1 Identification

- **Product identifier**
  - **Product number:** TF1525
  - **Trade name:** LOHAPS POLYURTHANE BARRIER COAT
  - **Application of the substance / the mixture:** For professional use

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** IVM Chemicals srl
    Viale della Stazione 3 -27020 Parona (PV) Italy tel +39 038425441
  - **1.3.2 Importer**
    Name I.C.& S. DISTRIBUTING CO.
    Address P.O.BOX 10845 LANCASTER, PA USA
    E-Mail: nelson@ics-company.com
  - **Information department:**
    Environmental Health and safety office
    hseoffice@ivmchemicals.com
  - **Emergency telephone number:**
    ChemTel Expert Assistance Hotline/MSDS Fax Access by dialing 1-800-255-3924 or for International +1-813-248-0585.

2 Hazard(s) identification

- **Classification of the substance or mixture**

  ![GHS02 Flame]

  Flam. Liq. 2 H225 Highly flammable liquid and vapor.

  ![GHS08 Health hazard]

  Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  Carc. 2 H351 Suspected of causing cancer.
  Repr. 2 H361 Suspected of damaging fertility or the unborn child.
  STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
  Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

  ![GHS07]

  Skin Irrit. 2 H315 Causes skin irritation.
  Eye Irrit. 2A H319 Causes serious eye irritation.
  Skin Sens. 1 H317 May cause an allergic skin reaction.
  STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- **Label elements**
  - **GHS label elements**
    The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)
The document contains the following information:

**Product number**: TF1525  
**Trade name**: LOHAPS POLYURTHANE BARRIER COAT

### Hazard pictograms
- GHS02  
- GHS07  
- GHS08

### Signal word: Danger

### Hazard-determining components of labeling:
- Toluene
- Ethyl acetate
- 4,4'-Methylene diphenyl diisocyanate
- Aromatic polyisocyanate
- 4-Isocyanatesulphonyltoluene

### Hazard statements
- **H225**: Highly flammable liquid and vapor.  
- **H315**: Causes skin irritation.  
- **H319**: Causes serious eye irritation.  
- **H334**: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
- **H317**: May cause an allergic skin reaction.  
- **H351**: Suspected of causing cancer.  
- **H361**: Suspected of damaging fertility or the unborn child.  
- **H335-H336**: May cause respiratory irritation. May cause drowsiness or dizziness.  
- **H373**: May cause damage to organs through prolonged or repeated exposure.  
- **H304**: May be fatal if swallowed and enters airways.

### Precautionary statements
- **P210**: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
- **P301+P310**: If swallowed: Immediately call a poison center/doctor.  
- **P321**: Specific treatment (see on this label).  
- **P331**: Do NOT induce vomiting.  
- **P303+P361+P35**: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
- **P305+P351+P338**: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
- **P362+P364**: Take off contaminated clothing and wash it before reuse.  
- **P405**: Store locked up.  
- **P501**: Dispose of contents/container in accordance with local/regional/national/international regulations.

### Classification system:

#### NFPA ratings (scale 0 - 4)
- Health = 2  
- Fire = 3  
- Reactivity = 0

#### HMIS-ratings (scale 0 - 4)
- Health = *2  
- Fire = 3  
- Reactivity = 0
3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture: consisting of the following components.

### Dangerous components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>141-78-6</td>
<td>30-49.99%</td>
</tr>
<tr>
<td>Ethyl acetate</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td>Isobutyl acetate</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td>Toluene</td>
<td>10-12.49%</td>
</tr>
<tr>
<td>108-88-3</td>
<td>12.5-15%</td>
</tr>
<tr>
<td>108-85-6</td>
<td>5-9.99%</td>
</tr>
<tr>
<td>4,4'-Methylene diphenyl disocyanate</td>
<td></td>
</tr>
<tr>
<td>53317-61-6</td>
<td>2.5-4.99%</td>
</tr>
<tr>
<td>Aromatic polyisocyanate</td>
<td></td>
</tr>
<tr>
<td>4083-64-1</td>
<td>1-2.49%</td>
</tr>
<tr>
<td>26471-62-5</td>
<td>&lt;0.1%</td>
</tr>
<tr>
<td>4-Methyl diphenyl disocyanate</td>
<td></td>
</tr>
</tbody>
</table>

4 First-aid measures

- **Description of first aid measures**
  - **General information:**
    Immediately remove any clothing soiled by the product.
    Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
    Personal protective equipment for first aid responders is recommended. (please see section 8)
  - **After inhalation:**
    Supply fresh air and to be sure call for a doctor.
    In case of unconsciousness place patient stably in side position for transportation.
  - **After skin contact:**
    Immediately wash with water and soap and rinse thoroughly.
    Take off immediately all contaminated clothing, include underwear and shoes (if necessary).
    Rinse thoroughly with plenty of water for at least 20 minutes and take medical advise. If medical advise is needed have products container or label at hand.
49.0.14
· After eye contact:
  Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· After swallowing:
  Do not induce vomiting; immediately call for medical help.
· Information for doctor:
  · Most important symptoms and effects, both acute and delayed
    For symptoms and effects caused by substances, refer to Section 11.
  · No further relevant information available.
  · Indication of any immediate medical attention and special treatment needed
    No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
  · Suitable extinguishing agents: Alcohol resistant foam, CO₂, powder, water spray/mist.
  · For safety reasons unsuitable extinguishing agents:
    Do not use a jet water stream as it may scatter and spread fire.
· Special hazards arising from the substance or mixture
  During heating or in case of fire poisonous gases are produced.
· Advice for firefighters
  Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.
· Protective equipment:
  Hardhat with visor, fireproof clothing, suitable gloves and if necessary respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Mount respiratory protective device.
  Wear protective equipment. Keep unprotected persons away.
  Ensure adequate ventilation
  Keep away from ignition sources
· Environmental precautions: Do not allow to enter sewers/ surface or ground water.
· Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to Section 13.
  Ensure adequate ventilation.
· Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.
· Protective Action Criteria for Chemicals

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>141-78-6 ethyl acetate</td>
<td>1,200 ppm</td>
</tr>
<tr>
<td>110-19-0 isobutyl acetate</td>
<td>450 ppm</td>
</tr>
<tr>
<td>108-88-3 toluene</td>
<td>67 ppm</td>
</tr>
<tr>
<td>101-68-8 4,4'-methylene diisocyanate</td>
<td>0.45 mg/m³</td>
</tr>
<tr>
<td>108-65-6 2-methoxy-1-methylethyl acetate</td>
<td>50 ppm</td>
</tr>
</tbody>
</table>

(Contd. on page 5)
Safety Data Sheet
acc. to OSHA HCS

Product number TF1525
Trade name: LOHAPS POLYURTHANE BARRIER COAT

7 Handling and storage

· Handling:
  · Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Open and handle receptacle with care.
    Prevent formation of aerosols.
    Protect against electrostatic charges.
    Keep respiratory protective device available.
    Use explosion-proof apparatus / fittings and spark-proof tools.
  · Information about protection against explosions and fires:
    Keep ignition sources away - Do not smoke.
    Protect against electrostatic charges.
    Keep respiratory protective device available.

· Conditions for safe storage, including any incompatibilities
  · Storage:
    · Requirements to be met by storerooms and receptacles:
      Store in a cool, well-ventilated area, away from heat and sources of ignition
      Provide solvent resistant, sealed floor.
      Observe the label precautions, the expiration date for the use, if not indicated, is from delivery date of goods.
      In cases where there is no reported expiration date , it means that the product must be used within 8 months.
    · Information about storage in one common storage facility: Not required.
    · Further information about storage conditions:
      Keep receptacle tightly sealed.
      Store in cool, dry conditions in well sealed receptacles.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters
  · Components with limit values that require monitoring at the workplace:
    The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

### 141-78-6 ethyl acetate

<table>
<thead>
<tr>
<th>Standard</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>Long-term: 1400 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term: 1400 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term: 1440 mg/m³, 400 ppm</td>
</tr>
</tbody>
</table>

### 110-19-0 isobutyl acetate

<table>
<thead>
<tr>
<th>Standard</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>Long-term: 700 mg/m³, 150 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term: 700 mg/m³, 150 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term: 712 mg/m³, 150 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term: 238 mg/m³, 50 ppm</td>
</tr>
</tbody>
</table>

### 101-68-8 4,4'-methylenediphenyl disocyanate

<table>
<thead>
<tr>
<th>Standard</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>Ceiling limit: 0.2 mg/m³, 0.02 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term: 0.05 mg/m³, 0.005 ppm</td>
</tr>
<tr>
<td></td>
<td>Ceiling limit: 0.2* mg/m³, 0.02* ppm</td>
</tr>
<tr>
<td></td>
<td>*10-min</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term: 0.051 mg/m³, 0.005 ppm</td>
</tr>
</tbody>
</table>

### 108-65-6 2-methoxy-1-methylethyl acetate

<table>
<thead>
<tr>
<th>Standard</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEE (USA)</td>
<td>Long-term: 50 ppm</td>
</tr>
</tbody>
</table>

### 26471-62-5 m-tolylidene diisocyanate

<table>
<thead>
<tr>
<th>Standard</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>Ceiling limit: 0.14 mg/m³, 0.02 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>LFC</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term: (0.14) NIC-0.021* mg/m³, (0.02) NIC-0.003* ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term: (0.036) NIC-0.007* mg/m³, (0.005) NIC-0.001* ppm</td>
</tr>
<tr>
<td></td>
<td>*(IFV) SEN; NIC-Skin; A3</td>
</tr>
</tbody>
</table>

### Ingredients with biological limit values:

### 108-88-3 toluene

<table>
<thead>
<tr>
<th>Standard</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEI (USA)</td>
<td>0.02 mg/L</td>
</tr>
<tr>
<td></td>
<td>Medium: blood</td>
</tr>
<tr>
<td></td>
<td>Time: prior to last shift of workweek</td>
</tr>
<tr>
<td></td>
<td>Parameter: Toluene</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.03 mg/L</td>
</tr>
<tr>
<td>Medium: urine</td>
</tr>
<tr>
<td>Time: end of shift</td>
</tr>
<tr>
<td>Parameter: Toluene</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3 mg/g creatinine</td>
</tr>
<tr>
<td>Medium: urine</td>
</tr>
<tr>
<td>Time: end of shift</td>
</tr>
<tr>
<td>Parameter: α-Cresol with hydrolysis (background)</td>
</tr>
</tbody>
</table>

### Additional information: The lists that were valid during the creation were used as basis.

### Exposure controls

- Personal protective equipment:
  - General protective and hygienic measures:
    - Keep away from foodstuffs, beverages and feed.
    - Immediately remove all soiled and contaminated clothing.
    - Wash hands before breaks and at the end of work.
    - Store protective clothing separately.
    - Avoid contact with the eyes and skin.
Pregnant women should strictly avoid inhalation or skin contact.

- **Breathing equipment:**
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**
  [Image of protective gloves]

  Due to missing tests no recommendation to the glove material can be given for the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

  The glove material has to be impermeable and resistant to the product.

  - **Material of gloves**
    The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

  - **Penetration time of glove material**
    The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**
  [Image of goggles]

  Tightly sealed goggles

---

**9 Physical and chemical properties**

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - **Form:** Fluid
      - **Color:** According to product specification
      - **Odor:** Characteristic
      - **Odor threshold:** Not determined.
    - **pH-value:** Not determined.
  - **Change in condition**
    - **Melting point/Melting range:** Undetermined.
    - **Boiling point/Boiling range:** 77 °C (170.6 °F)
  - **Flash point:** -4 °C (24.8 °F)
  - **Flammability (solid, gaseous):** Not applicable.
  - **Ignition temperature:** 315 °C (599 °F)
  - **Decomposition temperature:** Not determined.
  - **Auto igniting:** Product is not selfigniting.
  - **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

(Contd. on page 8)
### 49.0.14

- **Explosion limits:**
  - Lower: 1.2 Vol %
  - Upper: 11.5 Vol %

- **Vapor pressure at 20 °C (68 °F):** 97 hPa (72.8 mm Hg)

- **Density (+/- 0.03) at 20 °C (68 °F):**
  - Relative density: Not determined.
  - Vapor density: Not determined.
  - Evaporation rate: Not determined.

- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**
  - Dynamic: Not determined.
  - Kinematic at 20 °C (68 °F): 40 s (ISO 4 mm)

- **Solvent content:**
  - VOC content: 76.94 %
  - 740.1 g/l / 6.18 lb/gal

- **Solids content:** 23.0 %

- **Other information (HAPS)** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** typical of the product as indicated in the data sheet.
- **Chemical stability** The product is stable in normal conditions of storage and use recommended.
- **Thermal decomposition / conditions to be avoided:**
  - No decomposition if used and stored according to specifications.

- **Possibility of hazardous reactions**
  - Reacts with strong acids and oxidizing agents.
  - Vapours may form explosive mixtures with air.

- **Conditions to avoid** No further relevant information available.

- **Incompatible materials:** No further relevant information available.

- **Hazardous decomposition products:**
  - in case of possible formation of combustion:
    - Carbon monoxide and carbon dioxide
11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:

<table>
<thead>
<tr>
<th></th>
<th>141-78-6 ethyl acetate</th>
<th>110-19-0 isobutyl acetate</th>
<th>108-88-3 toluene</th>
<th>101-68-8 4,4'-methylenediphenyl disocyanate</th>
<th>53317-61-6 Aromatic polyisocyanate</th>
<th>108-65-6 2-methoxy-1-methylethyl acetate</th>
<th>26471-62-5 m-tolylidene disocyanate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oral LD50 4,934 mg/kg (rabbit)</td>
<td>Oral LD50 13,400 mg/kg (mouse)</td>
<td>Oral LD50 5,000 mg/kg (mouse)</td>
<td>Oral LD50 2,001 mg/kg (mouse)</td>
<td>Oral LD50 5,001 mg/kg (mouse)</td>
<td>Oral LD50 8,532 mg/kg (mouse)</td>
<td>Oral LD50 5,110 mg/kg (mouse)</td>
</tr>
<tr>
<td></td>
<td>Dermal LD50 20,001 mg/kg (rabbit)</td>
<td>Dermal LD50 17,401 mg/kg (rabbit)</td>
<td>Dermal LD50 12,124 mg/kg (rabbit)</td>
<td>Dermal LD50 9,401 mg/kg (rabbit)</td>
<td>Dermal LD50 5,001 mg/kg (rabbit)</td>
<td>Dermal LD50 5,001 mg/kg (rabbit)</td>
<td>Dermal LD50 9,401 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>LC50/4 h 1,600 mg/l (mouse)</td>
<td>LC50/4 h 31 mg/l (mouse)</td>
<td>LC50/4 h 25.7 mg/l (mouse)</td>
<td>LC50/4 h 35.7 mg/l (mouse)</td>
<td>LC50/4 h 35.7 mg/l (mouse)</td>
<td>LC50/4 h 35.7 mg/l (mouse)</td>
<td>LC50/4 h 0.107 mg/l (mouse)</td>
</tr>
<tr>
<td></td>
<td>LC0 22.6 ppm (mouse)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: Irritating effect.

- Sensitization:
  - Sensitization possible through inhalation.
  - Sensitization possible through skin contact.

- Additional toxicological information:
  - Harmful
  - Irritant
  - Causes skin irritation.
  - Causes serious eye irritation.
  - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - May cause an allergic skin reaction.
  - Suspected of causing cancer.
  - Suspected of damaging the unborn child.
  - May cause respiratory irritation.
  - May cause drowsiness or dizziness.
  - May cause damage to organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways. Contains isocyanates. May produce an allergic reaction.

- Carcinogenic categories

- IARC (International Agency for Research on Cancer - Cl. 1 and 2)
  26471-62-5 m-tolylidene diisocyanate  2B
  98-88-4 benzoyl chloride  2A

- NTP (National Toxicology Program)
  26471-62-5 m-tolylidene diisocyanate  <0.1%

- OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.

- Sensitisation
  Monomers / polymers isocyanate
  Particular characteristics / effects: prolonged exposure may irritate the eyes, nose, throat and respiratory tract.
  Isocyanate exposure may result in the delayed appearance of respiratory disorders, cough or asthma. Sensitive individuals may show exposure symptoms to isocyanates below workplace TLV values. Prolonged skin contact may result cause irritation and dehydration.

12 Ecological information

- Toxicity

  - Aquatic toxicity:

    141-78-6 ethyl acetate
    EC50  165 mg/l (daphnia) (48 h)
    LC50 (96h)  230 mg/l (Fish)

    110-19-0 isobutyl acetate
    EC50  370 mg/l (algae) (72 h)
    25 mg/l (daphnia)
    LC50 (96h)  17 mg/l (Fish)

    108-88-3 toluene
    EC50  134 mg/l (algae) (96 h)
    3.78 mg/l (daphnia) (48 h)
    LC50 (96h)  5.5 mg/l (Fish)

    101-68-8 4,4'-methylenediphenyl diisocyanate
    EC50  1,001 mg/l (daphnia) (24 h)
    LC50 (96h)  1,001 mg/l (Fish) (96 h)

    108-65-8 2-methoxy-1-methylethyl acetate
    EC50  1,001 mg/l (algae) (72 h)
    501 mg/l (daphnia) (48 h)
    LC50 (96h)  134 mg/l (Fish)

    26471-62-5 m-tolylidene diisocyanate
    EC50  12.5 mg/l (daphnia) (48h)
    LC50 (96h)  133 mg/l (Leuciscus idus melanotus)

- Persistence and degradability
  Data refers to the substance Toluene CAS No. 108-88-3
  Readily biodegradable (according to OECD criteria and/or EU RAR)
49.0.14

· Substances Easily biodegradable

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>141-78-6</td>
<td>ethyl acetate</td>
<td></td>
</tr>
<tr>
<td>110-19-0</td>
<td>isobutyl acetate</td>
<td></td>
</tr>
<tr>
<td>108-88-3</td>
<td>toluene</td>
<td></td>
</tr>
<tr>
<td>108-65-6</td>
<td>2-methoxy-1-methylethyl acetate</td>
<td></td>
</tr>
</tbody>
</table>

· Behavior in environmental systems:

· Bioaccumulative potential  No further relevant information available.
· Mobility in soil  No further relevant information available.

· Additional ecological information:

· General notes:
  Water hazard class 2 (Self-assessment): hazardous for water
  Do not allow product to reach ground water, water course or sewage system.
  Danger to drinking water if even small quantities leak into the ground.

· Other adverse effects  No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  Hand over to hazardous waste disposers.
  Dispose of contents and container in accordance with local state and federal regulations.

· Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number

· DOT  NA1263
· IMDG, IATA  UN1263

· UN proper shipping name

· DOT      Paint
· IMDG, IATA  PAINT

· Transport hazard class(es)

· DOT

· Class  3 Flammable liquids
· Label  3
· Class  3 Flammable liquids
· Label  3

(Contd. on page 12)
49.0.14 IMDG, IATA

- Class: 3 Flammable liquids
- Label: 3

- Packing group
  - DOT, IMDG, IATA: II

- Environmental hazards:
  - Marine pollutant: No

- Special precautions for user
  - Warning: Flammable liquids
  - Danger code (Kemler): 33
  - EMS Number: F-E,S-E
  - Stowage Category: B

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

- Transport/Additional information:
  - IMDG
    - Limited quantities (LQ): 5L
    - Excepted quantities (EQ): Code: E2
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 500 ml

- UN "Model Regulation": UN 1263 PAINT, 3, II

15 Regulatory information

- SARA
  - Section 355 (extremely hazardous substances):
    None of the ingredients is listed.
  - Section 313 (Specific toxic chemical listings):
    108-88-3 toluene 10-12.49%
    101-68-8 4,4'-methylene diphenyl diisocyanate 5-9.99%
    26471-62-5 m-tolylidene disocyanate <0.1%
    98-88-4 benzoyl chloride <0.01%

- TSCA (Toxic Substances Control Act):
  All components have the value ACTIVE.

- Hazardous Air Pollutants
  108-88-3 toluene
  101-68-8 4,4'-methylene diphenyl diisocyanate

- Proposition 65

- Chemicals known to cause cancer:
  26471-62-5 m-tolylidene disocyanate <0.1%

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49.0.14

- Chemicals known to cause reproductive toxicity for females:
  70657-70-4 2-methoxypropyl acetate <0.1%

- Chemicals known to cause reproductive toxicity for males:
  None of the ingredients is listed.

- Chemicals known to cause developmental toxicity:
  108-88-3 toluene 10-12.49%

- Carcinogenic categories
  - EPA (Environmental Protection Agency)
    108-88-3 toluene II 10-12.49%
    101-68-8 4,4'-methylenediphenyl diisocyanate D, CBD 5-9.99%
  - TLV (Threshold Limit Value established by ACGIH)
    108-88-3 toluene A4
    26471-62-5 m-tolylidene diisocyanate (A4)
    98-88-4 benzyl chloride (A4)
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.

- National regulations:
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: IVM Chemicals Srl
- Contact: See emergency phone
- Abbreviations and acronyms:
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFFA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  VOC: Volatile Organic Compounds (USA, EU)
  LC50: Lethal concentration, 50 percent
  LDI0: Lethal dose, 50 percent
  NIOSH: National Institute for Occupational Safety
  OSHA: Occupational Safety & Health
  TLV: Threshold Limit Value
  PEL: Permissible Exposure Limit
  REL: Recommended Exposure Limit
  BEI: Biological Exposure Limit
  Flam. Liq. 2: Flammable liquids – Category 2
  Flam. Liq. 3: Flammable liquids – Category 3
  Acute Tox. 2: Acute toxicity – Category 2
  Acute Tox. 4: Acute toxicity – Category 4
  Skin Irrit. 2: Skin corrosion/Irritation – Category 2
  Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
  Resp. Sens. 1: Respiratory sensitisation – Category 1
  Skin Sens. 1: Skin sensitisation – Category 1

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Carc. 2: Carcinogenicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Sources
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL and following amendments
Agency ECHA web site
INRS Fiche Toxicologique
IARC International agency for research on cancer