

Product Data Sheet:ELKTC42J160810A

Water-Borne *TufKoat*® TC-42J High Gloss Baking Clear Coating

- Premium Gloss/Hardness for Copper, Copper Alloys, and Metals Plated Therewith

Characteristics:

1. Water borne, low pollution, non-inflammable.
2. High gloss, high hardness film formed thereof.
3. Protective film with high resilience and abrasion resistance.
4. A minimal 150 °C temperature required for optimal curing conditions.
5. Excellent anti-tarnishing to copper, copper alloys and plated substrates.
6. Conforming to any environmental or VOC regulations.

Introduction:

TufKoat® TC-42J is a water-borne, thermosetting clear coating, designed especially for copper, copper alloys, or any copper-plated metals, to perform as a premium protective film against corrosion and abrasion.

TufKoat® TC-42J can be applied onto metal pieces either by brushing, immersion, spraying, or rollers in a conventional way, followed by curing at 150 C x 30 min. or 180 C x 20 min., to result in a high gloss, protective 5~10 micron film with 6H hardness and excellent tarnish resistance standing up to 250 hours salt spray test.

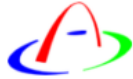
It is advisable that, coppers, copper alloys, or copper-plated metals must be cleaned, degreased, and free from any stains, before *TufKoat*® TC-42J is applied onto them, to ensure a perfect and effective coating is obtained.

TufKoat® TC-42J contains no toxic metal salts and conforms to the most stringent requirements of modern environmental and safety regulations, e.g. VOC or RoHS, for which *TufKoat*® TC-42J can be used easily and with minimal precautionary measures, due to its very low volatile organic contents of less than 3%, and ecological, but effective compositions.

Specifications:

Appearance:	Aqueous colorless translucent
Chemical type:	Modified acrylic-MF system
Non-volatile, 110°C x 2 hours:	20 ± 1 %
Organic solvent content, %	< 3%, alcohols

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Specific gravity, g/ml, 25 °C:	1.11 ± 0.10
pH value:	7 ~ 8
Viscosity, Ford Cup #4, 25 °C:	10 ± 5 seconds

Suggested Curing Conditions:

We strongly suggest a curing schedule of 180°C x 20 minutes when using **TufKoat® TC-42J**, to achieve the optimal cross-linking density. However, if lower temperature is wanted, a minimal temperature of 150 °C is required for extended time, say, 30 minutes or more.

Suggested Handling and Storage:

Handling

Despite **TufKoat® TC-42J** contains low volatile solvents, general precautionary safety measures, such as goggles, gloves and well-ventilated areas, are still advised when handling the solutions. Avoid any contact of **TufKoat® TC-42J** solutions with skin and eyes. Once contacted by accident, thorough rinse with water immediately is suggested.

Storage

Unused, sealed **TufKoat® TC-42J** in original containers is guaranteed with pot life of six months as minimal, if it is stored in a cool, well-ventilated area and avoid any direct exposure to sunlight.

For those open, untempered **TufKoat® TC-42J** in original containers, we suggest them sealed immediately after use, and use them up within three months.

For those **TufKoat® TC-42J** used on-line and idle from further use, we suggest them sealed immediately in separate containers, and try to use them up within seven days.

Packages:

20 kilograms in PE plastic pails or 200 kilograms in PE plastic drums ◦

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