



Model : 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 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
- GB14907-2018 Tested and Approved
- High Build epoxy
- High Solids content | two component
- 100% Volume Solids
- Plural Component, single leg or trowel application
- Solvents free packaging
- 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.
Primer	Zinc-rich epoxy Primer (preferred)



TDS

AUTHOR	REX MEDWAY
VERSION	4.0
PURPOSE/CHANGES	APPLICATION ADDITION
DATE PUBLISHED	Jan 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.
- 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

Some applications do not require any mesh reinforcement. If mesh is required, it 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/m² for standard plural component application.
2. Up to 5-7mm WFT in one coat without slump
3. 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 30°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 18 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

18 months / 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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