Technical Data Sheet

LOCTITE® SF 7505™

Known as 7505 and/or Loctite X-80
July 2017

PRODUCT DESCRIPTION

LOCTITE® SF 7505™ provides the following product characteristics:

Technology	Aqueous Based
Chemical Type	Synthetic Latex Resin
Appearance	Milky liquid
Odor	Mild
Cure	Dries
Application	Coating
Specific Benefits	• Easy application by brush, roller or sponge • Converts and stops rust

LOCTITE® SF 7505™ is a fast drying, latex coating that is applied to rusted metal to stop rust, protect the surface and act as a primer for the finish coat. Typical applications include pipes and valves, fittings in refineries, tankers, power plants, and domestic and commercial heating/cooling plants. It is also used for truck and trailer industries, agriculture equipment, and anywhere that requires protection against rust. This product resists heat aging up to 90°C continuously and up to 120°C for short exposure periods.

TYPICAL PROPERTIES

Specific Gravity @ 25 °C	1.2
Flash Point - See SDS	

TYPICAL ENVIRONMENTAL RESISTANCE

Resistance to moisture, solvents & chemicals

LOCTITE® SF 7505™ should be topcoated for many applications. Continuous exposure of LOCTITE® SF 7505™ should not be used in applications involving continuous immersion in water or fluids. LOCTITE® SF 7505™ should be topcoated with products known to be resistant to the environment expected.

Topcoat selection is dependent upon the environment to which the coating will be subjected. The following guidelines can be used. Topcoats are listed by their relative order of performance:

- Moisture/salt spray - high-build epoxies, coal tar epoxy catalysed urethanes, vinyls, chlorinated rubber.
- Solvent resistance - catalysed urethanes, coal tar epoxies, high build epoxy, vinyls.
- Acid resistance - catalysed urethanes, coal tar epoxies, high build epoxies.
- Alkali resistance - catalysed urethanes, coal tar epoxies, high build epoxies, chlorinated rubber.
- Oxidizing agent resistance - vinyls, catalysed urethanes.
- Abrasions - epoxies, urethanes, alkyds.

Where cratering, pitting or heavy surface profile is evident use coats of LOCTITE® SF 7505™ followed by a high build primer topcoat with sufficient thicknes to prevent pin-point corrosion. As with all paint systems, a test patch is recommended.

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 Safety Data Sheet (SDS).

Surface Preparation

Old Steel:

Loose or "flaky" rust must be removed. Only conversion of firmly bonded rust will result in durable protection. Oil, grease, old paint, mill scale, form oil, and water soluble surfaces and chlorides must be removed to allow LOCTITE® SF 7505™ to react with surface

Loose rust, mill scales and oil paint should be removed preferably by power wirebrushing, (avoid over polishing of the surface) followed by rinsing with water to remove powder and solubles. Manual wirebrushing, chipping, scraping and particularly rotopeening can also be used. Oil, grease, and form oil should be removed before loose rust.

Rust Conversion Time and Appearance:

Two coats of LOCTITE® SF 7505™ are recommended. On lightly rusted steel (that has been wirebrushed) the first coat will start to develop a black color within minutes. The second coat should dry to a black color with gloss varying from flat to satin. The second coat should be applied within 60 minutes of the first coat.

Application Conditions

LOCTITE® SF 7505™ may be applied when surface and air is between 10 °C minimum and rising and 30 °C maximum and falling. Reaction is slower at lower temperatures. If temperature is too hot, film may surface and bubble. High humidity is beneficial; it slows drying but assists rust conversion. LOCTITE® SF 7505™ should not be applied in conditions of condensing humidity (e.g. fog, dew), on ice, in rain or in heavy sea (salt) spray atmospheres. Steel surfaces may be damp but not wet (i.e. continuous visible film of water). Do not apply LOCTITE® SF 7505™ to surface in direct sunlight.

Directions for use

1. Shake the product thoroughly before use.
2. Ensure all surfaces are free of any dirt, oil, release agents or other contaminants.
3. Sanding is not required.
4. Pour into clean container for easy application by brushing or apply directly to surface and brush out.
5. If sandblasted, sufficient material should be applied to effectively cover the profile.
6. Apply liberally by brush, roller or sponge. An airless spray may also be used.
7. The use of gloves is recommended.
8. Spray application is recommended for larger areas.
9. Airless equipment is faster and provides more effective conversion and improved surface penetration.
10. Conventional air-spray equipment may be used but LOCTITE® SF 7505™ may require thinning to 10% with water for proper spraying. Never add solvent to LOCTITE® SF 7505™.
11. Application of 2 coats is recommended for maximum durability.
12. Uneven color indicates the need for additional coats for maximum protection. Recoat time is 60-120 minutes. Allow 24 hours minimum to dry before painting.
13. Brushes, rollers and other tools should be cleaned immediately with detergent and water. Flush spray equipment immediately after use with detergent and water. LOCTITE® SF 7505™ is difficult to remove when dry.
14. Once dried, strong solvents such as paint remover will be required to remove LOCTITE® SF 7505™ from equipment and clothes. Mechanical abrasion may be necessary.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Storage

Store product in the unopened container in a dry location. 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. Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Conversions

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Disclaimer

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