# Dampney Protective Coatings


## Hi-Temp Lab-metal

### Metal repair and patching compound for temperatures to 1000°F

## Description

Hi-Temp Lab-metal is a ready-to-use, aluminum-filled repair and patching compound. Applied directly from the can with a putty knife or similar tool, Hi-Temp Lab-metal adheres to metal, wood, plastic, glass, fiberglass, and more. Apply right from the can; no two-part mixing or measuring and no heat catalyst is required.

Many applications may be made from a single can. After each use, to prevent Hi-Temp Lab-metal from hardening in the can, pour a small amount of Lab-solvent over the remaining Hi-Temp Lab-metal contents, then cover tightly. (Stir the solvent into the Hi-Temp Lab-metal upon opening container.)

## Recommended Uses

Hi-Temp Lab-metal is recommended where original Lab-metal may not withstand the extreme heat. Originally developed to meet foundries' core box repair needs, industries such as metalworking, powder coating, welding, fabricating, heating, construction, auto repair, die casting, mold refinishing, and sheet metal production and finishing use Hi-Temp Lab-metal. The repair compound is used on:

- Foundry core boxes
- Duct work
- Radiators
- Molds
- Mufflers, exhaust systems, engines
- Wood and coal burning stoves, grills, and industrial ovens
- Dented metal, prior to powder coating

## Features

- Withstands heat to 1000°F (must be heat cured as directed)
- Excellent adhesion
- Excellent weather and abrasion resistance
- Ready-to-use formulation -- no mixing, no measuring, no heat required
- Does not peel or flake
- Coatable with liquid or powder coatings
- Can be thinned for brush applications
- Can be machined, ground, filed and sanded to a smooth finish
- Impervious to rust, rot and mildew
- Not affected by varying climatic conditions

## Surface Preparation

For best results, surface should be clean and dry (clean with Lab-solvent). Roughen surface to achieve optimal adhesion. Stir Hi-Temp Lab-metal before use. Thin with Lab-solvent if necessary.

## Application

Spread with putty knife or similar tool. Thin with Lab-solvent as needed. When filling deep holes or cavities, the putty should be applied in thin layers, less than ¼ inch thick. Allow each layer to dry for at least 24 hours at room temperature, and heat harden prior to each additional coat. Heat cure at 425°F for one hour.

To apply Hi-Temp Lab-metal with a paint brush, it must be thinned to paint consistency with Lab-solvent, then applied with light brush strokes – not worked over as with paint. Dip the brush into Lab-solvent periodically to keep the bristles free and prevent clogging.

**Application temperature range:** Room temperature during application and drying time.

## Thinning

Thin with Lab-solvent.

## Drying Time

The depth of the application determines drying time; hardening occurs by exposure to air. Apply no thicker than ¼ inch per application. The application must air dry for 24 hours, or until the product has hardened to a metal state. It must then be heat cured (before applying a second coat.)

## Storage

Store in dry place at room temperature. For extended storage, add a capful of Lab-solvent to the unused Hi-Temp Lab-metal and cover tightly after use.

## Packaging



Hi-Temp Lab-metal is available in the following sizes:

14 oz. (½ pint can)
24 oz. (pint can)

# TECHNICAL DATA

| Hi-Temp Lab-metal | |
|---|---|
| **Description** | Ready-to-use aluminum filled repair and patching compound. Single component dent and body filler / sealer. |
| **Color** | Metal gray. Aluminum when buffed. |
| **Adhesion** | Excellent adhesion to clean, dry surfaces of metal, hard plastics, and glass. Hi-Temp Lab-metal can not be used as an adhesive. |
| **Hardness** | 81 on Shore D scale |
| **Coefficient of Linear Expansion** | $15 \times 10^{6}$ inch / inch per $^{o}$F |
| **Strength** | Tensile: 650 lb. / sq. in.<br>Comressive: 20,000 psi<br>Water: 50 psi |
| **Specific Gravity** | 1.95 at 75$^{o}$F |
| **Weight** | Cubic inch: 31.2 grams or 1.10 oz. |
| **Heat Resistance** | 1000$^{o}$F (once heat hardened as directed) |
| **Chemical Resistance** | Not affected by mild acids, gasoline, petroleum, petroleum solvents, oil or L.P. gas. Alkalis will attack Hi-Temp Lab-metal slowly, but only after extensive immersion. |
| **Combustibility** | Will not support combustion. |
| **Conductivity** | A nonconductor at normal voltage. Not considered an insulator. Accepts ground for powder coating. |
| **Thermal conductivity** | Est. 1-2 BTU per sq. ft., per hr., per $^{o}$F |
| **Mechanical Properties** | Strong and durable. Can be milled, sawed, drilled, tapped, sanded, ground, filed. Does not shrink, chip, crack or peel. |

## WARRANTY

Dampney products are expressly warranted to meet applicable technical and quality specifications. The technical data contained herein are accurate at the date of issuance but are subject to change without prior notification. No warranty of current accuracy is hereby given or implied. User must contact Dampney to verify correctness before ordering. Dampney assumes no responsibility for coverage, performance or injuries resulting from handling or use and **LIABILITY, IF ANY, SHALL BE LIMITED TO PRODUCT REPLACEMENT.** In no event will Dampney be responsible for consequential damages, except insofar as mandated by law. Dampney **DISCLAIMS ALL OTHER WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**