

CHARCOAT

CharCoat CC

PRODUCT DESCRIPTION

CharCoat CC is designed as an Intumescent fire protection coating for electrical cables. It is a water-based latex mastic coating for interior and exterior applications specially developed to stop fire from spreading and continue ampacity on single, grouped or bundled electrical cables for 90 minutes in a hydrocarbon environment.

APPLICATION AREAS

CharCoat CC is assessed as a fire protection coating for:

- Electrical cable either single, grouped or in horizontal or vertical tray
- Supporting cable structures

CharCoat CC can be applied to interior and exterior electrical cables in industrial, marine and commercial projects or where cable protection is required to avoid spread of flame or continued ampacity.

UV / ENVIRONMENTAL PROTECTION

- Exterior application
- Latex based for water resistant application
- 100% UV Resistant
- 0.5mm DFT for UV protection only
- Salt water immersion tested and approved
- UV protection extends cable sheath life up to 25 years

TECHNICAL DATA

PROPERTIES	RESULT
Color	White
Solids	62% by weight 53% by volume
VOC	19 g/L
Velocity	50-60,000 cps
Elongation	ASTM D412 - 750% @ 1.6mm @ 21°C
Specific Gravity	1.22 g/L
Wt/gallon	10lbs/gallon (4.53kg/gallon)
PH	6.5-8.5
Toxicity	Non-toxic / Non-Hazardous
UV	100% UV Resistant
LOI	89 (Limiting Oxygen Index)
Current Capacity	Non-Derating
Solvent	Free
Asbestos	Free
Halogen	Free
Mercury	Free
Plasticizer	Free
Smoke	Free



TDS

AUTHOR	SEAN RITCHIE
VERSION	5.0
PURPOSE/CHANGES	WARRANTY
DATE PUBLISHED	MAY 2025

FEATURES AND BENEFITS

- Intumescent Coating
- Water-based
- Impermeable
- Classified for up to 90 minute Fire Rating 750°C
- Classified for up to 90 minute Fire Rating 1100°C
- Low DFT (Dry Film Thickness) of 1.6mm
- Water tight / Air tight
- 100% UV Stable and weatherproof
- Resistant to oil, various chemicals and petrol spills
- Ageing resistant
- Highly flexible in cured form
- After completion (full cure) temperature resistant down to approx. -40°C

DIRECTION FOR USE:

Recommended conditions:

1. Material and air temperature > 5°C, humidity < 80%.
2. Refer to complete application guide for spray units, hoses, tips and pressures.

SHELF LIFE

When stored at the recommended conditions, unopened pails have a shelf life of 18 months from date of manufacture.

WARRANTY

Twelve (18) months from date of manufacture.

GENERAL INFORMATION

For safe handling information on this product, please refer to the Safety Data Sheet (SDS). Use CharCoat CC in accordance with all applicable local and national regulation. As regulations are often revised please request for the actual safety data sheet before using the product.

PREPARATION BEFORE APPLICATION

IMPORTANT: CharCoat CC must be stirred thoroughly before application.

- Application by a slow running stirrer.
- Application by brush, roller or airless spraying.
- All cables and tray to be clean and free of dust/oils/solids.
- For cold weather application contact CharCoat.
- Exterior application does NOT require a topcoat.

COVERAGE RATE (without wastage)

1. Approx. 3.0mm wet = 1.6mm dry = approx. 3.82kg/m²
2. Thinning: max. 3% water (when required)

DRYING

1. At 20°C object temperature and 65% relative
2. Touch dry: approx. 2 hours
3. Full cure: approx. Min. 24-72 hours

PACKAGING

- 22.5 kg net weight (5 Gallons)
- Weight / gallon = 4.53kg
- Plastic pails
- Other sizes on request

TRANSPORT / STORAGE

- Transport and storage free from frost preferably at a minimum of +5°C to a maximum of +32°C.
- Opened pails must be sealed completely and 1 cup of clean water placed over the coating.

TEST DATA

APPROVALS

IEC 60331-11*
IEC 60331-21*
IEC 332-3-22
ASTM E 84
ASTM E 162
ASTM D4256-83
UL723 (ASTM E 84)
ABS

ASTM E 2599
ASTM E1354
ASTM D2863
KERI (Korea)
BS476: Part 6&7
BS6853
BS6853 D 8.4
ISO5660
Rodent Certificate
LEED
UV Stability
Previous Testing

RESULT

90 Minute - 750°C & 1100°C
90 Minute - 750°C & 1100°C
Category A/F - Pass - 0.93m
Flame Spread "0", Smoke "15"
Pass
Radioactivity Decon. Factor - 5.83
Flame Spread "0", Smoke "15"
American Bureau of Shipping
Certified for marine applications
Radiant Heat Test 2 hour - 957°C
Cone Calorimeter
LOI value of 89
NON DERATING
"Class 0" spread of flame
Zero smoke and toxicity
Smoke density
Smoke production
Rodent resistant
29.95g/L
QUV: 100% UV Stable
Flame Retardant Coating
PASSED - Ampacity
PASSED - NON DERATING
PASSED - Salt Water Exposure
PASSED - Dielectric Strength
PASSED - Flamability Test

*Cable

IEC 60331-11/21 - tested to 5000V and 8000V HV Power Cable



Suite 301 – 220 Brew Street, Port Moody, BC V3H 0H6 Canada
☎ +1 604 941 1001 ✉ mail@CharCoat.com 🌐 www.CharCoat.com

SALES AND FRANCHISE OFFICES LOCATED IN:

AUSTRALIA/NZ | CENTRAL AMERICA | CHINA | HONG KONG | INDIA | ISRAEL | MALAYSIA | PHILIPPINES | ROMANIA | SAUDI ARABIA | THAILAND | TURKEY | USA

charcoatpfp     

Disclaimer: The above data, particularly the recommendations for the application and use of Charcoat Passive Fire Protection products are based on the manufacturer's knowledge and experience. Due to different materials and conditions of application, which are beyond our control, we recommend in any case to carry out sufficient tests in order to ensure that Charcoat Passive Fire Protection products are suitable for the intended purpose and applications. Therefore, any liability for such recommendations or any oral advice is expressly excluded unless we have acted willfully or by gross negligence. It is always the responsibility of the installer / purchaser to guarantee correct preparation, DFT (Charcoat Coatings) and thickness (Charcoat Firestop Products) of all Charcoat Passive Fire Protection products. Charcoat Passive Fire Protection is not liable for installation or faulty installation. It is always the responsibility of the installer / purchaser to guarantee and certify the installation of materials.

