

UCA-2M

Water-Soluble Ultrasound Gel

General

UCA-2M is a water-based bright blue transparent gel, consisting of a blend of coupling agents, organic corrosion inhibitors and thickening agents.

UCA-2M has marked thixotropic properties which ensure it stays in position when applied and does not drip or run from the part under test. The thixotropic and excellent wetting properties ensure free and even movement of ultrasonic probes over both rough and smooth surfaces with immediate and excellent acoustic transmission.

UCA-2M is neutral in reaction (pH value 7.5 - 8.5) and the presence of special organic corrosion inhibitors ensures that it will not corrode most metals. The product is low in sulphur and halogens and essentially ash free on ignition. (See Typical Properties below.)

UCA-2M contains no hydrocarbons or powerful solvents and is therefore without effect on painted surfaces, plastics, synthetic or natural rubbers.

UCA-2M contains no known toxic ingredient and the effect on skin is negligible. The presence of surface active agents could exert a slight defatting effect on persistent or prolonged contact; this may be avoided by the application of a barrier cream.

Method of Use

UCA-2M is normally applied by hand or with a soft bristle brush. It is completely soluble in water and can be readily removed by washing with water. Where the use of water is not convenient or practical, UCA-2M can be removed with alcohol, acetone or similar solvent.

UCA-2M is normally used as supplied but can be pre-diluted with water. When diluted with an equal quantity of water, UCA-2M retains its thixotropic properties. More dilute solutions retain enhanced viscosity and powerful wetting properties.

UCA-2M contains freezing point depressants. Working temperature range: minus 10 °C to plus 50 °C. Above 50 °C, some evaporation of water will take place on prolonged exposure.

UCA-2M is non flammable under normal operational conditions.

Typical Properties (not a specification)

| | |
|------------------------------|-----------------------------|
| Density: | approx. 1 g/cm ³ |
| pH: | approx. 8 (undiluted) |
| Velocity of sound in UCA-2M: | 1675 metres/second |
| Sulphur: | <50 ppm |
| Chlorine: | <50 ppm |
| Fluorine: | <10 ppm |
| Bromine: | <10ppm |
| Ash: | <0.1% |

Analysis according to ASME Boiler Code 1983 Edition, Section 5.
Sulphur determined by ASTM D-129 or allowed alternative.
Halogens determined by ASTM 0-1598.

Storage

Storage Temperature: 5 – 40 °C
Protect against frost.

Safety guidance

Before operating the process described it is important that this complete document, together with any relevant Safety Data sheets, be read and understood.

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