SAFETY DATA SHEETS

This SDS packet was issued with item:

078071633

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078289994

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078234387 078289903

Jorgensen Laboratories, Inc.

1450 North Van Buren Avenue Loveland, CO Product Codes: J751, J751A

24 hour Emergency Telephone: INFOTRAC: (900) 535-5053

All non-emergency questions may be directed to customer service @ (970) 669-2500 or fax (970) 663-5042

HAZARDOUS INFORMATION

Steel Epoxy Putty Stick

ast Acting, Steel Repair Putty

escription)

teel stick is a hard kneadable, non-rusting, steel sinforced epoxy putty that mixes in one minute to rovide fast, permanent repair to items made of ferrous nd alloy metals. It comes in a handy rod form with the curing gent encapsulated in the resin material. Its putty-like onsistency eliminates drips and runs providing "no mess" pplication with no tools required for use.

teel-stick is steel gray in color after cure.

leneral characteristics

Resin Epoxide

hemical Resistance Resistant to hydrocarbons,

ketones, alcohols, esters,

halocarbons, aqueous salt solutions

and dilute acids and bases

lectrical Resistance

30,000 mega Ohms

dielectric Strength

300 Volts/mil

hrinkage \
lon-volatile content

<1% 100%

helf life

6 months minimum stored at

25°C

Compressive strength—

-84N/mm(2) (12,000 psi)

lax temperature

lesistance

120°C continuous

150°C intermittent

'erformance Characteristic

nitial Cure 1 hour max 'ull Cure Time 24 hours

ap Sheer Tensile

trength (Steel) 6.2N/mm(2)

hore D Hardness

Full Cure 24hrs0

80

pening Time

3.5 minutes

How to Use

In order to achieve optimum adhesion, surfaces should be clea grease or dirt. Scuffing or sanding the surface prior to cleaning ensure a good bond.

Mixing: Twist or cut off required amount. To mix, knead with uniform color. If mixing is difficult warm Steel-Stick to room temperature or slightly above. Apply to the surface to be repair two minutes of mixing.) The mixed epoxy does not exhibit hig strength at this point, but appears to be merely lying on the sur into any cracks or holes to be filled and strike off excess mater preferably with a tool wetted with clean water. When applying wet or slowly leaking area, work the material forcefully into th and apply pressure until adhesion begins to take effect.

For a smooth appearance of the cured compound hand rub witl damp clothe prior to hardening. Remove excess material befor begins. After just 30 minutes Steel-Stick is completely cured a drilled, sawn, carved, sanded, stained or painted

Storage: Store in cool conditions preferably away from direct s excessive heat. Shelf life is at least 6 months at 25°C.

Health and Safety: Steel-Stick contains epoxy resins and hardn can cause skin irritation in sensitive individuals. It is therefore recommended that the hands be washed immediately after use, either a proprietary hand cleaner such as Saratoga or soap and Always keep Steel-Stick away from food and utensils.

Pack Size: Steel-Stick is packaged in a 180-gram clear plastic: tube with a plastic end cap.

While all reasonable care is taken in compiling technical data a company's products are made without guarantee since the concuse are beyond the control of the company. It is the customer's responsibility to satisfy him that each product is fit for the purp which he intends to use it, and that the actual conditions of use suitable.

Section 1

Preparation and Company identification

Preparation identification:

VES1-Epoxy Steel Stick

Company identification and Telephone Number

Vortex Industrial Products Ltd. Terry Dicken Industrial Estate Ellebeck Way Stokeseley Cleveland

TS 7AE

Tel 01642 713613

Section 2

Composition/information

on ingredients

Hazardous

CAS No.

Percentage:

Components

Epichlorohydrin 25088-38-6

5088-38-6 10%-20%

Bisphenol A

Index No 603-074-00-8

EEC-Symbol XI

Risk phrases: R36/38-43

Section 3

Hazards identification

Irritating to eyes and skin

May cause sensitization by skin contact

Section 4

First Aid Measures

Inhalation:

Not applicable, material does not emit harmful vapors

Skin Contact:

May lead to sensitization. Wash with plenty of soap and water. Do not use organic solvents.

Eye contact:

Irritant may cause superficial burns. Wash immediately with copious amounts of clean water. Seek medical attention immediately

Ingestion:

Rinse mouth out with clean water. If swallowed, drink plenty of water or milk. Do not induce vomiting. Seek medical attention immediately.

This sheet should be shown to emergency services/medical staff.

Section 5

Fire Fighting Measures

Extinguishing Media: Foam/water fog/dry powder/CO2

Odor: Very slight

Solubility in water: In soluble

Section 6

Accidental Release Measures

Personal precautions: Suitable protective clothing (overalls), rubber/plastic-coated gloves, and eye/face protection advised.

Environmental precautions: Inform local authority if material reaches public drains or waterways.

Methods of cleanup: Shovel into suitable closed container

Section 7

Handling and Storage

<u>Handling</u>: Irritant, Sensitizing, Ensure good ventilation. Smoking, eating, drinking and preparation of foodstuffs prohibited where material are stored or handled. <u>Storage</u>: Store in a cool location away from direct sunlight.

Section 8

Exposure Control / Protection

Respiratory: None required

Hand/Skin: Wash hands after each work period and before eating. Wear rubber or plastic-coated gloves while handling product.

Eye: Safety glasses/goggles or face shield advised especially when working overhead.

Section 9

Physical / Chemical Properties

Appearance: Putty, various colors

Odor: Very slight Flash Point: >200° C

Solubility in water: Insoluble

Section 10

Stability and Reactivity

Conditions To Avoid: Temperature Extremes

<u>Materials To Avoid</u>: Strong acids, strong oxidizing agents

<u>Hazardous Decomposition products</u>: May release oxides of carbon and other toxic gases or vapors if burned.

Section 11

Toxicological Information

LD50 Acute oral toxicity in rats: >2000mg/kg Eye irritant tested in rabbits: possible Skin irritant tested in rabbits: possible Skin sensitization in guinea pigs: may cause sensitization by skin contact

Section 12

Ecological Information

Do not allow the material to enter water courses. If water is contaminated inform the relevant authorities immediately.

Section 13

Transportation

Not regulated.

Jorgensen Laboratories, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. JORGENSEN LABORATORIES, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET-FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS, ACCORDINGLY, JORGENSEN LABORATORIES, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.