INTUMESCENT CHEMICALS LTD
LIQUID FLAME RETARDANTS

CHARON™
LIQUID FLAME RETARDANTS

Version1 02/09/2021

TECHNICAL DATASHEET

PRODUCT	CODE	DESCRIPTION
Charon™ 63 Varnish, Clear	C63V	Multi Coat Thin Film Varnish, Clear
Charon™ 63 Paint, White	C63P (Part A)	Multi Coat Thin Film Paint, White
Charon™ 63 Varnish	C63LF	Low Formaldehyde/Low Fume Multi Coat Thin Film Varnish, Clear
Charon™ 63 Activator	C63 (Part B)	Activator for the Charon™ 63 Range

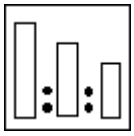
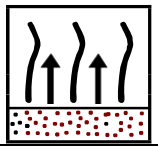
PRODUCT DESCRIPTION

Charon™ Coating Range is a versatile 2-component Melamine system, developed specifically as finish for Timber applications. Charon™ Genuine 2K Paint gives a high quality finish with excellent gloss semi gloss and durability and meets the highest expectations.

Ready to use, this product contains less VOC emissions than 420 g / l.

CHOICE AND PREPARATION OF SUBSTRATES

	Before application, thoroughly remove contamination using light sanding	
	Standard timber knotting solution Native smooth wood surface	**Sanding** P600 – P1200 machine

Mixing ratios 	**HVLP and conventional application**		
	Part A Part B	**Varnish 63V** **Weight** C63V & LF 100 parts C63V & LF 112 parts	**Paint C63P** **Weight** C63P Part A 100 parts C63P Part B 82 parts
	Potlife at 20°C	6 hours Spraying gun has to be cleaned immediately after use. IMPORTANT: To comply with the VOC regulations DO NOT add additional Thinner (Water)	
	Viscosity	TBC sec. DIN 4 at 20°C For optimal application the temperature has to be between 18 - 25 ° C	TBC sec. DIN 4 at 20°C
	Number of layers 63V	**Spray** 2 layers 200g/m^2 coat 1 200g/m^2 coat 2 Nominal 350 microns	**Brush** 2 layers 200g/m^2 per coat 200g/m2 coat 2 350 microns
	Evaporation between layers	Moderate 3 hours	
	Air-dry at 20°C: Dust-free Manageable Refinish Commissioning	4 - 5 hours 12 -16 hours 3 hour 24 - 48 hour	
	Refinishing	3 hour	

TECHNICAL INFORMATION

Theoretical coverage in m2 / l ready-to-use product	Approximately 2.5m2 per liter of ready-to-use product for a layer thickness of 400g/m^2, depending on the amount of thinner used. (brush only)

EUROPEAN VOS LEGISLATION

The VOC level permitted by European regulations for this ready-to-use product (product category: IIB) in ready to use form is a maximum of 420 g / l VOC.
The VOC emissions of this ready-to-use product is a maximum of 420 g / l.
Depending on the method, the actual VOC of this ready-to-use product may be lower than specified in the EU Directive Code.

HEALTH AND SAFETY

THESE PRODUCTS ARE FOR PROFESSIONAL USE ONLY and are not suitable for purposes other than those mentioned. The information on this TDS is based on scientific and technical research. It is the responsibility of the user to take all necessary precautions to ensure proper use of the product for the intended purpose.
For health and safety information, see the Material Safety Data Sheet, available at upon request from info@intuchemicals.com

Intumescent Chemicals Ltd

Charon C63P "White Paint" Internal Applications

The Charon C63P White Paint is a heavy-duty decorative fire-retardant coating used for wooden substrates on applications such as showrooms, factories, warehouses, workshops, garages. It is a water-based, high durability two-pack epoxy resin coating.

FIRE TEST STANDARD in UKAS-accredited Fire Test laboratory **BS EN Class B s1 d0**

BS EN 13823 (SBI): 2020

- Smoke & Gas "s" – s1 + s2 are none or very low & compliant levels, s3 moderate, s4 high smoke.
- 4 Flaming Droplets or Airborne particulates – d0 is none, d1 = some, d2 = moderate, d3 = high levels.

Touch dry in 2-3hrs @20°C

Suitable for use on bare, unpainted and previously painted areas.

Mix Ratio A:B or 100:82 Weight

Pot life: In excess of 6 hours once mixed

Air-dry at 20°C: Dust-free Manageable Refinish Commissioning	 4 - 5 hours 12 -16 hours 3 hour 24 - 48 hour

Appearance: Semi -Gloss white or other pigments

Lateral Flame Spread to End of Specimen? : **None**
Fall of Flaming Drop/Particle? : **None**
Flaming of Fallen Particle Exceeding 10s? : **None**

Available kit Sizes:

5 SQM Kit
20 SQM Kit

Charon C63P

Both systems are two parts and rely on the acidity of the orthophosphate esters to form further esters with amino resins with the production of water. The fume extraction requirements are minor, particularly when compared to the requirements of the conventional solvent based, fast drying products. The formulation is currently solvent free. The only hazard is a negligible emission of formaldehyde during curing.

The Charon Coatings range are designed to supersede traditional 2 pack intumescent coating systems by overcoming the inherent problems with the older varnishes. These new coatings are more water resistant, harder, have a high level of gloss, don't crack, haze or peel and are generally designed to be easier to work with than the existing systems.

Films based on Charon™ PCP produce their insulation char at far lower temperatures than conventional APP based products. The DFT efficiency of this formulation is equivalent to or better than the best-in-class conventional formulations.

Application

The formulations are designed for brush, roller application.

The coating will be dry within 24/48 hours at room temperature, but it can take up to 3-4 days to fully cross link and reach ultimate hardness. To be ready to fire test the panels should be conditioned for no less than 21 days at room temperature. The material can be accelerated

through a low bake, the exact temperature will depend upon the substrate. Be aware bubbling can occur if the material dries too quickly. Do not apply in damp conditions when condensation may form or below 4°C.

If flow characteristics need altering it can be diluted for Spray Applications, water can be added between 3% to 8% this level must not be exceeded.

Semi-gloss white, two-pack waterborne coating for wood, and other wood derivatives that include, door frames, doors and skirting boards.

Pre-treatment
Native timbers should be sealed or knotted to prevent moisture ingress through the wood and to prevent any colour change. Particle boards need no pre-treatment. Intumescent Chemicals recommends that thermosets and thermoplastics are primed with a suitable primer prior to painting.

- Ensure surface surround is clean and thoroughly dry
- Remove any latency or slurry debris
- Existing paint must be firmly adhered
- If acid is used for surface cleaning, rinse to neutralise and allow to dry
- For previously painted areas, ensure existing paint films are sound and firmly adhering, check chemicals detail of previous coatings if known, test a small area to ensure a reaction does not occur, before applying.
- Remove all loose, flaking and suspect films, clean them thoroughly with abrasive cleaner, rinse and allow to dry thoroughly

Storage

- Store in tightly closed original container in a dry, cool and well-ventilated place
- Store in closed original container at temperatures between 5°C and 25°C
- Protect from freezing and direct sunlight
- Keep upright

Health & Safety
Please refer to the Product Safety Data Sheets prior to use.

For specific advice regarding any aspect of this product, please consult our Technical Department on 0330 135 9150 (option 2) or send a message to info@intuchemicals.com

IMPORTANT FIRE PRODUCTS NOTICE: The information displayed on this website should be used as a guide ONLY and our Technical Department should be contacted to obtain a tailored specification and any advice necessary before you place an order for fire protection products. Fire protection products are non-returnable except in accordance with certain conditions detailed within the terms and conditions of sale. We will not be held liable for any resulting damage to property, human life or monetary costs incurred due to the incorrect specification you have prepared or use of fire protection products caused by your negligence, including your failure to have contacted us to obtain the relevant advice/specification.