Version 3

Print Date 14/12/2004

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

Product information

| Product name | : | INDURITORE HS |
|----------------------|---|---|
| Product code | : | L0000362 |
| Company | : | Lechler SpA Via Cecilio 17 22100 Como |
| Telephone Telefax | : | +39031586111 +39031586206 |

In order to get more information and in case of emergencies please address to Lechler Group Security Office. (Tel. +39-031-586.301).

: Tel. +39-031-586301 Fax +39-031-586299

2. COMPOSITION/INFORMATION ON INGREDIENTS

:

Chemical nature

: Polyisocyanic compound

Hazardous components

| Components | CAS-No. | EEC-No. | Symbol(s) | R-phrase(s) | Concentration |
|---------------------------|------------|--------------|-----------|-------------|----------------|
| | | | | | [%] |
| Xylene | 1330-20-7 | 601-022-00-9 | Xn | R20/21, | >= 50 - <= 100 |
| | | | | R38, R10 | |
| N-Butyl Acetate | 123-86-4 | 607-025-00-1 | | R10, R66, | >= 1 - < 3 |
| | | | | R67 | |
| Naphtha Hydrodesulfurized | 64742-82-1 | 649-330-00-2 | Xn, N | R65, | >= 1 - < 3 |
| Heavy | | | | R51/53, | |
| | | | | R10 | |
| Polyisocianate HDI | 28182-81-2 | | Xi | R43, | >= 30 - < 50 |
| Derivative | | | | R52/53 | |

3. HAZARDS IDENTIFICATION



Hazardous components : XylenePolyisocianate HDI Derivative

R-phrase(s) : Flammable. Harmful by inhalation and in contact with skin. Irritating to skin. May cause sensitization by skin contact.

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Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s) :

Do not breathe spray. Avoid contact with skin. Wear suitable protective clothing and gloves.

Exceptional labelling of special preparations :

Contains isocyanates. See information supplied by the manufacturer.

4. FIRST AID MEASURES

| General advice | : | When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person. |
|--------------------|---|--|
| After Inhalation | : | Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. |
| After Skin contact | : | Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Put shower on working place |
| After Eye contact | : | Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Remove contact lenses. Seek medical advice. Put eye-washer on working place |
| After Ingestion | : | If accidentally swallowed obtain immediate medical attention. Keep at rest. Do not induce vomiting. |

5. FIRE-FIGHTING MEASURES

| Suitable extinguishing media | : | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray. |
|---|---|--|
| Extinguishing media which must not be used for safety reasons | : | Do NOT use water jet. |

| Specific hazards during fire fighting | : | As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). |
|--|---|--|
| | | Exposure to decomposition products may be a hazard to health. Cool closed containers exposed to fire with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for fire-fighters | : | Wear self contained breathing apparatus for fire fighting if necessary. |
| Environmental precautions | : | Try to prevent the material from entering drains or water courses. If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods for cleaning up | : | Clean with detergents. Avoid solvents. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceus earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |
| Additional advice | : | Refer to section 15 for specific national regulation. |
| IANDLING AND STORAGE | | |
| Handling | | |
| Safe handling advice | : | Avoid exceeding of the given occupational exposure limits (see section 8). |

| | section 8). Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Smoking, eating and drinking should be prohibited in the application area. Avoid inhalation of vapour or mist. For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Thoroughly mix before using After using, store in a well-sealed container |
|--|--|
| Advice on protection against : fire and explosion | Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. When transferring from one container to another apply earthing measures and use conductive hose material. No sparking tools should be used. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. No smoking. |

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| Storage | |
|---|---|
| Requirements for storage areas and containers | : Observe label precautions. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store between 5° an 35°C in a dry, well ventilated place away from source of heat, ignition and direct sunlight. Electrical installations / working materials must comply with the technological safety standards. Store in accordance with the particular national regulations. |
| Advice on common storage | : Keep away from oxidising agents, strongly acid or alkaline materials, as well as of amines, alcohols and water. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Components | | CAS-No. | Value [mg/m ³] | Value [ppm] | Basis |
|--------------------------------|---|--|--|--|--|
| Xylene | | 1330-20-7 | 221,00 | 50,00 | |
| N-Butyl Acetate | 123-86-4 | 713,00 | 150,00 | | |
| Naphtha Hydrodesulfurized Heav | у | 64742-82-1 | 350,00 | 100,00 | |
| Personal protective equipment | | | | | |
| Respiratory protection | limits. This should practically If the occup | | | general extra ocal exhaust annot be me | cupational exposure ction and -if t ventilation. t, in exceptional forn only for a short |
| Hand protection | Barrier cre should how Skin shoul | For prolonged or repeated contact use protective gloves. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred. Skin should be washed after contact. Wash your hands and put on barrier creams | | | |
| Eye protection | : Chemical | Chemical resistant goggles must be worn. | | | |
| Skin and body protection | Working c melting be Personnel | d be washed a lothes must no haviour in case should wear pr hould wear ant | ot consist of e of fire. rotective clo | textiles, wh othing | ich show a dangerous |

Components with workplace control parameters

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

: liquid

SAFETY DATA SHEET according to EC directive 2001/58/EC INDURITORE HS Version 3 Print Date 14/12/2004 : > 23 - 55 °C Flash point Density : 1 g/cm3 Viscosity : <= 60 s Transversale section: 6 mm Method: 2431 '84 (ISO 6) Solids by weight : 43 % **10. STABILITY AND REACTIVITY** Conditions to avoid Our products were manufactured in compliance with safety standards to avoid decomposition and degrading under the defined conditions. Taking the product type into account, it is advisable to leave the product in its original packaging thus avoiding transferring it. Hazardous reactions Keep away from oxidising agents, strongly alkaline and strongly acid : materials in order to avoid exothermic reactions. Avoid moisture. Amines and alcohols cause exothermic reactions. Preparation reacts slowly with water resulting in evolution of CO2. **11. TOXICOLOGICAL INFORMATION** Acute inhalation toxicity Exposure to component solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects. Such as: mucous membrane irritation, respiratory system irritation, adverse effects on kidney, liver and central nervous system. Symptoms and signs: headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss of consciousness. Inhalation of airborne droplets may cause irritation of the respiratory tract. Skin irritation Repeated or prolonged contact with the preparation may cause : removal of natural fat from the skin resulting in desiccation of the skin. The product may be absorbed through the skin. Note : The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

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| N-Butyl Ace | tate | OBSERVATIONS ON HUMAN SUBJECTS: Inhalation: 3300 ppm (16 mg/l), for short periods, cause serious irritation to the eyes and to the nose. Inhalation: 200-300 ppm (1-1.4 mg/l), for short periods, cause moderate irritation to the eyes and to the nose. Inhaling the vapours can irritate the respiratory system. The vapours can cause headache and nausea. As a liquid it can irritate the eyes and cause conjunctivitis, it can irritate the skin and cause dermatitis and, if swallowed, causes inebriation, hallucinations and sedation. Symptoms of illness at 500 ppm. Serious toxic effects at 2,000 ppm for 60 min. TCLo: 200 ppm | | | |
| Naphtha Hyo Heavy | drodesulfurized | ACUTE: INHALATION: Vapor concentration aboove recommended exposure levels may be irritating to the eyes and the repiratory tract, may cause headaches and dizziness, could be anesthetic and may other nervous system effects. SKIN CONTACT: Low order of toxicity. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. EYE CONTACT: Will cause eye discomfort, but will noy injure eye tissue. INGESTION: Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema. Minimal toxicity. | | | |
| 2. ECOLOGICA | L INFORMATION | | | | |
| Further information | | : The product contains dangerous substances for the environment (see chapter n° 2), The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation. | | | |
| Naphtha Hydrodesulf | R51/ urized Heavy | 753 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. | | | |
| 3. DISPOSAL (| CONSIDERATION | 5 | | | |
| Product | | The product should not be allowed to enter drains, water courses or the soil. Disposal together with normal waste is not allowed. Special disposal required according to local regulations. | | | |
| 4. TRANSPOR | FINFORMATION | | | | |
| ADR : | UN-No Class Code Packaging group | 1263 3 F1 III PAINT RELATED MATERIAL | | | |
| | Description of the goods | | | | |

| | | | | Print Date 14/12/2 |
|--------------------------|---|---|--|--|
| IMDG IATA | : UN-No Class EmS Packaging group Marine pollutant Description of the goods : UN-No Class Packaging group Description of the goods | | 1263 3 F-E, S-E III PAINT RE 1263 3 III Paint relate | LATED MATERIAL d material |
| | | | he listed on the | labeli |
| • Xy | s components which n lene yisocianate HDI Deri | | | adel: |
| Symbol(s) | 1 | : | Xn | Harmful |
| R-phrase(| s) | : | R10 R20/21 R38 R43 R52/53 | Flammable. Harmful by inhalation and in contact with skin. Irritating to skin. May cause sensitization by skin contact. Harmful to aquatic organisms, may cause long- term adverse effects in the aquatic environment |
| S-phrase(s | ;) | : | S23 S24 S36/37 | Do not breathe spray. Avoid contact with skin. Wear suitable protective clothing and gloves. |
| Exception special pro | al labelling of | : | Contains isocy | vanates. See information supplied by the manufacturer. |
| | - | | | |
| Exception special pro | legislation | | | |
| Exception special pro | legislation | | | |

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| Xylene | R20/21 R38 R10 | Harmful by inhalation and in contact with skin. Irritating to skin. Flammable. |
| | K10 | Tammaole. |
| N-Butyl Acetate | R10 | Flammable. |
| | R66 | Repeated exposure may cause skin dryness or cracking. |
| | R67 | Vapours may cause drowsiness and dizziness. |
| Naphtha Hydrodesulfurized Heavy | R65 R51/53 | Harmful: may cause lung damage if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| | R10 | Flammable. |
| Polyisocianata HDI Darivativa | R43 | May cause consitization by skin contact |
| Polyisocianate HDI Derivative | R43 R52/53 | May cause sensitization by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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SDS updated to the last adjustment of EEC directive 67/548/CE, 1999/45/CE.