

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

1.1 Product Identification	Lith-X
1.2 Use	Dry powder extinguishing agent
1.3 Supplier	Chubb Fire Limited Chubb House Sunbury on Thames Middlesex TW16 7AR United Kingdom Tel: +44 (0)1932 785588 Fax: +44 (0)1932 765630

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Wt %	CAS No	EINECS	Class, R & S Phrases
Graphite	93	7782-42-5	231-955-3	R 36/37
Magnesium Aluminium Silicate (Attapulgitic clay or Fuller's Earth)	4-6	8031-18-3	Listed	S22 S36
Magnesium stearate	1-3	557-04-0	209-150-3	

### 3. HAZARDS IDENTIFICATION

#### For humans

##### Threshold limit values:

Graphite: OSHA PEL, TWA 15 mppcf  
ACGIH TLV-TWA 2mg.m<sup>3</sup>

Nuisance dust limit: OSHA TWA 15 mg/m<sup>3</sup>  
ACGIH TLV-TWA 10mg/m<sup>3</sup>

##### Signs and symptoms

##### Acute exposure:

Eye contact: mildly irritating for short periods of time

Inhalation: Usual route of entry. Causes irritation of upper respiratory tract. Possibly allergenic. Transient cough, shortness of breath. Possibly bronchitis.

Skin contact: May be mildly irritating.

Ingestion: Not an expected route of entry with normal use.

Chronic overexposure: Causes pulmonary fibrosis, emphysema, and cor pulmonare have resulted from prolonged inhalation of graphite dust.

Medical conditions generally aggravated by exposure: respiratory problems, chronic obstructive pulmonary disease (COPD)

#### Chemicals listed as Carcinogen or Potential Carcinogen:

National Toxicology Program - no IARC monographs - no OSHA - no

For environment: See section 12

4. FIRST AID MEASURES

- Inhalation: Remove victim to fresh air. Seek medical attention if discomfort continues.
- Skin contact: Wash with soap and water. If irritation persists, seek medical attention.
- Eye contact: Flush with large amounts of water. If irritation persists, seek medical attention.
- Ingestion: If patient is conscious, give large amounts of water and induce vomiting. Seek medical help.

5. FIRE FIGHTING MEASURES

- Extinguishing media: This is an extinguishing agent.
- Special procedures: none.
- Unusual fire and explosion hazards: none.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions: see section 8
- Clean up method: sweep up and put in closed container
- Waste disposal methods: see section 13

7. HANDLING AND STORAGE

- Handling: do not mix fire protection agents. See incompatibility information in section 10.
- Storage: store in original container or class D fire extinguisher.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Respiratory: dust mask where dustiness is prevalent or TLV is exceeded.  
Use mechanical filter respirator if exposure is prolonged.
- Hand: none normally needed.
- Eye: chemical goggles are recommended as mechanical barrier for prolonged exposure.
- Skin and body: if irritation occurs, use long sleeves and impervious gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Black powder
- Odour: none
- pH: not determined
- Boiling point/boiling range: not applicable
- Flash point: none
- Flammability (solid, gas): non flammable
- Explosive properties: not explosive
- Oxidising properties: none
- Vapour pressure: not applicable
- Relative density: not applicable
- Solubility: water solubility: slight
- Vapour density: not applicable

10. STABILITY AND REACTIVITY

Stability:	stable
Conditions to avoid:	none
Hazardous reactions:	will not occur
Conditions to avoid:	none
Materials to avoid:	Chlorine trifluoride, fluorine or potassium oxide
Hazardous decomposition products:	not determined

11. TOXICOLOGICAL INFORMATION

This product has not been tested for toxicological effects. Product is treated as a nuisance dust. Graphite may cause irritation on skin, eyes and mucous membranes.

12. ECOLOGICAL INFORMATION

Mobility	not tested
Absorption/desorption	not tested
Degradability	not tested
Biotic and abiotic degradation	not tested
Aerobic and anaerobic degradation	not tested
Persistence	not applicable
Accumulation	not applicable
Bioaccumulation potential	not applicable
Biomagnification	not applicable
Short and long term effects on ecotoxicity	
aquatic organisms	
soil organisms	
plants and terrestrial animals	not tested
Other adverse effects	not tested
Ozone depletion potential	not applicable
Photochemical ozone creation potential	not applicable
Global warming potential	none
Effects on water treatment plants	not tested

13. DISPOSAL CONSIDERATIONS

Dispose of in compliance with local and national regulations

14. TRANSPORT INFORMATION

Hazard class or division	not a hazardous substance
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15. REGULATORY INFORMATION

Product :

EU classification	irritant
R Phrases	R36/37 Irritating to eyes and respiratory system
S Phrases	S22 Do not breathe dust
	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
	S36 Wear suitable clothing

Limit values for exposure  
Threshold limit values:  
Graphite: OSHA PEI, TWA 15 mppcf  
ACGIH TLV-TWA 2mg.m<sup>3</sup>  
Nuisance dust limit: OSHA TWA 15 mg/m<sup>3</sup>  
ACGIH TLV-TWA 10mg/m<sup>3</sup>

EINECS Status: All components are included in EINECS inventories.  
Restrictions on marketing and use: none  
Refer to any other national measures that may be relevant.

16. OTHER INFORMATION