





Technical Data Sheet: Cortex 0500FR Flame Retardant Membrane

Product Description

Cortex 0500FR is a flame-retardant flexible membrane used for sealing interfaces to provide an airtight and weathertight seal on construction projects.

The material is a 100% woven Polyester PVC coated front and back, finished with an acrylic lacquer. It has a textured surface on both sides to ensure maximum bond strength is achieved. Cortex 0500FR is flame retardant to B-s3-d0 (EN13501-1), is highly UV resistant, watertight and airtight.

Technical Data

Fire resistanceEN13501-1B-s3-d0Thickness0.50mmTensile strengthDIN EN ISO 1421/V12200 / 2100 N/50mmTear strengthDIN 53363230 / 230 NTemperature resistanceDIN EN 1876-1/PA07.04 intern-40°C / +70°CCrack resistanceDIN 53359A100000 xUV resistanceExposed10+ yearsEquivalent air layer thickness (sd value)EN 193133,726Vapour resistanceEN 193159 MNs/gIongation at break (Werp) %DIN EN ISO 142125,73Elongation at break (Weft) %DIN EN ISO 142129,48				
Tensile strengthDIN EN ISO 1421/V12200 / 2100 N/50mmTeor strengthDIN 53363230 / 230 NTemperature resistanceDIN EN 1876-1/PA07.04 intern-40°C / +70°CCrack resistanceDIN 53359A100000 xUV resistanceExposed10+ yearsEquivalent air layer thickness (sd value)EN 193113mWater vapour permeability (µ)EN 193123,726Vapour resistanceDIN EN ISO 142125,73	Fire resistance	EN13501-1	B-s3-d0	
Tear strengthDIN 53363230 / 230 NTemperature resistanceDIN EN 1876-1/PA07.04 intern-40°C / +70°CCrack resistanceDIN 53359A100000 xUV resistanceExposed10+ yearsEquivalent air layer thickness (sd value)EN 193113mWater vapour permeability (µ)EN 193123,726Vapour resistanceEN 193159 MNs/gElongation at break (Warp) %DIN EN ISO 142125.73	Thickness		0.50mm	
Temperature resistanceDIN EN 1876-1/PA07.04 intern-40°C / +70°CCrack resistanceDIN 53359A100000 xUV resistanceExposed10+ yearsEquivalent air layer thickness (sd value)EN 193113mWater vapour permeability (μ)EN 193123,726Vapour resistanceEN 193159 MNs/gElongation at break (Warp) %DIN EN ISO 142125.73	Tensile strength	DIN EN ISO 1421/V1	2200 / 2100 N/50mm	
Crack resistanceDIN 53359A100000 xUV resistanceExposed10+ yearsEquivalent air layer thickness (sd value)EN 193113mWater vapour permeability (µ)EN 193123,726Vapour resistanceEN 193159 MNs/gElongation at break (Warp) %DIN EN ISO 142125,73	Tear strength	DIN 53363	230 / 230 N	
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value)Water vapour permeability (μ)EN 193123,726Vapour resistanceEN 193159 MNs/gElongation at break (Warp) %DIN EN ISO 142125.73	UV resistance	Exposed	10+ years	
Vapour resistanceEN 193159 MNs/gElongation at break (Warp) %DIN EN ISO 142125.73		EN 1931	13m	
Elongation at break (Warp) % DIN EN ISO 1421 25.73	Water vapour permeability (µ)	EN 1931	23,726	
g	Vapour resistance	EN 1931	59 MNs/g	
Elongation at break (Weft) % DIN EN ISO 1421 29.48	Elongation at break (Warp) %	DIN EN ISO 1421	25.73	
	Elongation at break (Weft) %	DIN EN ISO 1421	29.48	

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Safety Data Sheet: Cortex 0500FR Membrane

Section 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier: Trade name Cortex 0500FR membrane

1.2 Relevant identified uses of the substance or mixture and uses advised against: Coated fabrics for industrial and professional application.

1.3 Details of the supplier of the safety data sheet:

Supplier: Obex Protection Ltd Address: Obex Protection Ltd Severn House Bromyard Road Crown East Worcester WR2 5TR

Tel (including for emergencies): 01905 337800 (Mon-Fri 7am-5pm) Fax: 01905 337186 Email: sales@obexuk.com

Section 2: Hazards identification

2.1 Classification of the substance or mixture: Classification information.

This product is in the sense of article 3 of the Regulation (EC) 1907/2006 (REACH) an article and not subject to the labelling obligations according to the following:

Art. 1, Regulation (EC) 1272/2008 (CLP);

Article 12.(2), Directive 1999/45 (DPD). To provide a safety data sheet is not mandatory for articles and is done on a voluntary basis.

2.2 Label elements: Not relevant.

2.3 Other hazards: No data available.

Section 3: Composition/information on ingredients

3.1 Substances: Not applicable. The product is not a substance.

3.2 Mixtures: Chemical characterization, soft PVC coated polyester fabric.

Hazardous ingredients: This product does not contain substances to be mentioned according to EU Regulation No 1907/2006 (REACH), annexe II.

3.3 Other information: Depending on the batch, this product may contain SVHC substances included in the Candidate List.

Section 4: First-aid measures

4.1 Description of first-aid measures:

General information: No special measures necessary. After inhalation: No data available. After skin contact: No data available. After eye contact: No data available. After ingestion: No data available.

4.2: Most important symptoms and effects, both acute and delayed: No data available.

4.3 Indication of any immediate medical attention and special treatment needed: No data available.

Section 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media: Extinguishing measures to suit surroundings. Unsuitable extinguishing media: No data available.

5.2 Special hazards arising from the substance or mixture: In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO); Hydrogen chloride (HCI)

5.3 Advice for firefighters: Use self-contained breathing apparatus. Wear protective clothing.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: For non-emergency personnel: Refer to protective measures listed in sections 7 and 8.

For emergency responders: No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions: No special measures necessary.

6.3 Methods and material for containment and cleaning up: No special measures necessary.

6.4 Reference to other sections: No data available.

Section 7: Handling and storage

7.1 Precautions for safe handling: Advice on safe handling

Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.

General protective and hygiene measures: Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages.

Advice on protection against fire and explosion: No special measures. necessary.





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Conditions for safe storage, including any incompatibilities:

Technical measures and storage conditions: $\ensuremath{\mathsf{Protect}}$ from heat and direct sunlight.

Requirements for storage rooms and vessels: No special measures required.

Advice on storage assembly: None known.

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

Control parameters: No parameters available for monitoring. Exposure controls: Appropriate engineering controls No data available.

Personal protective equipment:

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Make sure there is good local exhaust ventilation during hot air welding.

Eye / face protection: No data available Hand protection: No data available Environmental exposure controls: No data available

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Form/Colour		
Film		
Various, depending on colouration		
Odour		
Odourless		
Odour Threshold		
No data available		
Boiling point/boiling range		
No data available		
Melting point/melting range		
No data available		
Decomposition point / decomposition range		
Value > 160°C		
Elash opint: No data available		

Flash point: No data available Auto-ignition temperature: No data available Oxidising properties: No data available Explosive properties: No data available Flammability (solid, gas): No data available Lower flammability or explosive limits: No data available Upper flammability or explosive limits: No data available Vapour pressure: No data available Vapour density: No data available Evaporation rate: No data available Relative density: No data available Density: No data available Solubility in water: No data available Solubility(ies): No data available Partition coefficient: n-octanol/water: No data available Viscosity: No data available

9.2 Other information

Burning behaviour: easily to hardly flammable tarpaulins DIN 75200, tents DIN 4102 B1

Section 10: Stability and reactivity

Reactivity: No data available. Chemical stability: No data available. Possibility of hazardous reactions: No data available. Conditions to avoid: None, if handled according to order.

Incompatible materials: No hazardous reactions when stored and handled according to prescribed instructions.

Hazardous decomposition products: Carbon monoxide; Hydrogen chloride (HCl)

Section 11: Toxicological information

11.1 information on toxicological effects

Acute oral toxicity: No data available Acute dermal toxicity: No data available Acute inhalational toxicity: No data available Skin corrosion/irritation: No data available Serious eye damage/irritation: No data available Respiratory or skin sensitisation: No data available Germ cell mutagenicity: No data available Reproduction toxicity: No data available Carcinogenicity: No data available STOT-single exposure: No data available STOT-repeated exposure: No data available Aspiration hazard: No data available Other information: No health-damaging effects to be expected if used properly.

Section 12: Ecological information

12.1 Toxicity

Fish toxicity: No data available Daphnia toxicity: No data available Algae toxicity: No data available Bacteria toxicity: No data available





Safety Data Sheet: Cortex 0500FR Membrane

12.2 Persistence and degradability

Physico-chemical eliminability	
Remarks	If used properly, this product does not cause problems, on the strength of previous experience.

12.3 Bioaccumulative potential: No data available

12.4 Mobility in soil: No data available

12.5 Results of PBT and vPvB assessment: No data available

12.6 Other adverse effects: No data available

Section 13: Disposal considerations

13.1 Waste treatment methods Product: Waste code - 200139 - plastics

The listed waste code numbers, according to the European Waste Catalogue, are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company. May be taken to household waste disposal or incineration plant, but care for official regulations.

Packaging: Dispose of in accordance with federal, state and local regulations.

Section 14: Transport information

14.1 Transport ADR/RID/ADN: The product is not subject to ADR/RID/ ADN regulations.

14.2 Transport IMDG: The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA: The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information: No data available 14.5 Environmental hazards: Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user: No data available

14.7 Transport in bulk according to annexe II of MARPOL 73/78 and the IBC Code: Not relevant

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

<u>EU regulations:</u> Restriction of occupation Adhere to the national sanitary and occupational safety regulations when using this product. 15.2 Chemical safety assessment: No data available

Section 16: Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 1999/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EC

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Department issuing safety data sheet

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This information is based on our present state of knowledge and experience. The security data sheet describes products with a view to the security requirements. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

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Technical Data Sheet: Cortex 0771FR Paste Adhesive

Specification Sheet

Fire resistance	B-s1-d0 (EN13501-1)
Chemical base	Oxime
Consistency	Stable paste
Curing system	Moisture curing
Curing time	2mm/24 hours (23°C, %50 R.H)
Shore A	20, DIN 53 505 (N/mm2)
Density	1.40 ± 0.03gr/cm3
Elongation	462%
Maximum allowed distortion	25 %
Temperature resistance	-50 °C -120 °C
Tensile strength	1.0 MPa
Application temperature	5°C - 40°C

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DIN EN ISO 20811:1992-08 Textiles • Determination of resistance of textile fabrics to water penetration; hydrostatic pressure test

Product description

Cortex 0771FR Paste Adhesive is a high-quality, neutral, elastic one-component joint sealant based on fast skinning silicones. Can be used in applications which require sealants of fire-retardant properties.

Properties

Very easy to apply, colourfast and UV resistant, permanent elastic after curing, very good adhesion on many materials, low modulus and especially developed for EPDM applications. High level of fire retardation.



For more product information call us with your enquiry on 01905 337800 or email sales@obexuk.com







Technical Data Sheet: Cortex 0771FR Paste Adhesive

Applications

Bonding and sealing of membranes and onto other building substrates. Surfaces to be clean, dry and free of dust, grease and oils etc.

Packaging

Colour: Black

Packaging: 600ml cartridge

Shelf life:12 months in unopened packaging in a cool and dry storage place at temperatures between $+5^{\circ}C$ and $+25^{\circ}C$. Substrates: All usual building substrates.

Nature: Clean, dry, free of dust and grease.

Surface preparation: Porous surfaces in water loaded applications should be primed with Cortex Primer. No primer needed for non-porous substrates. All loose or flaking surface coatings, and old sealant and mastic joints should be removed before application.

There is no adhesion on PE, PP, PTFE (Teflon[®]). We recommend a preliminary compatibility test. Given the wide variety of EPDM-substrates, we always recommend a preliminary adhesion test.

Application method

Application method: With a manual or pneumatic caulking gun. Cleaning: Clean with Cortex 0795 Cleaning Wash immediately after use. Repair: With the same material.

Health and Safety Recommendations

Take the usual labour hygiene into account. Consult the packaging label for more information.

Remarks

• Do not use on natural stones like marble, granite (staining).

• Cortex 0771FR Paste Adhesive is not suitable for applications with permanent water stress (e.g. horizontal roof sealing joints below the water level).



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Safety Data Sheet: Cortex 0771FR Paste Adhesive

Section 1: Identification of the mixture and of the company

1.1 Product identifier Product Trade Name: Cortex 0771FR Paste Adhesive

1.2 Relevant identified uses of the mixture and uses advised against: Product use: Adhesive

1.3 Details of the supplier of the safety data sheet:

Supplier: Obex Protection Ltd Address: Obex Protection Ltd Severn House Bromyard Road Crown East Worcester WR2 5TR

Tel (including for emergencies): 01905 337800 (Mon-Fri 7am-5pm) Fax: 01905 337186 Email: sales@obexuk.com

Section 2: Hazards identification

2.1 Hazard description: Not applicable.

2.2 Information concerning particular hazards for human and environment: The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

2.3 Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Section 3: Composition/Information on ingredients

Description: Mixture of substances listed below with non-hazardous additions.

Ingredients	CAS No.	EINECS No.	Conc. (% w/w)	Classification
Butanone oxime	96-29-7	202-496-6	0.1-1%	Xn; R21 Xi; R41 - R43

Section 4: First-aid measures

4.1 General information: No special measures required.

4.2 After inhalation: Supply fresh air; consult a doctor in case of complaints.

4.3 After skin contact: If skin irritation continues, consult a doctor.

4.4 After eye contact: Rinse opened eye for several minutes under running water.

4.5 After swallowing: If symptoms persist consult a doctor.

Section 5: Firefighting measures

5.1 Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol-resistant foam.

5.2 Protective equipment: Mouth respiratory protective device.

Section 6: Accidental release measures

6.1 Person-related safety precautions: Ensure adequate ventilation.

6.2 Measures for environmental protection: Do not allow to enter sewers/ surface or groundwater.

6.3 Measures for cleaning/collecting: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Additional information: No dangerous substances are released.

Section 7: Handling and storage

7.1 Handling:

7.2. Information for safe handling: Use only in well-ventilated areas.

7.3 Information about fire and explosion protection: No special measures required.

7.4 Storage:

7.5 Requirements to be met by storerooms and receptacles: No special requirements.

7.6 Information about storage in one common storage facility: Not required.

7.7 Further information about storage conditions: None.

Section 8: Exposure controls/personal protection

8.1 Additional information about design of technical facilities: No further data; see item 7.

8.2 Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

 $\ensuremath{\mathsf{8.3}}$ Additional information: The lists valid during the making were used as basis.

8.4 Personal protective equipment.







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8.5 General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.

8.6 Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

8.7 Protection of hands: The glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

8.8 Material of gloves: The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has to be checked prior to the application.

8.9 Penetration time of glove material:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

8.10 Eye protection: Goggles recommended during refilling.

Section 9: Physical and chemical properties

9.1 General information

Form/Colour
Paste
Odour
Acetic Acid
Colour
Black
Explosive Properties
No
Specific Gravity
120-1.23g/ml
Oxidizing Properties
No
Stability
Stable under normal usage conditions

Section 10: Stability and reactivity

10.1 Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.

10.2 Dangerous reactions: No dangerous reactions known.

10.3 Dangerous decomposition products: Reacts with water, bases and alcohol to form methanol.

Section 11: Toxicological information

11.1 Primary irritant effect:

11.2 On the skin: Can irritate on prolonged or repeated contact.

11.3 On the eye: Vapours released during curing may cause eye irritation.

11.4 On ingestion: Small amounts transferred to the mouth by fingers during use should not injure. Swallowing large amounts may cause digestive discomfort.

11.5 Other health hazard information: This product contains (a) powder(s) hazardous by inhalation. This is not relevant to the current physical form of the product, which is not in a respirable form.

Section 12: Ecological information

12.1 Environmental fate and distribution: No adverse effects on water purification plants.

12.2 Ecotoxicity effects: No adverse effects on aquatic organisms are predicted.

12.3 Bioaccumulation: No bioaccumulation potential.

12.4 Fate and effects in wastewater treatment plants: No adverse effects on bacteria are predicted.

Section 13: Disposal considerations

13.1 Product disposal: Dispose of in accordance with local regulations. According to the European Waste Catalogue, waste codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

13.2 Packaging disposal: Dispose of in accordance with local regulations. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Section 14: Transport information

ADR - This material is not classified as dangerous under ADR regulations. RID - This material is not classified as dangerous under RID regulations. IMDG - This material is not classified as dangerous under IMDG regulations.

IATA - This material is not classified as dangerous under IATA regulations.

Section 15: Regulatory information

- Regulation (EC) No 1907/2006
- (REACH) Regulation (EC) No 1272/2008, (CLP)
- Aerosol Dispensers Directive 75/324/EEC, (ADD)
- ADR-European Agreement Concerning the International Carriage of Dangerous Goods by RSECTION



Safety Data Sheet: Cortex 0771FR Paste Adhesive

16: Other information

16.1 Indication of changes to the previous version date prepared: 02.12.2014 Revision Date: 16.04.2015 Revision No: 2.5.

16.2 Abbreviations and acronyms

CLP: Classification, labelling and packaging. GHS: Globally harmonized system of classification and labelling of chemicals. ADR: European agreement concerning the Int. carriage of dangerous goods by road. IATA: International air transport association. ICAO: International civil aviation organization. IMDG: International maritime code for dangerous goods. PBT: Persistent, bioaccumulative and toxic according to 1907/2006/EC, Annex XIII. vPvB: Very persistent and very bioaccumulative according to 1907/2006/EC, Annex XIII. OEL: Occupational exposure limit. CAS No: Chemical abstract service index number. EC50: Half maximal effective concentration. LC50: Median lethal concentration LD50: Median lethal dose.

16.3 Special Information of certain preparations contains Diphenylmethane Diisocyanate Isomers Homologues

Contains isocyanates. Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. See information supplied by the manufacturer. Wear suitable gloves. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. In case of insufficient ventilation, wear suitable respiratory equipment. In case of an accident or if you feel unwell, seek medical advice immediately (show the label where possible). Keep out of the reach of children. Dispose of this material and its container to hazardous or special waste collection point.

16.4 Further information

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. The company supplying entity shall not be held responsible for any defect in the product covered by this SDS, should the existence of such defect not be detectable considering the current state of scientific and technical knowledge.

Department issuing SDS: Product safety department.

Contact: Product safety department sales@obexuk.com

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