

Chartek 1709

Product Description

A high performance, high build, solvent free, epoxy intumescent fireproofing coating.

Underwriters Laboratories (UL) ANSI/UL 1709 tested and exterior listed.

Suitable for the protection of steel, aluminium and other substrates from hydrocarbon and cellulosic fires.

Chartek 1709 is lightweight, robust and provides excellent corrosion protection.

Intended Uses

To protect steelwork (structural, divisional and vessels) in a hydrocarbon fire and to preserve functional integrity for a specified period of time.

Primarily intended for use in high risk environments such as the oil, gas, petrochemical and power generation industries. The robust, durable nature of the Chartek 1709 system makes it suitable for a wide range of fire protection uses from petrochemical plants to LNG terminals.

Practical Information for Chartek 1709

Colour Medium Grey (Part A - Dark Grey: Part B - White)

Gloss Level Semi-gloss

Volume Solids 100%

Typical Thickness Depends on protection required

Density 1.0 g/cm³ (62.4 lb/ft³) - spray applied (ISO 1183:1987 Method A)

Method of Application Two component heated plural spray unit

Drying Time

Temperature	State of Cure		Overcoating Interval with recommended topcoats	
	Touch Dry	Hard Dry	Minimum	Maximum
10°C (50°F)	8 hours	18 hours	24 hours	*
25°C (77°F)	5 hours	16 hours	18 hours	*
40°C (104°F)	2 hours	6 hours	6 hours	*

* Consult International Paint, Fire & Insulation Products

Regulatory Data

Flash Point Base (Part A) >106°C (223°F) Hardner (Part B) >106°C (223°F) Mixed >106°C (223°F)

VOC 0 g/l (0 lb/gal) (Calculated)

0 lb/gal (0 g/l) (Calculated)



Ecotech is an initiative by International Protective Coatings a world leader in coating technology to promote the use of environmentally sensitive products across the globe.

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Surface Preparation

All surfaces to be coated should be clean, dry and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504-1:2000.

Abrasive Blast Cleaning

This product must only be applied to surfaces prepared by abrasive blast cleaning to Sa2½ (ISO 8501-1:1988) or SSPC-SP10.

Primers

Selected primers or priming systems must have completed the primer qualification procedure from International Paint and feature on International Paint's published primers list. The preferred system shall be an epoxy polyamide (e.g. Intergard 251) at a thickness not exceeding 75 microns (3 mils). A two coat primer system, such as epoxy zinc (e.g. Interzinc 52) and tiecoat (e.g. Intergard 269), should not exceed 110 microns (3.5 mils) combined dry film thickness.

Application

All applications of Chartek 1709 shall strictly conform with procedures laid down in the International Paint Chartek Application Manual.

Mixing If applying Chartek 1709 by modified airless spray, pump or trowel, it will first be necessary to thoroughly power mix a kit of Chartek 1709. Individual components must have been stored for 24 hours at 23°C (73°F) and fully power agitated before mixing.

Mix Ratio Always mix full kits. (For hand application refer to the Chartek Application Manual).

Working Pot Life	15°C (59°F) 120 minutes	25°C (77°F) 90 minutes
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Plural Component Airless Spray	Recommended and preferred	Heated plural equipment approved by International Paint, Fire & Insulation Products.
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Airless Spray	Recommended for small areas	Recommended use minimum 68:1 airless, as approved by International Paint, Fire & Insulation Products. Typically thinned by up to 5% solvent.
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Trowel Suitable - Small areas only

Thinner International GTA123) Only for pre-mix and hand application - International GTA822) consult Application Manual.

Cleaner International GTA007

Work Stoppages Do not allow mixed material to remain in hoses, gun or spray equipment.

Clean Up Clean all equipment immediately after use with International GTA007. 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.

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Product Characteristics	The following conditions shall be maintained (or be generated) throughout the application:-
	Minimum Air Temperature 10°C (50°F)
	Maximum Humidity 85%
	Steel Temperature A minimum of 3°C (5°F) above dew point of surrounding air.
	General Clean and dry at all times.
Application	Chartek 1709 should be spray applied to ensure total wetting of the substrate is achieved. Where this is not possible by spray alone, then the first coat should be thoroughly trowelled and rolled to achieve this. The best time to overcoat Chartek 1709 with itself is 'wet on wet' or within 12 hours of application and before the coating has had any chance to become contaminated.
Mesh Application	If mesh reinforcement is required, International Paint's HK-1 carbon composite mesh should be installed in accordance with specific fire design and as detailed in the Chartek Application Manual.
After Mesh Application	Continue to spray apply Chartek 1709 - bring up to the required film thickness.
Equipment	Only equipment approved by International Paint, Fire & Insulation Products, shall be used as detailed in the Chartek Application Manual or by the International Paint Field Service Engineer.
Applicator Qualification	Only companies in receipt of Qualified Applicator status from International Paint, Fire & Insulation Products, shall be used for Chartek 1709 application. Companies shall document that they comply with this requirement prior to work commencement. Supervising and QA personnel on site shall be in receipt of individual qualifications, having attended an International Paint, Fire & Insulation Products, Chartek Applicator Training School. This is a minimum requirement and shall be documented prior to work commencement.
Inspection & QA	This is the responsibility of the Applicator but as a minimum must conform to the procedures laid down in International Paint, Fire & Insulation Products, Chartek QC Manual.
Field Service	This is available from International Paint, Fire & Insulation Products, and should be co-ordinated to ensure attendance at job start up. The Application Contractor is responsible for ensuring International Paint is notified of start up date and to arrange access to site.
Alternative Surface Preparation Methods	International Paint's procedures are also developed and available under certain project specific circumstances for wet blasting, needle gunning and ultra high pressure water blasting - Seek specific advice from International Paint, Fire & Insulation Products.
Maximum Substrate Operating Temperature	80°C (176°F) - above this temperature, recommendations are available from International Paint, Fire & Insulation Products.
Topcoating	Two component polyurethane topcoat, International Paint Interthane 990, applied at a thickness of 50 microns (2 mils). (For alternatives contact International Paint, Fire & Insulation Products).

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Additional Information

Additional information regarding industry standards, terms and abbreviations used in this data sheet can be found in the International Protective Coatings data manual, Chartek Application and Quality Manuals. For fire design and specification requirements, please contact International Paint, Fire & Insulation Products.

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 Material Safety Data Sheet and the container(s), and should not be used without reference to the Material Safety Data Sheet (MSDS) which International Protective Coatings has provided to its customers.

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. Please refer to the Chartek Application Manual.

If in doubt regarding the suitability of use of this product, consult International Paint, Fire & Insulation Products, for further advice.

Pack Sizes	20.0 kg kit	(44.1 lb)
	50.0 kg kit	(110.2 lb)
For availability of other pack sizes contact International Paint, Fire & Insulation Products		
Shipping Weight	U.N. Shipping No. 3082	
	20 kg kit	Part A 14.3 kg (31.5 lb) Part B 5.7 kg (12.6 lb)
	50 kg kit	Part A 35.7 kg (78.7 lb) Part B 14.3 kg (31.5 lb)
Storage	Shelf Life	1 year under normal temperature conditions. Should be stored indoors and out of direct sunlight. A temperature range of 1-30°C (34-86°F) must be maintained.

Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Any warranty, if given, or specific Terms & Conditions of Sale are contained in International's Terms & Conditions of Sale, a copy of which can be obtained on request. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

It is the user's responsibility to check that this sheet is current prior to using the product. Issue date: 25/01/2005

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International Protective Coatings Fire & Insulation Products

Headquarters
International Paint Ltd
Essex House
141 Kings Road
Brentwood, Essex
CM14 4DR
United Kingdom

Asia Region
International Paint Ltd
No.7-7 (7th Floor), Jalan USJ 9/5Q
UEP Subang Business Centre
47620 Subang Jaya
Selangor,
Malaysia

Americas Region
International Paint LLC
6001 Antoine Drive
Houston
TX 77091

Scandinavian Region
International Paint Ltd
Peter Grøns Gt. 2B
N-3210 Sandefjord
Norway

Tel: +44 (0) 1277 229192
Fax: +44 (0) 1277 228745
www.chartek.com

Tel: +60 (0) 3 8023 1103
Fax: +60 (0) 3 8023 1108

Tel: +1 713 684 1223
Fax: +1 713 684 1514

Tel: +47 33 42 72 00
Fax: +47 33 42 72 01