



MATERIAL SAFETY DATA SHEET
IN ACCORDANCE WITH EU DIRECTIVE 91/155 EWG

1. PRODUCT NAME AND DESCRIPTION	
Product Name:	Fire-O Fireproofing Chemical
Application:	Chemical substance used in fireproofing of wood, textile and paper)
Manufactured by:	Innotra Kimya Çözümleri San. Tic. Ltd.
Address:	Büyükbakkalköy, Yakacık cad. No:16 34857 Kartal-Istanbul / TURKEY
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2. CHEMICAL COMPOSITION
Aqueous emulsion

3. HAZARD IDENTIFICATION	
Respiratory:	Non hazardous
Skin irritation:	Unlikely to cause skin irritation
Eye contact:	May cause temporary irritation
Ingestion:	Non hazardous
Occupational exposure limits:	No limits assigned

4. FIRST AID MEASURES	
Eye contact:	Irrigate with water for 5 min. Obtain medical assistance if irritation persists.
Skin contact:	Wash off in flowing water. Launder contaminated clothing before re-use.
Inhalation:	Remove to fresh air if feeling unwell. Consult medical personnel if symptoms persist.
Ingestion:	Give large quantities of water to drink. Consult medical personnel.

5. FIRE FIGHTING MEASURES	
Flash point:	None below boiling point
Auto ignition:	No data
Exposure limits:	No data
Extinguishing media:	Water, foam, carbon dioxide, dry powder
Firefighting procedures:	None
Hazardous decomposition products:	None
Unusual fire hazard:	None
NFPA Ratings:	Health=0 / Flammability=0 / Reactivity=0 0:Least / 1:Slight / 2:Moderate / 3:High / 4:Extreme

6. ACCIDENTAL RELEASE MEASURES

Precautions relating to persons:	No special measures needed.
Spill/Leak precautions:	Contain spillage and absorb on suitable material e.g. sawdust, sand or earth. Transfer to a container for disposal. See action 13. Wash the spillage area.

7. HANDLING AND STORAGE

Handling:	No further requirements
Storage:	Store in tightly sealed original containers.

8. EXPOSURE CONTROLS /PERSONNAL PROTECTION

Eye protection:	Wear eye protection if splashing is possible. Keep an eye wash bottle available at work site.
Breathing apparatus:	Not necessary
Skin protection:	Gloves and protective overalls recommended if prolonged contact is likely.
Ventilation:	Maintain sufficient ventilation to comply with "Occupational Exposure Standard"
Information on working hygiene:	Wash hands after completing work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Color:	No color, transparent, lucid liquid
Odor:	Odorless
pH at 20°C:	7,89
Boiling point (°C):	102,8
Melting point (°C):	Not applicable
Freezing point (°C):	-7
Flash point (°C):	126
Flammability data:	See section 5
Explosive properties:	Not explosive
Density (°C) at 20°C:	1,179 gr/cm ³
Water solubility:	Completely miscible
Viscosity at 25°C	12,5
Solvent content:	0, Aqueous

10. STABILITY AND REACTIVITY

Conditions to be avoided:	N/A
Substances to be avoided:	N/A
Hazardous decomposition products:	N/A
Stable under normal storage conditions. No incompatible materials.	



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11. TOXICOLOGICAL INFORMATION

Acute toxicity:	According to the directive of the regulation on hazardous substances, Fire-O is not required to be labeled.
Other toxicological information:	With proper handling and use, no hazardous properties has been seen.
Further information:	The product is to be handled with care normally exercised for cleaning agents.

12. ECOLOGICAL INFORMATION

Eco-toxic effects:	No eco-toxic effects to be expected
Biodegradability:	Biodegradable to %100 in 60 days.

13. DISPOSAL CONSIDERATION

Not subject to disposal regulations, landfill in accordance with local, state or national regulations.
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14. TRANSPORT INFORMATION

Not restricted under any transport regulations.

15. REGULATORY INFORMATION

ADR/RID	Not designated as a hazardous material
IMO-IMDG	Not designated as a hazardous material
IATA-ICAO	Not designated as a hazardous material
DOT	Not designated as a hazardous material
UN/NA I.D. :	N/A
Hazard Classification	N/A
Package Notation:	N/A
Transport Name	Fire-O fireproofing chemical with natural active agent
IMFG:	N/A
IMO:	N/A
USA STCC No.:	N/A
B.K. emergency code:	N/A
Passenger carrier notation:	N/A
Cargo carrier notation:	N/A
ERG Number:	N/A

16. SMOKE TOXICITY

Below are the test results comparing the contains of exhaust gases obtained from burning tests of cotton untreated and treated with Fire-O		
Smoke Component	Cotton (Untreated)	Cotton (Treated)
Oxygen	12,00 %	17,00 %
Nitrogen	70,00 %	74,00 %
Carbon dioxide	13,50 %	6,00 %
Carbon monoxide	1,00 %	0,50 %
Oxides of sulfur	0,50 %	0,50 %
Oxides of Nitrogen	3,00 %	2,00 %



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17. FLARING UP AND COMBUSTION TESTS

Below are the test results comparing the flaring up times of cotton, untreated and treated with Fire-O

Position	Cotton (Untreated)	Cotton (Treated)
45° Vertical	20 sec	-
90° Vertical	17 sec	-
Horizontal	25 sec	-

The treated piece of tested material has caught no flame during the test. However carbonization and change of color has been witnessed due to the heat generated by blowtorch flame of 1300 °C

18. OTHER INFORMATION

All information stated is based on our current state of knowledge and satisfies both national legislation and EU directives. However, the actual working conditions of the user are beyond our control. Without consulting with us, the product must not be used for purposes other than as stated in section 1. All components are registered in accordance with EINECS and TSCA. This MSDS contains environmental, health and toxicology information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information incorporated in your own MSDS. Latest version of this MSDS is downloadable from www.fire-o.com