SAFETY DATA SHEET

PRODUCT LABELS

LABELLING (standard or EU): Concerned
EC No. 292-460-6

Symbol(s):

Symbol(s): Xn Harmful

Contains: Alkanes, C11-15-iso-

R-phrases:
R-65 Harmful: may cause lung damage if swallowed.
R-66 Repeated exposure may cause skin dryness or cracking.

S-phrases:
S-23 Do not breathe gas/fumes/vapour/aerosol mist.
S-24 Avoid contact with skin.
S-62 If swallowed, do not induce vomiting: seek medical advice immediately and show the container or label.

TRANSPORT LABELLING: Applicable (see section 14)

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

Name of the product: ISANE IP 185

Product application: Organic solvent

Supplier: TOTAL FLUIDES
51, Esplanade du Général de Gaulle
92907 Paris La Défense Cédex

Contact: Service QSE: Tel: 01 41 35 33 64 / Fax: 01 41 35 33 50

Emergency telephones: ORFILA / Tel: 01.45.42.59.59

See local details at end of sheet:

2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE

Chemical nature: C11-C15 alkanes

<table>
<thead>
<tr>
<th>Substances presenting a health hazard</th>
<th>EC No.</th>
<th>CAS No.</th>
<th>Content</th>
<th>Symbol(s)</th>
<th>R-phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkanes, C11-15-iso-</td>
<td>292-460-6</td>
<td>90622-58-5</td>
<td>100 %</td>
<td>Xn</td>
<td>R-65, 66</td>
</tr>
</tbody>
</table>

See section 16 for explanations of R-phrases:

Composition comments: Total content in aromatic, ppm: Typical: 10
3. HAZARDS IDENTIFICATION

Health effects: If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours). Prolonged or repeated contact may cause irritation.

Environmental impact: None to our knowledge

Physico-chemical hazards: In use, may form flammable/explosive vapour-air mixture. Static electricity. The product may accumulate electric charges that can spark off a fire.

Product classification: Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking.

4. FIRST AID MEASURES

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Inhalation: Remove to fresh air.
- Symptoms: Irritation of the respiratory system. At high concentrations: Narcosis.

Ingestion: Do not induce vomiting to avoid the risk of aspiration into the respiratory tract. Get medical attention immediately!
- Symptoms: Nausea, vomiting, abdominal pains. In the event of ingestion with bronchial inhalation: Pneumonopathy with respiratory distress.

Skin contact: Rinse with water.
Remove contaminated clothing.
In case of repeated or prolonged contact with the skin: Chapping. Dryness.

Eye contact: Rinse the eye with water immediately.
In case of splashing in the eyes: Burning feeling and temporary redness.

Aspiration: If the product is believed to have entered the lungs (in case of vomiting, for example), take the person to hospital for immediate care.

5. FIRE FIGHTING MEASURES

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

Extinguishing media:
- suitable: Foam, CO₂, powder
- not recommended: Water jet.

Specific fire-fighting methods: Cool down tanks and surfaces exposed to the fire by abundant spraying with water.

Specific hazards: Incomplete combustion and thermolysis produce gases of varying toxicity such as CO, CO₂, various hydrocarbons, aldehydes and soot. These may be highly dangerous if 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: Protective clothing, gloves, and goggles should be worn, as applicable.
Safety Data Sheet

Product name: ISANE IP 185
SDS n°: 30078-33
Version: 13.00
This sheet supersedes the one dated: 2004-11-26

After spillage / leakage: Design installations so as to prevent water and ground pollution.
Spill cleanup methods:
- Recovery:
  Use flame-proof and explosion-proof material.
  Contain and recover by physical means.
  Absorb small spills on dry chemical absorbent.
- Elimination:
  Hand over contaminated materials to an approved collector - see also section 13.
  Flush with plenty of water to clean spillage area.

Prevention of secondary risks: Remove all sources of ignition.

7. HANDLING AND STORAGE

HANDLING:
Prevention of user exposure: Ventilate extensively if the formation of vapours, fumes, mists or aerosol is a risk.
Prevention of fire and explosion: Use explosion-proof material. Arrange machinery and equipment so as to prevent the sheet of burning product from spreading (retention pits and basins, siphons in the water drainage system).
Precautions: Avoid extended and repeated contacts with the skin as these can cause skin ailments aggravated by small injuries or friction on soiled clothing.
Avoid breathing in vapours, fumes or fogs.
Do not spray at high pressure (> 3 bar).

STORAGE:
Technical measures: Use anti-explosive materials conforming with the applicable regulations.
Prevent any build-up of static electricity.
Storage precautions:
- Suitable:
  Store away from all sources of ignition and heat.
  Containers and equipments must be earthed in order to prevent sparks due to static electricity.
  Use only hydrocarbon resistant containers, joints, pipe-lines...
  Keep in closed and accurately labelled containers when not in use.
Incompatible products: Dangerous reaction with strong acids and oxidizing agents.
Packaging materials: Steel, stainless steel

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Technical measures: Use this product in a well-ventilated atmosphere with explosion-proof equipment.
Occupational exposure limit: TOTAL FLUIDES recommends an occupational exposure limit (OEL) value for hydrocarbon solvents of 1200 mg/m³ based on the CEFIC-HSPA (Brussels) guideline values determined using the RCP (Reciprocal Calculation Procedure).
Respiratory protection: In case of risk of exposure exceeding the mean exposure value, an appropriate breathing apparatus must be worn by each individual.
Hand protection: Impermeable hydrocarbon-proof gloves.
Eye protection: Goggles, in case of risk of splashing.
Skin and body (other than the hands) protection: Wear appropriate clothing to prevent any possibility of skin contact.
Hygienic work practices: Avoid prolonged and repeated contact with the skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid
**Product name:** ISANE IP 185  
**SDS n°:** 30078-33  
**Version:** 13.00  
**This sheet supersedes the one dated:** 2004-11-26

**Colour:** Colourless.

**Odour:** Barely perceptible

**Density/specific gravity:** 760 - 775 kg/m³  
**Temperature (°C) 15**

**Flash point:** => 64 °C (ISO 2719)

**Comments on flash points:** (Pensky/Martens Closed cup)

**Température d'auto-inflammation:** > 230 °C (ASTM E 659)

**Comments on autoignition temperature:** This temperature may be significantly lower under particular conditions (slow oxidation on finely divided materials...).

**Flammability limit - lower(%) :** 0.6

**Flammability limit - upper(%) :** 6.5

**Temperatures at phase change:**  
- Flowing point: - 50 °C  
- Distillation range: 185-215 °C

**Vapour pressure:** < 1 hPa  
**Temperature (°C) 20**

**Solubility:**  
- in water: Slightly soluble. < 20 ppm  
- in organic solvents: Soluble in many common solvents.

**Viscosity:** 1.3 mm²/s  
**Temperature (°C) 40**

**Further information:**  
- **pH: not applicable**

### 10. STABILITY AND REACTIVITY

**Stability:** The product is stable at normal storage, handling and use temperatures.

**Conditions to avoid:** Heat (temperatures above flash point), sparks, ignition points, flames, static electricity

**Materials to avoid:** Strong acids and oxidising agents

**Hazardous decomp. products:** Incomplete combustion and thermolysis produces potentially toxic gases such as CO, CO₂, various hydrocarbons, aldehydes and soot.

### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity / Local effect:**

**Skin contact, comments:** Repeated exposure can cause skin dryness or cracking.

**Ingestion:** LD₅₀(Rat) > 5000 mg/kg

**Ingestion, comments:** Harmful: If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions (medical survey for 48 hours min).

**CHRONIC TOXICITY OR LONG-TERM TOXICITY :**

**Skin contact:** Frequent or prolonged skin contact destroys the lipoacid cutaneous layer and may cause dermatosis.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Acute toxicity. LC₅₀ 96 hours fish > 100 mg/l
Mobility:
- Soil: Given its physical and chemical characteristics, the product generally shows little mobility in the ground.
- Water: The product is insoluble; it spreads on the surface of the water

Bioaccumulation: Bioaccumulable
Persistence and degradability: Easily removed from the aqueous environment.

13. DISPOSAL CONSIDERATIONS

Waste disposal: Prevent from entering sewers or the immediate environment.
- Relevant disposal method:
  The only method authorized is collection by an authorized waste contractor and regeneration or incineration in an approved installation.

Disposal of contaminated packaging: Hand over to an authorised waste contractor.
Empty packaging may contain flammable or explosive vapours.

National regulations:
When cleaning tanks, the disposal of sludge is to be carried out in compliance with regulations concerning waste: law N° 75-633 of 15.07.1975 (JO of 16.07.1975), amended law N° 76-663 of 19.07.1976 (regulated facilities).
Decree N° 77-974 of 19.08.1977 (JO of 28.08.1977)
Decree of 01.03.1993 concerning waste (JO of 28.03.1993)

14. TRANSPORT INFORMATION

Not concerned by transport regulations ADR/RID, IMDG, IATA.

UN Number: 9003
Proper shipping name (national): MATIERES DONT LE POINT ECLAIR EST SUPERIEUR A 61 °C MAIS INFERIEUR OU EGALE A 100 °C, N.S.A. (isoalcanes en C11-15)
Proper shipping name (international): SUBSTANCES WITH A FLASH POINT ABOVE 61 °C AND LESS THAN 100 °C, N.O.S. (Isoalkanes, C11-15)
Road (ADR) / Rail (RID):
Transport by barge (ADNR):
Class: 9
Marine (IMO-IMDG):
Air (ICAO/IATA):
Comments: ADNR: classified dangerous only if transported by tanker.

15. REGULATORY INFORMATION

EC No: 292-460-6
Symbol(s):
Symbol(s): Xn Harmful
Contains: Alkanes, C11-15-iso-
Risk phrases: R-65 Harmful: may cause lung damage if swallowed.
R-66 Repeated exposure may cause skin dryness or cracking.
Safety phrases: S-23 Do not breathe gas/fumes/vapour/aerosol mist.
S-24 Avoid contact with skin.
S-62 If swallowed, do not induce vomiting: seek medical advice immediately and show the container or label.
Table of occupational illnesses and diseases No. 84
Listed installations: Follow the regulations applicable for hazard-rated facilities.
INVENTORIES:
EUROPE (EINECS): EINECS Registration number 292-460-6
JAPAN (ENCS): Yes Registration number 2-10
PHILIPPINES (PICCS): Yes
AUSTRALIAN (AICS): Yes
KOREA (ECL): Yes Registration number KE-00533
CHINA: Yes

16. OTHER INFORMATION
Explanation of R-phrases in section 2:
R-65 Harmful: may cause lung damage if swallowed.
R-66 Repeated exposure may cause skin dryness or cracking.
RECOMMENDED USES AND RESTRICTIONS ON USE:
Recommended uses and restrictions: see section 1
Revision date: 2005-01-26
Supersedes the data sheet of: 2004-11-26
* Information revised since the previous version of the SDS:
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 03.20.44.44.44 - 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.
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.