

# CHARCOAT

## CharCoat 1709

### PRODUCT DESCRIPTION

CharCoat 1709 is a high performance, 100% Solids, two-component epoxy intumescent fireproofing system. CharCoat 1709 can be spray applied as a high build coating or cast into molded fireproof cladding components.

Suitable for protection of structural steel, pipelines, tanks, skirts and legs from cellulosic and hydrocarbon fires in accordance with UL1709 and API2218.

### APPLICATION AREAS

CharCoat 1709 is intended to protect structural steel, vessels, piping, skirts, legs, pipes and pipe supports in a cellulosic, cellulosic CX exposure and hydrocarbon fire (pool) to extend their functional integrity for a specific period of time.

### SPECIAL FEATURES

- Up to 5 hour Fire Rated Coating
- 100% Epoxy Coating
- Tested to hydrocarbon fire under UL1709
- In accordance with API 2218
- GB14907-2018 Tested and Approved
- High Solids content | two component
- 100% Volume Solids
- Plural Component, single leg or trowel application
- Zero Maintenance Required
- Resistant to oil, petrol, chemicals, and acids
- Weatherproof / UV resistant
- Non-Corrosive
- 100% UV Stable
- After completion (full cure) temperature resistant down to -40°C

### TECHNICAL DATA

PROPERTIES	RESULT
Color	Part A: Black   Part B: White
Finish	Semi-Gloss
Volume Solids	100%
Mix Ratio, A:B	2.5:1 by weight
Shelf Life	12 months
Pot Life, 1 litre	45 mins @ 25°C   70 mins @ 15°C
Solvent	Solvent Free in packaging
Typical Thickness	5 - 21mm Depending on Requirement
Product A & B	Thixotropic mixture. Becomes more fluid with mixing and heating (plural application).
Primer	Zinc-rich epoxy Primer (preferred) or other compatible primers not to exceed 75 microns



# TDS

AUTHOR	REX MEDWAY
VERSION	4.0
PURPOSE/CHANGES	APPLICATION ADDITION
DATE PUBLISHED	FEB 2026

### APPLICATION

- All surfaces shall be prepared in accordance with ISO 8504:2000
- All surfaces must be clean, dry and free of contaminants.
- CharCoat 1709 to be stirred thoroughly prior to mixing.
- CharCoat 1709 can be spray applied from commercially available heated plural component proportioning systems or single leg application (min 70:1 airless).
- Pre-weighed kits are available that permit manual mixing for application by hand trowels.

### SPRAY

Application of CharCoat 1709 shall be applied by spraying to ensure complete wetting of the substrate. If spraying is not possible, the first coat shall be thoroughly trowelled or rolled to achieve complete wetting of the substrate.

### TROWEL

For trowel application, individual components should be stored at 30°C and thoroughly stirred before mixing. Solvent up to 5% can be added to enhance workability.

### MESH

Mesh should be installed according to specific fire protection design and the detailed instructions in the CharCoat 1709 application manual. For more requirements, please seek specific advice from CharCoat. After mesh application, continue to spray CharCoat 1709 to achieve the required film thickness.

**Refer to CharCoat 1709 Application Manual for complete substrate preparation and application.**

### COVERAGE RATE

1. Approx. 1mm wet = 1mm dry = approx. 1.0 kg/m<sup>2</sup> for standard plural component and single leg application.
2. Up to 5-7mm WFT in one coat for plural
3. Up to 4-6mm WFT in one coat for for single leg
4. Multiple passes may be required due to site conditions
5. Thinning and clean-up: PMAc: Propylene glycol monomethyl ether acetate (CAS: 108-65-6).

## DIRECTIONS FOR USE

### Recommended Conditions

1. Minimum 10°C, max 85% relative humidity.
2. Surface Temperature: at least 3°C above dew point temperature
3. Refer to CharCoat 1709 Applications Manual for complete directions of use and conditions.

## DRYING

Typical Cure Times are temperature, humidity and thickness dependent.

	15°C	25°C	40°C
Pot Life	70min	45min	30 min
To Touch	12 Hrs	6 Hrs	4 Hrs
To Handle	30 Hrs	16 Hrs	8 Hrs
To Recoat, max	3 months	2 months	1 month
Cure for Service	7 Days	5 Days	4 Days

## WORK STOPPAGES

Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with a suitable cleaner. Once units of paint have been mixed they should not be resealed and it is advised that after prolonged stoppages work recommences with freshly mixed units.

## CLEAN UP

Clean all equipment immediately after use with a suitable cleaner. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency of cleaning will depend upon amount sprayed, temperature and elapsed time, including any delays. All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

## SAFETY PRECAUTIONS

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given on this sheet, the Safety Data Sheet and the container(s), and should not be used without reference to the Safety Data Sheet (SDS). All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards and regulations. In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation. If in doubt regarding the suitability of use of this product, consult CharCoat for further advice.

## PACKAGING

Plural Component: A: 20kg Drum | B: 8kg Drum - 28kg Kit  
Single Leg: A: 10kg Drum | B: 4kg Drum - 14kg Kit  
Packaged in steel drums

## SHELF LIFE

When stored at the recommended conditions, unopened pails have a shelf life of 12 months from date of manufacture.

## TRANSPORT / STORAGE

Transport and indoor storage - preferably at a minimum of +5°C to a maximum of +30°C.

## WARRANTY

1 year / Product only.

## GENERAL INFORMATION

For safe handling information on this product, please refer to the Safety Data Sheet (SDS). Use CharCoat 1709 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.



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**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.

