

# TECHNICAL DATASHEET

## Hydrosil Silicone Roof Coating

### Description & Uses

Cromar Hydrosil is a professional grade, solvent based, liquid applied, single component, moisture-cure premium silicone coating that has been specifically formulated to deliver direct-bond adhesion as a restoration and maintenance coating over most common roof substrates and membranes.

Hydrosil forms a durable, vapor permeable, watertight and weatherproof barrier that provides long term resistance to degradation from natural weathering (including extreme temperatures, UV, rain and snow). The coating has excellent UV resistance, dries to a grey finish which keeps roof surfaces cooler preventing thermal shock and extending the life of the roof.

Independently tested and complies and/or exceeds all the requirements of ASTM D 6694 Standard Specification Liquid-Applied Silicone Coating used in Spray Polyurethane Foam Roofing Systems.

Hydrosil is approved for Class "A" Non-Combustible credentials as tested under UL 790 Spread of Flame procedures over most common roofing substrates and membranes.

**Note: For professional use only – do not dilute.** We cannot assume liability for the results of customers use or a customer's inability to properly use or apply this product.

### Benefits

- Single Coat Application
- Superior Adhesion
- No Primer Required
- Fast Cure Time
- Highly Durable
- Self- Levelling
- Unaffected By Standing Water
- Suitable For Use On Most Common Roofing Substrates



**FOR FULL APPLICATION INSTRUCTIONS PLEASE REFER TO THE HYDROSIL APPLICATION GUIDE**

### Preparation

- Prior to coating ensure all surfaces are clean, dry and free of dust, dirt, grease, wax and any other incompatible substances. It may be necessary to power wash or prime to enhance adhesion and or limit asphalt bleed through.
- Cover all flashing details, joints & seams using the Hydrosil Seam Sealer and Detailer, ensuring it is thoroughly cured before applying Hydrosil Silicone Roof Coating.

### Mixing Procedure

Do not thin product with solvent or other solutions. Product may separate during shipping and storage, though it may still look mixed. Mix well before using.

When product is in 18.9 Ltr pails, use a 3" min diameter-mixing blade. Hand mixing with a suitable mixing blade is acceptable. **DO NOT OVER-MIX.**

Containers are packaged with a layer of dry nitrogen, to keep latent moisture from prematurely starting the curing process. Once opened, the product has a pot life of 2-6 hours, depending on relative humidity conditions.

### Application

- Hydrosil may be sprayed, rolled or brush applied.
- Can be applied over surfaces that exhibit ponding water, however it is advised that all roof systems be designed and built to ensure positive drainage.
- Coating must be evenly applied and pinhole free.
- Hydrosil Coating should be applied at the recommended coverage of 1L/1.25sqm (wet coating thickness 0.74mm). Application rates must be checked periodically to assure proper coating thickness. This may be done with a wet film gauge, or by checking coverage of a known quantity. The contractor should estimate coating requirements based on actual experience and needs to figure losses due to applicator experience, surface texture, wind, waste, and other factors increasing estimated litres required.

### Poured in place application

- Use 1 - 2.5 cm rollers.
- Use smooth or notched squeegee
- Use short bristle brush/roller on smooth substrates.
- Use longer bristle brush/roller on rough substrates.
- After the Hydrosil Seam Sealer & Detailer has thoroughly cured, pour base coat onto roof in a narrow pass for approximately 6 meters and spread with the squeegee or 45 cm applicator brush at an application rate designed to achieve the recommended coverage of 1L/1.25sqm (wet coating thickness 0.74mm).
- Immediately back-roll the area evenly with an 23-45 cm x 1-2.5 cm roller, perpendicular to the squeegee pattern. Care should be taken to back-roll immediately before coating begins to dry.
- **Note:** Temperature, coating type, applicator technique, substrate, as well as other factors will affect coating thickness.
- The Hydrosil Silicone Roof Coating shall completely cover all expansion joint covers, parapets and flashings applied at an application rate designed to achieve the recommended coverage of 1L/1.25sqm (wet coating thickness 0.74mm).

The roof and substrate should be prepared as per the manufacturer's specification prior to application of coating.

Note: Temperature, coating type, applicator technique, substrate, as well as other factors will affect coating thickness.

- Hydrosil will be touch dry in 2-8 hours and will be completely cured and trafficable in no more than 72 hours depending on weather conditions (i.e. temperature and humidity).

Please note: Coating must be evenly applied and pinhole free. Coating must be extended beyond the substrate to create a self-terminating flashing.

#### **Cure Time**

Dry-to-touch in 2-6 hours.

Full cure in 4-8 hours.

Foot traffic in 24 hours.

#### **Cleanup**

Application tools can be cleaned with Acetone. Do not use water!

Cromar Hydrosil cures by reacting with moisture and should not be left in spray guns, pump equipment and/or hoses for prolonged periods unless equipment contains moisture lock hoses, fittings, and seals. Equipment without these components will transmit sufficient moisture vapor to gradually form cured material on hose walls and at unsealed connections potentially causing an increase in operating pressure and material flow restriction.

#### **Storage**

Store in a well-ventilated place between 1 and 23°C. Keep cool. Store locked up. Can be stored in unheated warehouses during the cooler months without the risk of freezing. Keep out of direct sunlight and protect from extreme temperatures.

#### **Shelf Life**

18 months from date of manufacture when stored in original, unopened containers between 1 and 23°C.

#### **Limitations**

- Do not apply at ambient temperatures lower than 5°C.
- Ensure that all surfaces are not wet or damp and that rain is not imminent during the application time, or for at least an hour after application.
- Always refer to the manufacturer's specification for application limitations, procedures, and guidelines. Not recommended for continuous immersion service, for use in cryogenic tank, or cold storage roofing applications without a vapor barrier
- It is the user's responsibility to ensure suitability for use. Read product label and application guide thoroughly before use. Safety Data available on request.

## Technical Data

<b>Colour</b>	Grey
<b>Tensile Strength</b>	215 ± 10 psi @ 73F
<b>Elongation</b>	420% ± 10% @ 73F
<b>Tear Resistance</b>	29 ± 3 lbf/in @ 73F
<b>V.O.C</b>	<250 g/L
<b>Initial Emissivity</b>	.89
<b>Initial SRI Value</b>	102
<b>Permeance (Method B)</b>	6.1 perms
<b>Solids by Weight</b>	79% ± 5%
<b>Solids by Volume</b>	70% ± 5%
<b>Tack Free Time</b>	2-6 hours (RH dependent)
<b>Full Cure Time</b>	72 hours (RH dependent)

### Further Information:

In the event of further queries or problems concerning the use of this product, please contact the address below, e-mail [info@cromar.uk.com](mailto:info@cromar.uk.com).

*All products should be sold in accordance with the manufacturer's instructions. The manufacturer cannot be held responsible where conditions of use are beyond our control. Cromar Building Products Limited products' are available for sale in accordance with Cromar Building Products Limited standard conditions of sale, which is available upon request. Whilst any information contained herein is to the best of our knowledge true and accurate, no warranty is given or implied in connection with any recommendations, agents, or distributors, as the conditions of use and any labour involved are beyond our control. Our warranty is therefore limited to the quality of supplied product.*