

**ELMOTHERM® FS 190**

Version 5.0 SDB\_REG\_EU

Revision Date 21.01.2016

Print Date 09.11.2016

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

Trade name : ELMOTHERM® FS 190

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Use of the Substance/Mixture : Insulating varnish

**1.3 Details of the supplier of the safety data sheet**

Company : ELANTAS Europe S.r.l.  
Strada Antolini 1  
43044 Collecchio  
Italy  
Telephone : +3907363081  
Telefax : +390736402746  
E-mail address : msds.elantas.europe@altana.com

**1.4 Emergency telephone number**

+39 0736 3081 (8-17 h)

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**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification (REGULATION (EC) No 1272/2008)**

Flammable liquids , Category 3	H226: Flammable liquid and vapour.
Specific target organ toxicity - single exposure , Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Aspiration hazard , Category 1	H304: May be fatal if swallowed and enters airways.
Chronic aquatic toxicity , Category 3	H412: Harmful to aquatic life with long lasting effects.

**2.2 Label elements**

**Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal word : Danger

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Hazard statements	:	H226 H304  H336 H412	Flammable liquid and vapour. May be fatal if swallowed and enters airways.  May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.
Supplemental Hazard Statements	:	EUH066	Repeated exposure may cause skin dryness or cracking.
Precautionary statements	:	<b>Prevention:</b> P210  P261  P273 <b>Response:</b> P301 + P310  P331 P370 + P378	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Avoid release to the environment.  IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Do NOT induce vomiting. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Hazardous components which must be listed on the label:  
low boiling point hydrogen treated naphtha

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**

Chemical nature : Alkyd Resin Solution

**Hazardous components**

Chemical Name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
low boiling point hydrogen treated naphtha	64742-48-9 265-150-3 01-2119471843-32	STOT SE3; H336 Asp. Tox.1; H304 Flam. Liq.3; H226 Aquatic Chronic3; H412	>= 30 - < 50
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not Assigned 01-2119463258-33	Flam. Liq.3; H226 STOT SE3; H336 Asp. Tox.1; H304	>= 7 - < 10

For explanation of abbreviations see section 16.

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**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

- General advice : Show this safety data sheet to the doctor in attendance.  
Treat symptomatically.  
Do not leave the victim unattended.  
Consult a physician.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- If inhaled : Move to fresh air.  
If unconscious place in recovery position and seek medical advice.  
Oxygen or artificial respiration if needed.  
If symptoms persist, call a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off immediately with plenty of water for at least 15 minutes.  
Use a mild soap if available.  
Wash contaminated clothing before re-use.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Consult a physician.  
Keep eye wide open while rinsing.  
Protect unharmed eye.  
If eye irritation persists, consult a specialist.
- If swallowed : Gently wipe or rinse the inside of the mouth with water.  
Call a physician immediately.  
Never give anything by mouth to an unconscious person.  
Do not give milk or alcoholic beverages.

**4.2 Most important symptoms and effects, both acute and delayed**

- Symptoms : Nausea  
Vomiting  
Central nervous system depression

**4.3 Indication of any immediate medical attention and special treatment needed**

- Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

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**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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Unsuitable extinguishing media : High volume water jet

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Warning: water promotes the spread of fire.  
Cool containers/tanks with water spray.  
Burning produces irritant fumes.  
The pressure in sealed containers can increase under the influence of heat.  
Exposure to decomposition products may be a hazard to health.

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment. Exposure to decomposition products may be a hazard to health.

Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
Remove all sources of ignition.  
Ensure adequate ventilation.  
Keep people away from and upwind of spill/leak.

### 6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.  
Local authorities should be advised if significant spillages cannot be contained.  
Retain and dispose of contaminated wash water.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).  
Sweep up and shovel into suitable containers for disposal.  
Clean contaminated surface thoroughly.

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### 6.4 Reference to other sections

For personal protection see section 8.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms. Ensure all equipment is electrically grounded before beginning transfer operations.  
Avoid inhalation, ingestion and contact with skin and eyes.  
Keep away from fire, sparks and heated surfaces.  
Keep container closed when not in use.
- Advice on protection against fire and explosion : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Keep away from heat and sources of ignition.
- Hygiene measures : Store personal protection equipment in a clean location away from the work area. Keep working clothes separately.

### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Do not store together with explosives, gases, oxidizing solids, products which form flammable gases in contact with water, oxidizing products, infectious products and radioactive products.

### 7.3 Specific end use(s)

- Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

- low boiling point hydrogen treated naphtha : End Use: Workers  
Exposure routes: Skin contact  
Potential health effects: Chronic effects, Systemic effects  
Value: 300 mg/kg  
End Use: Consumers  
Exposure routes: Skin contact  
Potential health effects: Chronic effects, Systemic effects  
Value: 300 mg/kg  
End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Chronic effects, Systemic effects  
Value: 1500 mg/m<sup>3</sup>

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End Use: Consumers  
Exposure routes: Inhalation  
Potential health effects: Chronic effects, Systemic effects  
Value: 900 mg/m<sup>3</sup>  
End Use: Consumers  
Exposure routes: Ingestion  
Potential health effects: Chronic effects, Systemic effects  
Value: 300 mg/kg

### 8.2 Exposure controls

#### Engineering measures

Use only appropriately classified electrical equipment and powered industrial trucks.

#### Personal protective equipment

- Eye protection : Safety glasses with side-shields conforming to EN166  
Ensure that eyewash stations and safety showers are close to the workstation location.  
Do not wear contact lenses.
- Hand protection  
Material : Polyvinyl alcohol or nitrile- butyl-rubber gloves  
Remarks : Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Material : Protective gloves complying with EN 374.
- Skin and body protection : Workers should wear antistatic footwear.  
Remove and wash contaminated clothing before re-use.  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.  
Respiratory protection complying with EN 141.
- Filter type : Organic vapour type (A)
- Protective measures : Ensure that eye flushing systems and safety showers are located close to the working place.  
Do not wear contact lenses.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : amber
- Odour : characteristic
- pH : Not applicable
- Melting point/freezing point : lower -15 °C

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Boiling point/boiling range	: 130 - 210 °C
Flash point	: 35 °C
Upper explosion limit	: 7 %(V)
Lower explosion limit	: 0,8 %(V)
Relative vapour density	: upper 1(Air = 1.0)
Density	: 1.000 g/l (20 °C)
Solubility(ies)	
Water solubility	: immiscible
Partition coefficient: n-octanol/water	: No data available

### 9.2 Other information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Keep away from oxidizing agents, strongly acid or alkaline materials and amines.  
Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

### 10.5 Incompatible materials

Materials to avoid : Strong acids and strong bases  
Strong oxidizing agents  
Strong reducing agents  
Alkali metals  
Alkaline earth metals

### 10.6 Hazardous decomposition products

Hazardous decomposition products : Stable under recommended storage conditions.  
Heating can release vapours which can be ignited.  
Burning produces noxious and toxic fumes.  
Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of

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nitrogen (NOx), dense black smoke.

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**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity**

**Product:**

Acute oral toxicity : Remarks: No data available

**Components:**

**|| low boiling point hydrogen treated naphtha:**

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

Acute inhalation toxicity : LC50 (Rat): 4,951 mg/l  
Exposure time: 4 h  
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes

**Skin corrosion/irritation**

**Product:**

Remarks: No data available

**Serious eye damage/eye irritation**

**Product:**

Remarks: No data available

**Respiratory or skin sensitisation**

**Product:**

Remarks: No data available



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**Germ cell mutagenicity**

**Carcinogenicity**

**Reproductive toxicity**

**STOT - single exposure**

**STOT - repeated exposure**

**Repeated dose toxicity**

**Product:**

Remarks: No data available

**Aspiration toxicity**

**Further information**

**Product:**

Remarks: No data available

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**SECTION 12: Ecological information**

**12.1 Toxicity**

**Product:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

**Components:**

**|| low boiling point hydrogen treated naphtha:**

Toxicity to fish : LL50 (Fish): > 10 - < 30 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 22 - < 46 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202  
GLP: yes

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
GLP: yes

**12.2 Persistence and degradability**

**Product:**

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Biodegradability : Remarks: No data available

### Components:

#### **low boiling point hydrogen treated naphtha:**

Biodegradability : Result: Readily biodegradable  
Method: OECD Test Guideline 301F  
GLP: yes  
Remarks: Readily biodegradable, according to appropriate OECD test.

### 12.3 Bioaccumulative potential

#### Product:

Bioaccumulation : Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).  
This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

### 12.6 Other adverse effects

No data available

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Do not dispose of with domestic refuse.  
The product should not be allowed to enter drains, water courses or the soil.  
Container hazardous when empty.  
Dispose of in accordance with local regulations.  
Can be incinerated, when in compliance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

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## SECTION 14: Transport information

### 14.1 UN number

ADR/RID/ADN : UN 1263

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**IMDG** : UN 1263

**IATA** : UN 1263

**14.2 UN proper shipping name**

**ADR/RID/ADN** : PAINT

**IMDG** : PAINT

**IATA** : Paint

**14.3 Transport hazard class(es)**

**ADR/RID/ADN** : 3

**IMDG** : 3

**IATA** : 3

**14.4 Packing group**

**ADR/RID/ADN**

Packing group : III

Classification Code : F1

Hazard Identification Number : 30

Labels : 3

**IMDG**

Packing group : III

Labels : 3

EmS Code : F-E, S-E

**IATA**

Packing instruction (cargo aircraft) : 366

Packing instruction (passenger aircraft) : 355

Packing group : III

Labels : 3

**14.5 Environmental hazards**

**ADR/RID/ADN**

Environmentally hazardous : no

**IMDG**

Marine pollutant : no

**14.6 Special precautions for user**

Not applicable

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

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**SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : low boiling point hydrogen treated naphtha  
Xylene, mixture of isomers

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
P5c	FLAMMABLE LIQUIDS	5.000 t	50.000 t

34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils	2.500 t	25.000 t
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**15.2 Chemical Safety Assessment**

Not applicable

**SECTION 16: Other information**

**Full text of H-Statements**

H226 : Flammable liquid and vapour.  
H304 : May be fatal if swallowed and enters airways.  
H336 : May cause drowsiness or dizziness.  
H412 : Harmful to aquatic life with long lasting effects.

**Full text of other abbreviations**

Aquatic Chronic : Chronic aquatic toxicity  
Asp. Tox. : Aspiration hazard  
Flam. Liq. : Flammable liquids  
STOT SE : Specific target organ toxicity - single exposure

**Further information**

Training advice : Provide adequate information, instruction and training for operators.

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