

**Jorgensen Laboratories, Inc.**

1450 North Van Buren Avenue  
Loveland, CO

Product Codes: J751, J751A

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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**

Fast Acting, Steel Repair Putty

**Description**

Steel stick is a hard kneadable, non-rusting, steel reinforced epoxy putty that mixes in one minute to provide fast, permanent repair to items made of ferrous and alloy metals. It comes in a handy rod form with the curing agent encapsulated in the resin material. Its putty-like consistency eliminates drips and runs providing "no mess" application with no tools required for use. Steel-stick is steel gray in color after cure.

**General characteristics**

Resin	Epoxide
Chemical Resistance	Resistant to hydrocarbons, ketones, alcohols, esters, halocarbons, aqueous salt solutions and dilute acids and bases
Electrical Resistance	30,000 mega Ohms
Dielectric Strength	300 Volts/mil
Shrinkage	<1%
Non-volatile content	100%
Shelf life	6 months minimum stored at 25°C
Compressive strength	84N/mm(2) (12,000 psi)
Max temperature resistance	120°C continuous 150°C intermittent

**Performance Characteristic**

Initial Cure	1 hour max
Full Cure Time	24 hours
Tap Shear Tensile Strength (Steel)	6.2N/mm(2)
Shore D Hardness	
Full Cure 24hrs0	80
Opening Time	3.5 minutes

**How to Use**

In order to achieve optimum adhesion, surfaces should be clean, free of 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 repaired (two minutes of mixing.) The mixed epoxy does not exhibit high strength at this point, but appears to be merely lying on the surface. Push into any cracks or holes to be filled and strike off excess material preferably with a tool wetted with clean water. When applying to a wet or slowly leaking area, work the material forcefully into the area and apply pressure until adhesion begins to take effect.

For a smooth appearance of the cured compound hand rub with damp cloth prior to hardening. Remove excess material before curing begins. After just 30 minutes Steel-Stick is completely cured and can be drilled, sawn, carved, sanded, stained or painted.

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

Health and Safety: Steel-Stick contains epoxy resins and hardeners which can cause skin irritation in sensitive individuals. It is therefore recommended that the hands be washed immediately after use, either with a proprietary hand cleaner such as Saratoga or soap and water. 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 on our company's products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose which he intends to use it, and that the actual conditions of use are suitable.

**Section 1** Preparation and Company  
identification

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**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

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**Hazardous CAS No. Percentage:**

**Components**

**Epichlorohydrin** 25088-38-6 10%-20%

**Bisphenol A**

Index No 603-074-00-8

EEC-Symbol XI

Risk phrases: R36/38-43

**Section 3** Hazards identification

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Irritating to eyes and skin

May cause sensitization by skin contact

**Section 4** First Aid Measures

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**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

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

Odor: Very slight

Solubility in water: In soluble

**Section 6** Accidental Release Measures

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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

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Handling: Irritant. Sensitizing. Ensure good ventilation. Smoking, eating, drinking and preparation of foodstuffs prohibited where material are stored or handled.

Storage: Store in a cool location away from direct sunlight.

**Section 8** Exposure Control / Protection

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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

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Appearance: Putty, various colors

Odor: Very slight

Flash Point: >200° C

Solubility in water: Insoluble

## **Section 10**      Stability and Reactivity

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Conditions To Avoid: Temperature Extremes

Materials To Avoid: Strong acids, strong oxidizing agents

Hazardous Decomposition products:

May release oxides of carbon and other toxic gases or vapors if burned.

## **Section 11**      Toxicological Information

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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

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

## **Section 13**      Transportation

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Not regulated.

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