



Tufcote™ 3.5 HH

Hi-Heat Silicone Alkyd DTM

(Formerly High Heat Coatings)



GENERAL

DESCRIPTION

Tufcote 3.5 HH Hi-Heat is a high quality, flat finish pure silicone alkyd, designed to resist temperatures up to 1200°F (649°C). This coating is formulated to provide long-term protection. To achieve high temperature resistance, heat must be applied between 600°F - 800°F (316-427°C) to the painted metal in order to fuse the coating to the surface. The maximum heat resistance of Tufcote 3.5 HH occurs only after the fusion process.

SUGGESTED USES

As an economy coating for use directly over the properly prepared surfaces for boiler fronts, heat exchangers, smoke stacks, indoor and outdoor chemical and refinery installations, mufflers and special applications in the aircraft and space industries where the following attributes are desirable:

- Good hide and coverage
- Long-term protection
- Resists heat up to 1200°F (649°C)

COMPATIBILITY WITH OTHER COATINGS

- DO NOT APPLY TO HOT STEEL.
- Do not apply over primer.

COLOR

982 Black
983 Aluminum

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.



MIXING

COMPONENTS

Tufcote 3.5 HH 1 gallon container 100% Full (128 oz.)

MIXING

Mix thoroughly before use and/or after thinning. Assure color is uniform and there are no solids on bottom of can.

Reduction

If thinning is necessary, use up to 10% Tufcote 8020 Zero VOC Exempt Solvent.

POT LIFE

n/a



APPLICATION

SURFACE PREPARATION

All surfaces to be painted must be clean, dry and in fit condition to be painted. Be sure to remove all wax, silicone, oil powdery or scaling rust, loose or peeling paint and all other foreign matter. Smooth, slick surfaces should be sanded to give a mechanical tooth for adhesion purposes. Ideal surface profile is 1.5 mil.

BARE FERROUS METAL: Clean off all dirt, grease, oil, wax or other foreign matter. All loose, powdery or scaling rust must also be removed. A completely de-rusted surface is recommended. Sand blasted cleaned to a cleanliness of Swedish Standard SA 2 1/2 (equivalent to SSPC SP-10-Near White Metal Blast Cleaning).

APPLICATION

DO NOT APPLY TO HOT STEEL. Do not apply over primer.

Apply Tufcote 3.5 HH directly over the properly prepared surface. Apply 1 solid covering coat (2 mils dry film thickness) is sufficient. 1.5 mil dry film thickness is ideal. Coating thickness in excess of 3 mil is not suitable. Thick film may result in blistering and disbonding. To achieve high temperature resistance after application, wait 12 hours or longer and then heat gradually between 600°F - 800°F (316°C -427°C), to fuse the coating to the surface. Temperature increase of 185°F (85°C) per hour is ideal. Temperature increase of greater than 300°F (149°C) per hour is not recommended.

CLEAN UP THINNERS

Equipment should be thoroughly cleaned immediately after use in an enclosed spray equipment cleaner with Tufcote 8020 Zero VOC Exempt Solvent.



DRY TIMES

Cure Time at Recommended Thickness @ 50% RH

| | <u>77°F (25°C)</u> |
|-----------|--------------------|
| To Touch | 2 hours |
| To Handle | 2 - 4 hours |



PHYSICAL PROPERTIES

| | |
|---------------------------------|--|
| Viscosity | 55 - 65 Kres Units @ 77°F |
| Volume Solids | 31% - 38% |
| Weight Solids | 46% - 56% |
| Theoretical Coverage Per Gallon | 578 - 598 ft ² per gallon @ 1 mil DFT |
| Solvents Used | Aliphatic Hydrocarbon / Ketones |
| Flash Point | 1°F/TCC |
| Gloss | Low gloss |
| Shelf Life | 12 months |
| Recommended DFT | 1.5 - 2 mils DFT. (4-6 mils WFT) |

Application by spray only.



STORAGE CONDITIONS

IMPORTANT: The contents of this can are subject to gassing. Periodically release the gas by covering the lid with a cloth and opening the lid. Cautiously open lid with gradual release of possible pressure build-up in the can. **CAUTION:** To avoid contact with eyes, wear proper eye protection. Replace and secure lid before returning to stock.

To avoid pressure build-up in the can, storage temperatures should not exceed 85°F.

VOC REGULATIONS

VOC (Theoretical, varies with color).

3.5 lbs/gal (420 grams per liter) or less

These directions refer to the use of products which may be restricted or require special mixing instructions in VOC regulated areas. Follow mixing usage and recommendations in the VOC Compliant Products Chart for your area.

SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

TO AVOID SPONTANEOUS COMBUSTION, SOAKED SOILED RAGS, SPRAY BOOTH FILTERS, OVERSPRAY WASTE AND DRY DUST SWEEPINGS MUST BE PROPERLY DISCARDED IN WATER FILLED CONTAINERS AND DISPOSED OF IN ACCORDANCE WITH LOCAL DISPOSAL REGULATIONS.

All technical advice, recommendations and services are rendered by the Seller gratis. They are based on technical data which the Seller believes to be reliable, and are intended for professional use by persons having skill and know-how at their own discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from their use by Buyer in whole or in part. Such recommendations, technical advice or services are not to be taken as a license to operate under or intended to suggest infringement of any existing patent.

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