



LOCTITE[®] Fixmaster[®] Marine Chocking

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PRODUCT DESCRIPTION

LOCTITE[®] Fixmaster[®] Marine Chocking provides the following product characteristics:

Technology	Epoxy
Chemical Type	Epoxy
Appearance	Orange or green liquid ^{LMS}
Components	Two component - requires mixing
Mix Ratio, by volume - Resin : Hardener	100 : 11.6
Mix Ratio, by weight - Resin : Hardener	100 : 6.9
Cure	Room temperature cure
Application	Flooring & grout
Specific Benefit	<ul style="list-style-type: none"> Withstands temperatures up to 121 °C Non-shrinking Chemical resistant 100 % solids epoxy system Vibration resistant Self-leveling Allows flow into hard to reach areas Application versatility

LOCTITE[®] Fixmaster[®] Marine Chocking is a two-part epoxy chocking system. It is recommended for the installation of main engines and other equipment. Its high compressive strength withstands maximum loads. Typical applications include installation of main engines, drive engines, winches, hoists, and deck mounted equipment.

Lloyd's Register

Creep Test: A measure of high temperature progressive deformation of a material at constant stress.

LOCTITE[®] Fixmaster[®] Marine Chocking Orange - Approved for maximum loading of 3.5 MPa for a minimum measured exotherm temperature of 40 °C or maximum loading of 5.0 MPa where the chock is post-cured to a minimum temperature of 80 °C for 16 hours.

LOCTITE[®] Fixmaster[®] Marine Chocking Green - Approved for maximum loading of 5.0 MPa where the chock is post-cured to a minimum temperature of 80 °C for 16 hours.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Resin (Orange):

Viscosity, Brookfield - RVDV3, 25 °C, mPa·s (cP):
Spindle 7, speed 20 rpm 80,000 to 110,000^{LMS}

Weight Per Gallon, lbs/gal 13.3 to 14.0^{LMS}

Resin (Green):

Viscosity, Brookfield - RVDV3, 25 °C, mPa·s (cP):
Spindle 7, speed 20 rpm 85,000 to 105,000^{LMS}

Weight Per Gallon, lbs/gal 13.5 to 14.3^{LMS}

Mixed:

Coverage 636 cm³ per 1 kg
(17.6 in³ per 1 lb)

TYPICAL CURING PERFORMANCE

Curing Properties

Cure Time @ 25 °C, hours 24
Working Time @ 25 °C, minutes 10 to 15
Gel Time (Orange) @ 25 °C, minutes:
400 g mass 33 to 47^{LMS}
Gel Time (Green) @ 25 °C, minutes:
400 g mass 38 to 45^{LMS}

TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 24 hours @ 25 °C

Physical Properties:

Shore Hardness, ISO 868, Durometer D 90
Tensile Strength, ISO N/mm² 38
527-2 (psi) (5,500)
Compressive Strength, N/mm² 150
ISO 604 (psi) (22,000)
Compressive Modulus, N/mm² 2,760
ISO 604 (psi) (400,000)

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Directions for use:

Surface Preparation:

- Store kits at 15 °C to 25 °C for at least 24 hours before beginning the chock pour.
- Bedplates and machinery should be at least @ 15 °C to ensure complete flow.



- Once the engine is in position, install sides and backs of dams for the chocks in a thickness of 25 to 32 mm. Check dams with a flashlight to assure tightness. When a thicker chock is required, use the multiple pour technique. Allow each pour to set and cool before proceeding. Subsequent pours should be made within 12 hours of previous pour.
- Apply general-purpose weather stripping to the front edge of bedplates that will be in direct contact with epoxy excess to eliminate cracking.
- Release agent or grease should be used in the prepared chock area and on exposed anchor bolts to facilitate chock removal for realignment.
- Position front dams using an angle iron large enough to permit a minimum of a 12.5 mm head above the bedplate surface. Position dams from 16 to 19 mm away from bedplate edges.

Mixing:

- Check Marine Chocking temperature and bedplate temperature.
- Add the required amount of hardener (per the reduction chart) to the contents of the resin can and mix with a heavy-duty drill for or until mixture is homogeneous. Mix at moderate speed, but do not allow a vortex to form. If the mixer vortexes, air will be drawn in which will cause bubbling of the chocking compound. Let the mixed product stand for to de-aerate.

Application Method:

- Pour chocks from one corner to maximize the escape of air and assure good surface contact. At 25 °C working time is approximately 10 to 15 minutes.
- Allow chocks to cure the following minimum times before torquing bolts and checking alignment:
 - 35 hours at 15 °C
 - 24 hours at 21 °C
 - 16 hours at 26 °C
 - 11 hours at 32 °C.

Technical Tips for Working With Epoxies

Working time and cure depends on temperature and mass:

- The higher the temperature, the faster the cure.
- The larger the mass of material, the faster the cure.

To speed the cure of epoxies at low temperatures:

- Store epoxy at room temperature.
- Pre-heat repair surface until warm to the touch.

To slow the cure of epoxies at high temperatures:

- Mix epoxy in small masses to prevent rapid curing.
- Cool resin/hardener component(s).

Loctite Material Specification^{LMS}

LMS dated July 10, 2001 (Resin - Orange) and LMS dated November 21, 2000 (Resin - Green). Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Loctite Quality.

Storage

Store product in the unopened container in a dry location. Material removed from containers may be contaminated during use. Do not return liquid to original container. Storage information may be indicated on the product container labeling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.

Henkel cannot assume responsibility for product which has been contaminated or stored under conditions other than those recommended. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Note

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Reference 2.0