



TOTAL

## Safety Data Sheet

**Product name :** STELOX conditionné Page : 1/5  
SDS n° :30150-33 Version :1.15 Version of :2005-04-27  
This sheet supersedes the one dated :2004-05-13

### PRODUCT LABELS

**LABELLING (standard or EU):** Not concerned  
**R-phrases :** None  
**S-phrases :** None  
**TRANSPORT LABELLING:** Not applicable.

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

**Name of the product :** STELOX conditionné  
**Other products concerned :** STELOX 85/25 BLOCK 30, 85/25 S30, 90/40 S30, 95/35 BLOCK 20, 100/25 BLOCK 30, 100/40 BLOCK 20, 105/6 BLOCK 29, 110/30 BLOCK 24  
**Product application :** Bitumen for industrial use  
OXIDIZED BITUMEN, PACKAGED  
**Supplier :** TOTAL FRANCE  
24, cours Michelet.  
92800 PUTEAUX.  
FRANCE  
Tel: 01 41 35 40 00  
Fax: 01 41 35 82 88  
**Emergency telephones :** ORFILA / Tel : 01.45.42.59.59  
**See local details at end of sheet :**

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### SUBSTANCE

**Chemical nature :** Oxidized or air blown bitumen  
Oxidised bitumens are obtained by blowing air through a bituminous feedstock, with or without catalyst, at a temperature of 250-300°C.  
Bitumens are complex hydrocarbon products with high molecular mass, derived from the processing of crude oil.  
Bitumens are composed of products of paraffinic, naphthenic and aromatic nature. They may contain sulphurated derivatives and organic acids.  
They may also contain polycyclic aromatic hydrocarbons in the amount of a few parts per million (ppm).  
**CAS No. :** 64742-93-4  
**EU index No. :** 265-196-4

### 3. HAZARDS IDENTIFICATION

**Health effects :** OXIDIZED BITUMENS PRESENT NO DANGER IN SOLID STATE  
Risks exist only when the product has been heated to a high temperature. In this case, apply the precautions given in the material safety data sheet of the hot product, in bulk.  
**Environmental impact :** The components of the bitumen may become bio-avaialbe when the bitumen is diluted with a solvent and the mixture has a low viscosity at room temperature.  
**Physico-chemical hazards :** With overheated bitumens and under certain conditions, there is a specific risk of flaming or explosion.  
**Product classification :** None under applicable regulation.



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### 4. FIRST AID MEASURES

Risks exist only when the product has been heated to a high temperature. In this case, apply the precautions given in the material safety data sheet of the hot product, in bulk.

General : IN ALL CASES OF BURNS OR AFTER INHALATION OF VAPOURS OR FUMES, CALL IMMEDIATELY FOR EMERGENCY MEDICAL AID (AMBULANCE SERVICE, FIRE BRIGADE, DOCTOR...) AND ENSURE THE PROTECTION OF THE RESCUE TEAM -see below

### 5. FIRE FIGHTING MEASURES

Flash point:  
see heading 9 - "Physical and chemical properties"

Extinguishing media : - suitable:  
Foam, CO<sub>2</sub>, powder, sand and possibly water spray.  
- not recommended:  
Water jet PROHIBITED.

Specific hazards : Burning bitumen gives off a complex mixture of gases containing notably CO, CO<sub>2</sub>, and soot. They are very dangerous when inhaled.

Protective measures for firefighters : Insulated breathing apparatus must be worn in confined premises with heavy concentrations of fumes and gases.

### 6. ACCIDENTAL RELEASE MEASURES

Personal protection : Product in solid state : not concerned

After spillage / leakage : Product in solid state: not concerned.

### 7. HANDLING AND STORAGE

HANDLING :

Prevention of user exposure : Not applicable : the product is in solid state.  
When handling the liquefied product, take care to avoid burns.

Prevention of fire and explosion : Handle away from any source of ignition and heat.

Precautions : Do not eat or drink or smoke during use.  
Avoid contact with strong oxidising agents.

STORAGE :

Storage precautions : Store in well-ventilated premises and away from any source of ignition or heat.

Incompatible products : A dangerous reaction may occur with strong oxidizing agents.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit : - BITUMEN FUMES:in the USA : TLV/TWA = 0.5 mg/m<sup>3</sup> (inhalable fraction)(A4) -irritation  
In France : none.

Hand protection : Gloves if skin contact is likely during handling or use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Solid at 20°C  
Liquid at > 110°C.



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Colour : Black or brownish-black  
Odour : Characteristic.  
Density/specific gravity : 0,98 - 1,10 (relative density, ISO 3838)  
Temperature (°C) 25  
Flash point : > 250 ° C (ISO 2592)  
Température d'auto-inflammation : > 350 ° C  
Comments on explosivity : Not applicable  
Temperatures at phase change : Initial distillation point: > 250 ° C  
Softening point: 80 - 115 ° C ( EN 1427)  
Solubility :  
- in water : Insoluble and immiscible.  
- in organic solvents : Soluble in many common solvents.  
- in fatty substances : Partially soluble.  
Further information :  
- pH: not applicable  
- Electric conductivity: Insulating  
Hygroscopicity: Hygroscopic product.

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### 10. STABILITY AND REACTIVITY

Stability : This product is stable  
Conditions to avoid : Keep away from all sources of ignition.  
Materials to avoid : Strong oxidising agents.  
Hazardous decomp. products : Incomplete combustion and thermolysis produces potentially toxic gases such as CO, CO<sub>2</sub>, various hydrocarbons, aldehydes and soot.

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### 11. TOXICOLOGICAL INFORMATION

THE PRODUCT PRESENTS NO DANGER IN SOLID STATE.  
If the product is heated, see the material safety data sheet of the hot product, in bulk.

Acute toxicity / Local effect :

Inhalation, comments: Non-classified  
Skin contact, comments: Not classified.  
Eye contact, comments: Not classified.  
Ingestion, comments: Not classified.

CHRONIC TOXICITY OR LONG-TERM TOXICITY :

Sensitization : Not classified as allergenic.  
Carcinogenicity : The results of studies available to date give no proof that exposure to bitumen or to fumes from bitumen present a risk of cancer for man.

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### 12. ECOLOGICAL INFORMATION

Comments about ecotoxicity : Considered not to represent danger for soil-growing organisms and aquatic organisms.



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**Mobility :** - Soil:  
Given its physical and chemical characteristics, the product has no soil mobility.  
- Water:  
Bitumen is insoluble and floats or settles in water, depending on its type and the density of the water

**Bioaccumulation :** Improbable

**Persistence and degradability :** In bulk form, the product undergoes practically no alteration in the environment.

### 13. DISPOSAL CONSIDERATIONS

**Waste disposal :** The recommended method is recycling or disposal via an authorised waste contractor.

**Waste class :** 05 01 08.

**Disposal of contaminated packaging :** Disposal via an approved waste contractor.

**National regulations :** Waste classification: Decree 2002-540 of April 18, 2002.

### 14. TRANSPORT INFORMATION

Product transported at room temperature.  
Not concerned by the transport regulations below.

**Road (ADR) / Rail (RID) :**

**Transport by barge (ADNR) :**

**Marine (IMO-IMDG) :**

**Air (ICAO/IATA) :**

### 15. REGULATORY INFORMATION

**Symbol :** none

**Risk phrases :** None

**Safety phrases :** None

**EU directives :** Not classified according to the modified directive 67/548.

**Social Security code :** Table of occupational illnesses and diseases : not concerned  
- Art. L.461-6, Art. D.461-1, appendix D, No. 1

**Listed installations :** Headings 1520-1521  
Follow the regulations applicable for hazard-rated facilities.

### 16. OTHER INFORMATION

**Information sources :** CONCAWE report (Dossier No. 92/104; 98/104) Monographs of IARC vol. No. 35-1985 and addition No. 7-1987.  
Standard T 65-037

**Revision date:** 2005-04-27

**Supersedes the data sheet of:** 2004-05-13

\* Information revised since the previous version of the SDS :



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**Emergency number :** For France, in case of poisoning call the Antipoison Centre (if possible in your area) and/or the SAMU (15), see ORFILA in heading 1 - Tel : Angers 02.41.48.21.21 - Bordeaux 05.56.96.40.80 - Lille 0 825 812 822- Lyon 04.72.11.69.11 - Marseille 04.91.75.25.25 - Nancy 03.83.32.36.36 - Paris 01.40.05.48.48 - Rennes 02.99.59.22.22 - Strasbourg 03.88.37.37.37 - Toulouse 05.61.77.74.47.  
Serious burn treatment centres : PARIS Hôpital Cochin 01.42.34.17.58 - PARIS Hôpital Saint Antoine 01.49.28.26.12 - SURESNES Hôpital Foch 01.46.25.24.96 - LYON : Hôpital Edouard Heriot 04.72.11.73.11 - MARSEILLE : Hôpital de la conception 04.91.94.16.69 - Others : Bordeaux, Grenoble, Lille, Montpellier, Metz, Nantes...

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This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

# STELOX<sup>®</sup> 105/15

Oxidationsbitumen 105/15



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Parameter	Einheit	Bereich		Prüfverfahren
		min.	max.	
Penetration bei 25 °C	mm/10	10	20	DIN EN 1426
Erweichungspunkt (R+K)	°C	100	110	DIN EN 1427
Brechpunkt nach Fraaß	°C		-8	DIN EN 12593
Duktilität bei 25 °C	cm	2		DIN 52013
Flammpunkt Coc	°C	250		DIN EN ISO 2592
Löslichkeit	M.-%	99,5		DIN EN 12592
Paraffingehalt	M.-%		2,0	DIN EN 12606-1
Dichte bei 25°C	kg/m <sup>3</sup>	1000		DIN EN ISO 3838
Beständigkeit gegen Verhärtung				DIN 52016
- Masseänderung	M.-%		0,5	

Das Bitumen 105/15 wird als Klebebitumen sowie für Rohrschutzmassen und spezielle Bitumenlacke eingesetzt.

Revision: 7-05/2004