be applied easily in a thickness range from 5 to 15 grams more per square foot.

Test Data

Color: Q-17CX – Clear; Q-17CX-20 – Clear; Q-17CW-20 – White

Odor: Slightly resinous

Specific Gravity: ASTM D71-72; .90 +/- .05

LBS/Gallon: 7.5 lbs.

Solids Content: 1 hour @ 350°F (177°C) 99.95%

Coverage: Extruded Bead, 1/8" Diameter Bead, 1565 ft/gal, 3/16" Diameter Bead 615 ft/gal, 1/4" Diameter Bead 392 ft/gal

Toxicity: none

Flash Point: (Pensky Martin) >450°F (232°C)

Ball & Ring: Q-17CX - 260°F - 290°F; Q-17CX-20 - 290°F - 320°F; Q-17CW-20 - 290°F - 320°F

Excellent Resistance to: water, water vapor, mild acids, Bases, and detergents

Storage Life: Indefinite

Peel Strength: ASTM C-794 Aluminum 82PIW, Vinyl 75PIW, Polypropylene 55PIW, Particle Board 30PIW, 227-32 LB density, Wood interface failure Laminated strand lumber (LSL)



Product Data

Application

This compound is intended for use in a factory application. The application should be made using hot melt equipment with a gear pump at a setting of 350°F with tank units.

For best adhesion the orifice of the nozzle must be held close to the bead that is being applied. For proper set up consult the compound manufacturer for proper speed setting, orifice size, and pressure requirements.

Clean Up/ Precautions

The material can be cleaned from tools and equipment with a light application of mineral spirits.

Prolonged exposure to temperatures exceeding 400°F could result in a thermal breakdown of the compound and greatly reduce its physical characteristics and performance.

Packaging

This material is generally packaged in 55 gallon fiber drums. It can also be supplied in 5 gallon fiber or metal pails.

Freight Classification

"NOBIN" (no red label required)

Class 55, Item No. 149610

HMIS Rating: Health – 0, Flammability – 0, Reactivity – 0.

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EMERGENCY TELEPHONE NUMBER (24 HOURS): CHEMTREC, 1-800-424-9300

SECTION 1: PRODUCT IDENTIFICATION



Product Data

Product Name:	Q-17 Series	<u>HMIS Ratings</u>	
Chemical Name:	ROBOFOAM MASTIC	Health Hazard:	0 -- MINIMAL
Chemical Family:	MIXED ELASTOMERS	Flammability Hazard:	1 – MINIMAL
		Reactivity Hazard:	0 – MINIMAL

SECTION 2: HAZARDOUS COMPONENT INFORMATION

Based on data available to Edge Adhesives, none of the components in this product are considered hazardous according to OSHA Hazard Communication Standard 29CFR1910. 1200.

The composition of this mixture is proprietary information. In the event of a medical emergency, information will be provided to a physician or nurse.

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES

Volatile (Wt.) %: .001 Solubility in Water: Insoluble Specific Gravity (H2O = 1): 0.96 Evaporation Rate: Not applicable Odor: Slight Appearance: Solid	Color: Q-17, Q-17-10, Q-17-20, Q-17-30, Q-17-40, Amber Q-17BB, Q-17BB-10, Q-17BB-30 Gray Q-17W, Q-17W-10 White Q-17B-10 White
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SECTION 4: FIRE HAZARDS

Flash Point:	>400°F (204°C)
Method:	Pensky Marten closed cup
Extinguishing Media:	Foam, Carbon dioxide, dry chemical
Special Fire-Fighting Procedures:	Do not enter confined space without proper protective equipment. Do not use water; materials that floats.
Hazardous Combustion Products:	Carbon monoxide, Carbon dioxide

SECTION 5: HEALTH HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

- Acute or Immediate Effect – Routes of Entry and Symptoms

Ingestion:	Not expected to be an ingestion hazard.
Skin:	May cause irritation to sensitive skin. Molten material will cause thermal burns.
Eye:	Particles may cause irritation. Molten material will cause thermal burns.
Inhalation:	Not likely route of entry.
- Chronic Effects: None known
- Medical Conditions Aggravated Exposure: None known

Carcinogenicity Information:	None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTC, OSHA, or ACGIH as a carcinogen.
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SECTION 6: FIRST AID PROCEDURES

- Ingestion: Consult a physician if vomiting occurs.
- Skin Contact: If molten material gets on skin, cool rapidly with cold water. Do not attempt to remove material from skin. Obtain medical treatment for thermal burns.
- Eye Contact: Flush with water. Consult a physician if irritation persists.
- Inhalation: Remove to fresh air.
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SECTION 7: STABILITY AND REACTIVITY

- Stability: Stable
- Conditions to Avoid: Do not store near strong oxidizers or open flames. Do not heat above 400F



Product Data

11/8/2010

- Hazardous Decomposition Products: when processing.
Carbon monoxide, Carbon dioxide
- Polymerization: Will not occur

SECTION 8: ACCIDENTAL RELEASE MEASURES

Allow molten material to solidify, then peel up and put into containers for disposal.
Dispose of according to local, state, and federal regulations for non-hazardous solid waste.

SECTION 9: EXPOSURE CONTROLS/PERSONAL PROTECTION

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure at all times.

- Respiratory Protection: Not required under normal conditions
- Ventilation: Local exhaust recommended
- Protective Gloves: Required when working with molten material
- Eye Protection: Required when working with molten material
- Other Protective Equipment: None
- Hygienic Practices: Wash hands before eating, smoking, or using washroom.
Adhere to the sanitation requirements of 29CFR1910.141 and 29CFR1910.142

SECTION 10: TRANSPORTATION INFORMATION

- D.O.T. Shipping Information: Not regulated
- I.M.O. Shipping Information: Not regulated

SECTION 11: REGULATORY INFORMATION

Section 313 Supplier Notification: This product contains no known toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40CFR372.

STATE REGULATIONS (U.S.):

STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list for the states indicated below are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

1. Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for special hazardous substances): None known
2. WARNING: Substances known to the State of California to cause cancer, birth defects, or other reproductive harm: None known
3. Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.01% for substances identified as carcinogens, mutagens, or teratogens): None known

CANADIAN WHMIS: To the best of our knowledge, this material is classified as a NONCONTROLLED PRODUCT.

SECTION 12: ADDITIONAL COMMENTS

The data in this Material Safety Data Sheet relates only to the specific material designated and does not relate to use in combination with any other material or in any process.

This information is taken from sources or based upon data believed to be reliable; however, Edge Adhesives Disclaims any warranty, express or implied, as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may be required under particular conditions.

SECTION 13: OTHER INFORMATION

Revisions made: Added Q17B-10 to MSDS.