1 Identification

- **Product identifier**
  - Product number PI40
  - Trade name: **WHITE POLYESTER SEALER**
  - 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
  - Importer:
    - Name: I.C. & S. DISTRIBUTING CO.
    - Address: P.O.BOX 10845
    - 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.
  - GHS07 Health hazard
    - Carc. 2 H351 Suspected of causing cancer.
    - Repr. 2 H361 Suspected of damaging fertility or the unborn child.
    - STOT RE 1 H372 Causes damage to the hearing organs through prolonged or repeated exposure.

- **Label elements**
  - GHS label elements
    - The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
    - ![GHS02](image)
    - ![GHS07](image)
    - ![GHS08](image)
49.4.0

· Signal word Danger

· Hazard-determining components of labeling:
  styrene
  toluene

· Hazard statements
  H225 Highly flammable liquid and vapor.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H351 Suspected of causing cancer.
  H361 Suspected of damaging fertility or the unborn child.
  H372 Causes damage to the hearing organs through prolonged or repeated exposure.

· Precautionary statements
  P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  P303+P361+P353 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.
  P405 Store locked up.
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:
  · NFPA ratings (scale 0 - 4)

  2 3 0
  Health = 2
  Fire = 3
  Reactivity = 0

  · HMIS-ratings (scale 0 - 4)

  HEALTH 2
  FIRE 3
  REACTIVITY 0
  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>Chemical</th>
<th>Percentage</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>styrene</td>
<td>12.5-15%</td>
<td></td>
</tr>
<tr>
<td>acetone</td>
<td>5-9.99%</td>
<td></td>
</tr>
<tr>
<td>toluene</td>
<td>2.5-4.99%</td>
<td></td>
</tr>
</tbody>
</table>

(Contd. on page 3)
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:
    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.
  · 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**

- **PAC-1:**
  - Calcium carbonate: 45 mg/m³
  - Styrene: 20 ppm
  - Acetone: 200 ppm
  - Toluene: 67 ppm
  - Ethyl acetate: 1,200 ppm
  - Propane-1,2-diol: 30 mg/m³

- **PAC-2:**
  - Calcium carbonate: 210 mg/m³
  - Styrene: 130 ppm
  - Acetone: 3200 ppm
  - Toluene: 560 ppm
  - Ethyl acetate: 1,700 ppm
  - Propane-1,2-diol: 1,300 mg/m³

- **PAC-3:**
  - Calcium carbonate: 1,300 mg/m³
  - Styrene: 1100 ppm
  - Acetone: 5700 ppm
  - Toluene: 3700 ppm
  - Ethyl acetate: 10000 ppm
  - Propane-1,2-diol: 7,900 mg/m³

### 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.
- **Specific end use(s)** Those typical of the product and the instructions in the data sheet if required.

### 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 constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
    - At this time, the other constituents have no known exposure limits.

#### 67-64-1 acetone

<table>
<thead>
<tr>
<th>Limit</th>
<th>Long-term value</th>
<th>Short-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>2400 mg/m³, 1000 ppm</td>
<td>1187 mg/m³, 500 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>590 mg/m³, 250 ppm</td>
<td>594 mg/m³, 250 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>67-64-1 acetone</td>
<td></td>
</tr>
</tbody>
</table>

#### Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>BEI (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-42-5 styrene</td>
<td></td>
</tr>
<tr>
<td>BEI (USA)</td>
<td>400 mg/g creatinine</td>
</tr>
<tr>
<td>Medium: urine</td>
<td></td>
</tr>
<tr>
<td>Time: end of shift</td>
<td></td>
</tr>
<tr>
<td>Parameter: Mandelic acid plus phenylglyoxylic acid (nonspecific)</td>
<td></td>
</tr>
<tr>
<td>0.2 mg/L</td>
<td></td>
</tr>
<tr>
<td>Medium: venous blood</td>
<td></td>
</tr>
<tr>
<td>Time: end of shift</td>
<td></td>
</tr>
<tr>
<td>Parameter: Styrene (semi-quantitative)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Constituent</th>
<th>BEI (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1 acetone</td>
<td></td>
</tr>
<tr>
<td>BEI (USA)</td>
<td>50 mg/L</td>
</tr>
<tr>
<td>Medium: urine</td>
<td></td>
</tr>
<tr>
<td>Time: end of shift</td>
<td></td>
</tr>
<tr>
<td>Parameter: Acetone (nonspecific)</td>
<td></td>
</tr>
</tbody>
</table>
### 108-88-3 toluene

<table>
<thead>
<tr>
<th>BEI (USA)</th>
<th>Parameter: Toluene</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.02 mg/L</td>
<td>Medium: blood</td>
</tr>
<tr>
<td></td>
<td>Time: prior to last shift of workweek</td>
</tr>
<tr>
<td>0.03 mg/L</td>
<td>Medium: urine</td>
</tr>
<tr>
<td></td>
<td>Time: end of shift</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:**

  **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:**

  **Tightly sealed goggles**

  (Contd. on page 7)
### 9 Physical and chemical properties

#### Information on basic physical and chemical properties

- **General Information**
  - **Appearance:** 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:** 56 °C (132.8 °F)
- **Flash point:** -17 °C (1.4 °F)
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** >370 °C (>698 °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.
- **Explosion limits:**
  - **Lower:** 1.2 Vol %
  - **Upper:** 13 Vol %
- **Vapor pressure at 20 °C (68 °F):** 233 hPa (174.8 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)
- **Oxidising properties:** N.A.
- **Solvent content:**
  - **VOC content:** 20.14 %
    275.9 g/l / 2.30 lb/gal
  - **Solids content:** 87.3 %
- **Other information (HAPS)**
  - 100-42-5 styrene 12.5-15%
  - 108-88-3 toluene 2.5-4.99%
- **Other information** No further relevant information available.
10 Stability and reactivity

- **Reactivity** typical of the product as indicated in the data sheet
  - **Chemical stability**
    Polymerise spontaneously, if not inhibited, with rapid increase of temperature. In closed containers, has also rapid increase of ression rate. Polymerise violently with reaction that can be explosive by the action of light, heat, strong acids or perossidi. Presence of inhibitors reduces but does not eliminate the tendency to polymerization.
  - **Thermal decomposition / conditions to be avoided**:
    Avoid exposure to direct sunlight or storage or exposure to temperatures higher than 25 °C
  - **Possibility of hazardous reactions**
    Exothermic polymerization.
    Reacts with acids, alkalis and oxidizing agents.
    Vapours may form explosive mixtures with air
  - **Conditions to avoid**
    Avoid exposure to direct sunlight or storage or exposure to temperatures higher than 25 °C
  - **Incompatible materials**: Acids, alkalis and oxidizing agents
  - **Hazardous decomposition products**:
    in case of possible formation of combustion:
    Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity**:
    - **LD/LC50 values that are relevant for classification**:
      | 100-42-5 styrene |   |
      | Oral LD50 | 5,000 mg/kg (mouse) |
      | Dermal LD50 | 2,001 mg/kg (mouse) |
      | Inhalative LC50/4 h | 11.8 mg/l (mouse) |
      | 67-64-1 acetone |   |
      | Oral LD50 | 5,800 mg/kg (mouse) |
      | Dermal LD50 | 20,000 mg/kg (rabbit) |
      | Inhalative LC50/4 h | 76 mg/l (mouse) |
      | 108-88-3 toluene |   |
      | Oral LD50 | 5,000 mg/kg (mouse) |
      | Dermal LD50 | 12,124 mg/kg (rabbit) |
      | Inhalative LC50/4 h | 25.7 mg/l (mouse) |
      | 64742-95-6 Solvent naphtha (petroleum), light arom. |   |
      | Oral LD50 | 6,801 mg/kg (mouse) |
      | Dermal LD50 | 3,401 mg/kg (rabbit) |
      | Inhalative LC50/4 h | 20.1 mg/l (mouse) |
  - **Primary irritant effect**:
    - **on the skin**: Irritant to skin and mucous membranes.
    - **on the eye**: Irritating effect.
  - **Sensitization**: No sensitizing effects known.
  - **Additional toxicological information**:
    - Irritant
    - Causes skin irritation.
    - Causes serious eye irritation.
Suspected of damaging the unborn child.
Causes damage to the hearing organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

- **Carcinogenic categories**

  - **Titanium dioxide**
    IARC’s Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

  - **Quartz**
    No significant exposure to quartz is thought to occur during the use of products in which quartz is bound to other materials, such as resin, and for quantities present in the formula. stereotypes.

  - **Styrene**
    An increased incidence of lung tumors was observed in mice from an inhalation study on styrene. The relevance of this finding to humans is uncertain since data from mode of action investigations of mouse lung tumors coupled with other long-term animal studies and epidemiology studies of workers exposed to styrene do not provide a basis to conclude that styrene is carcinogenic.

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer - Cl. 1 and 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-42-5 styrene</td>
</tr>
<tr>
<td>13463-67-7 Titanium dioxide C.I. 77891 Pigment white 6</td>
</tr>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-42-5 styrene</td>
</tr>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA-Ca (Occupational Safety &amp; Health Administration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

### 12 Ecological information

- **Toxicity**
  - **Aquatic toxicity:**
    - **100-42-5 styrene**
      - $EC_{50}$ (algae) (72 h): 4.9 mg/l
      - $EC_{50}$ (daphnia) (48 h): 4.7 mg/l
      - $LC_{50}$ (96h): 4.02 mg/l
    - **67-64-1 acetone**
      - $EC_{50}$ (daphnia): 8,800 mg/l
      - $LC_{50}$ (96h): 5,540 mg/l
    - **108-88-3 toluene**
      - $EC_{50}$ (algae) (96 h): 134 mg/l
      - $EC_{50}$ (daphnia) (48 h): 3.78 mg/l
      - $LC_{50}$ (96h): 5.5 mg/l

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

100-42-5 styrene .
67-64-1 acetone .
108-88-3 toluene .

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 11)
IMDG, IATA

· Class
· Label
3 Flammable liquids

· Packing group
· DOT, IMDG, IATA
II

· Environmental hazards:
· Marine pollutant:
No

· Special precautions for user
· 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

· Safety, health and environmental regulations/legislation specific for the substance or mixture
Requirements of Federal Register
· SARA

· Section 355 (extremely hazardous substances):
None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

<table>
<thead>
<tr>
<th>Number</th>
<th>Chemical</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-42-5</td>
<td>styrene</td>
<td>12.5-15%</td>
</tr>
<tr>
<td>108-88-3</td>
<td>toluene</td>
<td>2.5-4.99%</td>
</tr>
<tr>
<td>1338-02-9</td>
<td>Naphthenic acids, copper salts</td>
<td>&lt;0.01%</td>
</tr>
<tr>
<td>142-71-2</td>
<td>copper di(acetate)</td>
<td>&lt;0.01%</td>
</tr>
<tr>
<td>120-80-9</td>
<td>1,2-dihydroxybenzene</td>
<td>&lt;0.01%</td>
</tr>
</tbody>
</table>

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

· Hazardous Air Pollutants

<table>
<thead>
<tr>
<th>Number</th>
<th>Chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-42-5</td>
<td>styrene</td>
</tr>
<tr>
<td>108-88-3</td>
<td>toluene</td>
</tr>
</tbody>
</table>
Safety Data Sheet
acc. to OSHA HCS

Product number PI40
Trade name: WHITE POLYESTER SEALER

(Contd. of page 11)

- **Proposition 65**
  - **Chemicals known to cause cancer:**
    - Titanium dioxide only in bound form
    - Quartz (SiO2) only in bound form
  
  | CAS-No  | Ingredient  | APPEARANCE | Form | LOI/LOE/LO | \%
  |---------|-------------|------------|------|------------|------
  | 100-42-5 | styrene     | *          |      | 12.5-15%   |      |
  | 13463-67-7 | Titanium dioxide C.I. 77891 Pigment white 6 | Only for Dust | 5-9.99% |      |
  | 14808-60-7 | Quartz (SiO2) | *          |      | <0.1%      |      |

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

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

- **Chemicals known to cause developmental toxicity:**
  108-88-3 toluene 2.5-4.99%

- **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)**
    - 67-64-1 acetone I 5-9.99%
    - 108-88-3 toluene II 2.5-4.99%
  
  - **TLV (Threshold Limit Value established by ACGIH)**
    - 100-42-5 styrene A4
    - 67-64-1 acetone A4
    - 13463-67-7 Titanium dioxide C.I. 77891 Pigment white 6 A4
    - 108-88-3 toluene A4
    - 14807-96-6 Talc (Mg3H2(SiO3)4) A4
    - 112945-52-5 silicon dioxide A4
    - 14808-60-7 Quartz (SiO2) A2

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  13463-67-7 Titanium dioxide C.I. 77891 Pigment white 6 5-9.99%
  14808-60-7 Quartz (SiO2) <0.1%

- **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
- **Date of preparation / last revision** 08/09/2019 / 62
- **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)
  - NFPA: National Fire Protection Association (USA)
<table>
<thead>
<tr>
<th>HMIS: Hazardous Materials Identification System (USA)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC: Volatile Organic Compounds (USA, EU)</td>
<td></td>
</tr>
<tr>
<td>LC50: Lethal concentration, 50 percent</td>
<td></td>
</tr>
<tr>
<td>LD50: Lethal dose, 50 percent</td>
<td></td>
</tr>
<tr>
<td>NIOSH: National Institute for Occupational Safety</td>
<td></td>
</tr>
<tr>
<td>OSHA: Occupational Safety &amp; Health</td>
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<tr>
<td>TLV: Threshold Limit Value</td>
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<tr>
<td>PEL: Permissible Exposure Limit</td>
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<tr>
<td>REL: Recommended Exposure Limit</td>
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<tr>
<td>BEI: Biological Exposure Limit</td>
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<tr>
<td>Flam. Liq. 2: Flammable liquids – Category 2</td>
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<tr>
<td>Flam. Liq. 3: Flammable liquids – Category 3</td>
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<tr>
<td>Acute Tox. 4: Acute toxicity – Category 4</td>
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<tr>
<td>Skin Irrit. 2: Skin corrosion/irritation – Category 2</td>
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<tr>
<td>Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A</td>
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<tr>
<td>Carc. 2: Carcinogenicity – Category 2</td>
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<tr>
<td>Repr. 2: Reproductive toxicity – Category 2</td>
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<tr>
<td>STOT SE 3: Specific target organ toxicity (single exposure) – Category 3</td>
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<tr>
<td>STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1</td>
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<tr>
<td>STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2</td>
<td></td>
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<tr>
<td>Asp. Tox. 1: Aspiration hazard – Category 1</td>
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<tr>
<td>Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3</td>
<td></td>
</tr>
</tbody>
</table>

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