



Nyalic Product Specifications

1. DESCRIPTION

- 1.1 NYALIC[®] is a single pack, "nylonic" polymer resin coating which provides envelope protection against chemical and ultraviolet corrosion on ferrous and nonferrous metals, galvanised, anodized and painted surfaces. Additional formulations exist for use on concrete, stone, wood and fibreglass.
- 1.2 NYALIC[®] is applied to clean, dry surfaces previously prepared by removal of dirt, oil, grease, wax and silicone. This is achieved by washing the surface with a free rinsing cleanser, rinsing thoroughly and allowing to dry. If coating a corroded metal surface, an acid wash followed by a neutralizing wash may be needed to remove loose metal oxide.
- 1.3 Nyalic[®] is a homogenous compound made up of nylonic and other resins with solvents.
- 1.4 Nyalic® contains no chlorinated solvents.
- 1.5 Nyalic® requires no dilution or mixing prior to use.
- 1.6 Clean up is with soap and water for hands and lacquer thinner for equipment.
- 1.7 Nyalic[®] is manufactured under exacting customised quality controls.

2. DELIVERY AND SITE HANDLING

- 2.1 Nyalic[®] is available in 500ml,1 Litre, 4 Litre and 20 Litre cans. Refer to container labelling for warnings and handling precautions as well as the product Material Safety Data Sheet.
- 2.2 PLEASE TAKE NOTE; Nyalic does not fall under the Transportation of Dangerous Goods Act and may be shipped by common carrier.
- 2.3 Nyalic[®] is combustible in liquid form with a flash point of 64°C and an auto ignition temperature of 427°C.

NEVER USE NYALIC® IN OR NEAR NAKED FLAME OR EQUIPMENT THAT WILL GENERATE SURFACE TEMPERATURES ABOVE THOSE LISTED Carbon dioxide, carbon monoxide and possibly other toxic vapours may be released upon heating the liquid compound. ENSURE GOOD VENTILATION AT ALL TIMES

- 2.4 Nyalic[®] should be stored in a cool, dry place with adequate ventilation and away from direct sunlight, heat, sparks and flame. "No smoking" should be observed while handling Nyalic.
- 2.5 Operators of open containers of Nyalic[®] should wear NIOSH/MSHS approved respiratory equipment, eye protection and skin protection at ALL times while handling contents.
- 2.6 Shelf life of Nyalic[®] is indefinite in a fully closed container.



- 2.7 Small spills can be wiped up or absorbed with absorbent materials. Large spills can be handled with pick-up buckets or other means and placed in suitable disposable containers. Residues are treated as small spills.
- 2.8 Dispose of all waste in accordance with National, Local, State, Federal or area Council regulations.

CHARACTERISTICS

3. GENERAL

- 3.1 Nyalic[®] is suitable for internal, external or submersed use as a non-toxic, anticorrosion protection for; Ferrous and Non-Ferrous Metals, Galvanized, Anodised and Painted Surfaces. Nyalic is also well suited for concrete, stone, wood and fibreglass.
- 3.2 Nyalic[®] may be used as a self-priming, direct-to metal one coat system. A significant advancement over multi-coat systems due to the potential for material/personnel savings and reduction in total V.O.C. emissions.
- 3.3 Nyalic[®] may be used as a primer coat under another product providing the best adherence to aluminium and related alloys of any coating available today. This primer base will expand and contract with the metal ensuring no loss of adhesion over the course of its life.
- 3.4 Nyalic[®] may be used as a clear protective top-coat over another product and will protect that product from chemical and ultraviolet corrosion, keeping colours sharp and preventing oxidation.
- 3.5 Nyalic[®] has been formulated as an environmentally friendly solvent based coating.
- 3.6 Nyalic[®] is applied in one coat at approximately 30 microns yielding a dry film thickness of approximately 4 microns. While additional coats will slow the curing time, two or three coats are recommended for extended submersion corrosion protection on oxidized surfaces, and when used on concrete, stone or wood.
- 3.7 In adverse conditions of low temperature and high humidity a dry cure may take up to FOUR DAYS with a full hard cure up to THIRTY DAYS. Curing may be speeded up by heating to 115°C for 15 minutes or by applying heat lamps etc. will speed up the curing process.

EXTREME CARE SHOULD BE TAKEN WHEN APPLYING HEAT

4. TOXICITY

4.1 PLEASE NOTE; The dry film of NYALIC® is non-toxic, food safe, potable water safe and medical safe. The dry compound is a "pure product" not recognized as a food or toxin by any known organism and is absolutely inert in the food chain. Nyalic contains no metal compounds.

5. EXPOSURE TO FIRE

5.1 The dry film compound will gas off (without combusting) at approximately 350°C.





5.2 Smoke and lower temperature fire damage may be easily cleaned off a Nyalic[®] coated surface with soap and water.

6. WELDING

- 6.1 Welding or flame cutting should not be conducted until Nyalic[®] has dried to the touch.
- 6.2 There is no concern for weld integrity when using NYALIC® on the surface of welded materials.
- 6.3 The welding process does produce harmful gases from the coating which are easily dispersed in a well ventilated area. The gases tested for were carbon monoxide, hydrogen chloride, and phosgene (these were selected because they are possible decomposition products of Nyalic[®] and they are regulated by OSHA). At 0.5 meter from the welding arc with a sensor in the welding plume maximum detected CO was 1ppm, to HC1 was detected and phosgene was less than 0.1 ppm SWRI Project #06-6892-104 May 3, 1995). These levels are within NZOSHA levels.

7. EXTRAORDINARY FEATURES

- 7.1 The dry film coating remains flexible throughout its life. Nyalic[®] will not chip, crack, peel or yellow. Nyalic[®] will not "track".
- 7.2 In the event of damage to the coating, the damage should be repaired by a further application of Nyalic[®].

8. MAINTENANCE

- 8.1 Nyalic[®] is self-annealing. At any time Nyalic[®] may be applied to a clean surface and it will bind through itself to form a new one part coating. The life of the coating may be extended with the application of additional coats at regular service intervals. Nyalic[®] is indefinitely maintainable.
- 8.2 Maintenance painting, using the techniques described in sections 10 and 11 should be conducted as needed.
- 8.3 Localized repairs of damaged or abraded areas should be conducted as necessary using the same techniques as in sections 10 and 11.
- 8.4 The smooth envelope protection of Nyalic[®] prevents the adherence of and lessens the build up of dirt, fingerprints, diesel carbon, algae, marine growth, bird droppings, etc. Although dirtying agents may settle on the surface, they will not adhere to Nyalic[®] and may be easily washed off with soap and water. Even marine encrustations wash off easily.

9. DURABILITY

(When applied as directed in Sections 10 and 11)

- 9.1 Nyalic[®] will yield an effective life of up to 10 years used as a one coat system depending on the substrate to which it is applied.
- 9.2 Nyalic[®] will add up to 10 years to the life of a paint when used as a top coat. (depending on the substrate.)





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