**Safety Data Sheet**

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|  **SECTION 1. Identification of the substance/mixture and of the company/undertaking** |

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|  **1.1. Product identifier** |
|  Code: | **AM100609**  |
|  Product name | **TEXPRINT DISCHARGE BASE F**  |
|   |  |

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|  **1.2. Relevant identified uses of the substance or mixture and uses advised against** |
|  Intended use | **inchiostro serigrafico a base acquosa** |

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|  **1.3. Details of the supplier of the safety data sheet** |
|  Name | **AMEX S.R.L**  |
|  Full address | **VIALE DELLO SPORT 12**  |
|  District and Country | **22070 APPIANO GENTILE (CO)**  |
|   | **IT**  |
|   | **Tel. 031931923**  |
|   | **Fax 031933789**  |
|  e-mail address of the competent person |  |
|  responsible for the Safety Data Sheet | **melissa@amexsrl.it**  |
|   |  |

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|  **1.4. Emergency telephone number** |
|  For urgent inquiries refer to | **031931923 Poison Control Center - Ospedale Niguarda - Milano - tel. 02/66101029**  |

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|  **SECTION 2. Hazards identification** |

**2.1. Classification of the substance or mixture**

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

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| --- | --- | --- |
|  Flammable liquid, category 3 | H226 | Flammable liquid and vapour. |
|  Carcinogenicity, category 2 | H351 | Suspected of causing cancer. |
|  Skin sensitization, category 1 | H317 | May cause an allergic skin reaction. |
|  Specific target organ toxicity - single exposure, category 3 | H336 | May cause drowsiness or dizziness. |
|   |  |  |

**2.2. Label elements**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

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| --- | --- |
|  Hazard pictograms: |  |
|   |  |  |  |  |  |  |

|  |  |
| --- | --- |
|  Signal words: | Warning |

Hazard statements:

|  |  |
| --- | --- |
|  **H226** | Flammable liquid and vapour. |
|  **H351** | Suspected of causing cancer. |
|  **H317** | May cause an allergic skin reaction. |
|  **H336** | May cause drowsiness or dizziness. |
|  **EUH066** | Repeated exposure may cause skin dryness or cracking. |

Precautionary statements:

|  |  |
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|  **P201** | Obtain special instructions before use. |
|  **P210** | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
|  **P261** | Avoid breathing dust / fume / gas / mist / vapours / spray. |
|  **P280** | Wear protective gloves/ protective clothing / eye protection / face protection. |
|  **P308+P313** | IF exposed or concerned: Get medical advice / attention. |
|  **P370+P378** | In case of fire: use . . . to extinguish. |
|   |  |
|  **Contains:** | TETRACHLOROETHYLENE |
|   | HYDROCARBONS, C9-C11, n-ALKANES, iso-ALKANES, CYCLICS, <2% AROMATICS |

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

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|  **SECTION 3. Composition/information on ingredients** |

**3.1. Substances**

Information not relevant

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|  **3.2. Mixtures** |

Contains:

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| --- | --- | --- | --- |
|  **Identification** | **x = Conc. %** | **Classification 1272/2008 (CLP)** |  |
|  **HYDROCARBONS, C9-C11, n-ALKANES, iso-ALKANES, CYCLICS, <2% AROMATICS** |  |  |  |
|  CAS 64742-48-9 | 30 ≤ x < 50 | Flam. Liq. 3 H226, STOT SE 3 H336, EUH066 |  |
|  EC 919-857-5 |  |  |  |
|  INDEX - |  |  |  |
|  Reg. no. 01-2119463258-33-XXXX |  |  |  |
|  **ETHANEDIOL** |  |  |  |
|  CAS 107-21-1 | 3 ≤ x < 5 | Acute Tox. 4 H302, STOT RE 2 H373 |  |
|  EC 203-473-3 |  |  |  |
|  INDEX 603-027-00-1 |  |  |  |
|  **TETRACHLOROETHYLENE** |  |  |  |
|  CAS 127-18-4 | 1 ≤ x < 2,5 | Carc. 2 H351, Skin Irrit. 2 H315, Skin Sens. 1 H317, STOT SE 3 H336, Aquatic Chronic 2 H411 |  |
|  EC 204-825-9 |  |  |  |
|  INDEX 602-028-00-4 |  |  |  |
|  **FATTY ALCOHOL POLYOXY ETHYLENE ETHER** |  |  |  |
|  CAS 9002-92-0 | 0,3 ≤ x < 0,35 | Acute Tox. 4 H302, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=1 |  |
|  EC |  |  |  |
|  INDEX - |  |  |  |

The full wording of hazard (H) phrases is given in section 16 of the sheet.

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|  **SECTION 4. First aid measures** |

**4.1. Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

**4.2. Most important symptoms and effects, both acute and delayed**

Specific information on symptoms and effects caused by the product are unknown.

**4.3. Indication of any immediate medical attention and special treatment needed**

Information not available

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|  **SECTION 5. Firefighting measures** |

**5.1. Extinguishing media**

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

**5.2. Special hazards arising from the substance or mixture**

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

**5.3. Advice for firefighters**

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

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|  **SECTION 6. Accidental release measures** |

**6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

**6.2. Environmental precautions**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

**6.3. Methods and material for containment and cleaning up**

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

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|  **SECTION 7. Handling and storage** |

**7.1. Precautions for safe handling**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

**7.2. Conditions for safe storage, including any incompatibilities**

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

**7.3. Specific end use(s)**

Information not available

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|  **SECTION 8. Exposure controls/personal protection** |

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|  **8.1. Control parameters** |

Regulatory References:

|  |  |  |
| --- | --- | --- |
|  DEU | Deutschland | TRGS 900 (Fassung 4.11.2016) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte |
|  ESP | España | INSHT - Límites de exposición profesional para agentes químicos en España 2017 |
|  FRA | France | JORF n°0109 du 10 mai 2012 page 8773 texte n° 102 |
|  GBR | United Kingdom | EH40/2005 Workplace exposure limits |
|  ITA | Italia | Decreto Legislativo 9 Aprile 2008, n.81 |
|  POL | Polska | ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 7 czerwca 2017 r |
|  EU | OEL EU | Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC. |
|   | TLV-ACGIH | ACGIH 2017 |

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|  **HYDROCARBONS, C9-C11, n-ALKANES, iso-ALKANES, CYCLICS, <2% AROMATICS** |
|  **Health - Derived no-effect level - DNEL / DMEL** |
|   | Effects on consumers |  |  |  | Effects on workers |  |  |  |
|  Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Chronic local | Acute local | Acute systemic | Chronic systemic |
|  Oral |  |  | VND | 300 mg/kg/d |  |  |  |  |
|  Inhalation |  |  | VND | 900 mg/m3 |  |  | VND | 1500 mg/m3 |
|  Skin |  |  | VND | 300 |  |  | VND | 300 mg/kg/d |

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|  **SALE DI ALLUMINIO E SODIO DELL'ACIDO SILICICO** |
|  **Threshold Limit Value** |
|  Type | Country | TWA/8h |  | STEL/15min |  |  |  |
|   |  | mg/m3 | ppm | mg/m3 | ppm |  |  |
|  VLEP | ITA |  3 |  |  |  |  |  |

|  |
| --- |
|  **ETHANEDIOL** |
|  **Threshold Limit Value** |
|  Type | Country | TWA/8h |  | STEL/15min |  |  |  |
|   |  | mg/m3 | ppm | mg/m3 | ppm |  |  |
|  MAK | DEU |  26 |  10 |  52 |  20 | SKIN |  |
|  VLA | ESP |  52 |  20 |  104 |  40 | SKIN |  |
|  VLEP | FRA |  52 |  20 |  104 |  40 | SKIN |  |
|  WEL | GBR |  52 |  20 |  104 |  40 |  |  |
|  VLEP | ITA |  52 |  20 |  104 |  40 | SKIN |  |
|  NDS | POL |  15 |  |  50 |  |  |  |
|  OEL | EU |  52 |  20 |  104 |  40 | SKIN |  |
|  TLV-ACGIH |  |  |  25 |  |  50 |  |  |
|  TLV-ACGIH |  |  |  |  10 |  | INHAL |  |

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|  **TETRACHLOROETHYLENE** |
|  **Threshold Limit Value** |
|  Type | Country | TWA/8h |  | STEL/15min |  |  |  |
|   |  | mg/m3 | ppm | mg/m3 | ppm |  |  |
|  AGW | DEU |  138 |  20 |  276 |  40 | SKIN |  |
|  VLA | ESP |  172 |  25 |  689 |  100 |  |  |
|  VLEP | FRA |  138 |  20 |  275 |  40 |  |  |
|  WEL | GBR |  345 |  50 |  689 |  100 |  |  |
|  NDS | POL |  85 |  |  170 |  |  |  |
|  OEL | EU |  138 |  20 |  275 |  40 | SKIN |  |
|  TLV-ACGIH |  |  170 |  25 |  678 |  100 |  |  |
|  Predicted no-effect concentration - PNEC |  |  |  |
|  Normal value in fresh water | 0,051 | mg/l |  |
|  Normal value in marine water | 0,0051 | mg/l |  |
|  Normal value for fresh water sediment | 0,903 | mg/kg |  |
|  Normal value for marine water sediment | 0,0903 | mg/kg |  |
|  Normal value for water, intermittent release | 0,0364 | mg/l |  |
|  Normal value of STP microorganisms | 11,2 | mg/l |  |
|  Normal value for the terrestrial compartment | 0,01 | mg/kg |  |
|  **Health - Derived no-effect level - DNEL / DMEL** |
|   | Effects on consumers |  |  |  | Effects on workers |  |  |  |
|  Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Chronic local | Acute local | Acute systemic | Chronic systemic |
|  Oral |  |  | VND | 1,3 mg/kg/d |  |  |  |  |
|  Inhalation |  |  | VND | 34,5 | 275 mg/m3 | VND | VND | 138 mg/m3 |
|  Skin |  |  | VND | 23 mg/kg/d | VND | 39,4 mg/kg/d |  |  |

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

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|  **8.2. Exposure controls** |

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

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|  **SECTION 9. Physical and chemical properties** |

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|  **9.1. Information on basic physical and chemical properties** |

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| --- | --- |
|  Appearance | viscous liquid |
|  Colour | colourless |
|  Odour | mild |
|  Odour threshold | Not available |
|  pH | Not available |
|  Melting point / freezing point | Not available |
|  Initial boiling point | Not available |
|  Boiling range | Not available |
|  Flash point | 23 ≤ T ≤ 60 °C |
|  Evaporation Rate | Not available |
|  Flammability of solids and gases | Not available |
|  Lower inflammability limit | Not available |
|  Upper inflammability limit | Not available |
|  Lower explosive limit | Not available |
|  Upper explosive limit | Not available |
|  Vapour pressure | Not available |
|  Vapour density | Not available |
|  Relative density | Not available |
|  Solubility | water thinnable |
|  Partition coefficient: n-octanol/water | Not available |
|  Auto-ignition temperature | Not available |
|  Decomposition temperature | Not available |
|  Viscosity | Not available |
|  Explosive properties | Not available |
|  Oxidising properties | Not available |

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|  **9.2. Other information** |

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| --- | --- |
|  Total solids (250°C / 482°F) | 33,37 % |
|  VOC (Directive 2010/75/EC) : | 36,01 % - 336,90 g/litre |

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|  **SECTION 10. Stability and reactivity** |

**10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

ETHANEDIOL

In the air absorbs moisture.Decomposes at temperatures above 200°C/392°F.

TETRACHLOROETHYLENE

Decomposes at temperatures above 150°C/302°F.Decomposes if exposed to: UV rays,moisture.

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.

ETHANEDIOL

Risk of explosion on contact with: perchloric acid.May react dangerously with: chlorosulphuric acid,sodium hydroxide,sulphuric acid,phosphorus pentasulphide,chromium (III) oxide,chromyl chloride,potassium perchlorate,potassium dichromate,sodium peroxide,aluminium.Forms explosive mixtures with: air.

TETRACHLOROETHYLENE

Risk of explosion on contact with: alkaline metals,aluminium,alkaline hydroxides,sodium amides.May react violently with: strong bases,strong oxidising agents,alkaline earth metals,light metals,metal powders,zinc oxide.

**10.4. Conditions to avoid**

None in particular. However the usual precautions used for chemical products should be respected.

ETHANEDIOL

Avoid exposure to: sources of heat,naked flames.

**10.5. Incompatible materials**

Information not available

**10.6. Hazardous decomposition products**

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

ETHANEDIOL

May develop: hydroxyacetaldehyde,glyoxal,acetaldehyde,methane,carbon monoxide,hydrogen.

TETRACHLOROETHYLENE

May develop: hydrogen chloride,phosgenes,chlorine,ethane tetrachloride,chlorine compounds.

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|  **SECTION 11. Toxicological information** |

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

**11.1. Information on toxicological effects**

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

TETRACHLOROETHYLENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

ETHANEDIOL

WORKERS: inhalation; contact with the skin.

POPULATION: inhalation of ambient air; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

TETRACHLOROETHYLENE

Has a toxic effect on the central and peripheral nervous system, liver, kidneys and heart; the mucous membranes and the skin are irritated.

ETHANEDIOL

Ingestion initially stimulates the central nervous system; later replaced by a phase of depression. There may be kidney damage, with anuria and uremia. Over-exposure symptoms are: vomiting, drowsiness, difficulty in breathing, convulsions. The lethal dose for humans is approx. 1.4 ml/kg.

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:Not classified (no significant component)

LD50 (Oral) of the mixture:>2000 mg/kg

LD50 (Dermal) of the mixture:Not classified (no significant component)

TETRACHLOROETHYLENE

LD50 (Oral) 2400 mg/kg Ratto

LC50 (Inhalation) 4000 ppm/4h Rat

ETHANEDIOL

LD50 (Oral) > 2000 mg/kg Rat

LD50 (Dermal) 9530 mg/kg Rabbit

HYDROCARBONS, C9-C11, n-ALKANES, iso-ALKANES, CYCLICS, <2% AROMATICS

LD50 (Oral) > 5000 mg/kg ratto

LD50 (Dermal) > 5000 mg/kg coniglio

LC50 (Inhalation) > 4951 mg/m3

FATTY ALCOHOL POLYOXY ETHYLENE ETHER

LD50 (Oral) > 200 mg7Kg ratto

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Suspected of causing cancer

TETRACHLOROETHYLENE

Classified in Group 2A (probable human carcinogen) by the International Agency for Research on Cancer (IARC).

Epidemiological studies show evidence of association between exposure to the substance and presence of various types of cancers: bladder cancer, non-Hodgkin's lymphomas and multiple myeloma (US EPA, 2014).

Classified as a "probable carcinogen" by the US National Toxicology Program (NTP).

ETHANEDIOL

Available studies have shown no carcinogenic potential. In a carcinogenicity study lasting two years, carried out by the US National Toxicology Program (NTP), in which ethylene glycol was administered in the feed, "no evidence of carcinogenic activity" in male and female B6C3F1 mice was observed (NTP, 1993).

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

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|  **SECTION 12. Ecological information** |

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

**12.1. Toxicity**

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| --- | --- | --- |
|  TETRACHLOROETHYLENE |  |  |
|  EC50 - for Crustacea |  | 18 mg/l/48h Daphnia magna |

|  |  |  |
| --- | --- | --- |
|  HYDROCARBONS, C9-C11, n-ALKANES, iso-ALKANES, CYCLICS, <2% AROMATICS |  |  |
|  LC50 - for Fish |  | > 1000 mg/l/96h Oncorhynchus mykiss |
|  EC50 - for Crustacea |  | > 1000 mg/l/48h Daphnia magna |
|  EC50 - for Algae / Aquatic Plants |  | > 1000 mg/l/72h Pseudokirchneriella subcapitata |

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|  **12.2. Persistence and degradability** |

|  |  |  |
| --- | --- | --- |
|  TETRACHLOROETHYLENE |  |  |
|  Solubility in water |  | 150 mg/l  |

 Degradability: information not available

|  |  |  |
| --- | --- | --- |
|  ETHANEDIOL |  |  |
|  Solubility in water |  | 1000 - 10000 mg/l |

 Rapidly degradable

**12.3. Bioaccumulative potential**

|  |  |  |
| --- | --- | --- |
|  TETRACHLOROETHYLENE |  |  |
|  Partition coefficient: n-octanol/water |  | 2,53  |
|  BCF |  | 49  |

|  |  |  |
| --- | --- | --- |
|  ETHANEDIOL |  |  |
|  Partition coefficient: n-octanol/water |  | -1,36  |

**12.4. Mobility in soil**

|  |  |  |
| --- | --- | --- |
|  TETRACHLOROETHYLENE |  |  |
|  Partition coefficient: soil/water |  | 2,15  |

**12.5. Results of PBT and vPvB assessment**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**12.6. Other adverse effects**

Information not available

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|  **SECTION 13. Disposal considerations** |

**13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

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|  **SECTION 14. Transport information** |

**14.1. UN number**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  ADR / RID, IMDG, IATA: | 1210 |  |  |  |  |  |

**14.2. UN proper shipping name**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  ADR / RID: | PRINTING INK or PRINTING INK RELATED MATERIAL |  |  |  |  |  |
|  IMDG: | PRINTING INK or PRINTING INK RELATED MATERIAL |  |  |  |  |  |
|  IATA: | PRINTING INK or PRINTING INK RELATED MATERIAL |  |  |  |  |  |

**14.3. Transport hazard class(es)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  ADR / RID: | Class: 3 | Label: 3 |  |  |  |  |
|  IMDG: | Class: 3 | Label: 3 |  |  |  |  |
|  IATA: | Class: 3 | Label: 3 |  |  |  |  |

**14.4. Packing group**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  ADR / RID, IMDG, IATA: | III |  |  |  |  |  |

**14.5. Environmental hazards**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  ADR / RID: | NO |  |  |  |  |  |
|  IMDG: | NO |  |  |  |  |  |
|  IATA: | NO |  |  |  |  |  |

**14.6. Special precautions for user**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  ADR / RID: |  | HIN - Kemler: 30 |  | Limited Quantities: 5 L |  | Tunnel restriction code: (D/E) |
|   |  | Special Provision: - |  |  |  |  |
|  IMDG: |  | EMS: F-E, S-D |  | Limited Quantities: 5 L |  |  |
|  IATA: |  | Cargo: |  | Maximum quantity: 220 L |  | Packaging instructions: 366 |
|   |  | Pass.: |  | Maximum quantity: 60 L |  | Packaging instructions: 355 |
|   |  | Special Instructions: |  | A3, A72, A192 |  |  |

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

Information not relevant

|  |
| --- |
|  **SECTION 15. Regulatory information** |

|  |
| --- |
|  **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture** |

Seveso Category - Directive 2012/18/EC: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

|  |  |  |
| --- | --- | --- |
|  Point | 3 - 40 |  |

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisarion (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

|  |
| --- |
|  **15.2. Chemical safety assessment** |

No chemical safety assessment has been processed for the mixture and the substances it contains.

|  |
| --- |
|  **SECTION 16. Other information** |

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

|  |  |  |
| --- | --- | --- |
|  **Flam. Liq. 3** | Flammable liquid, category 3 |  |
|  **Carc. 2** | Carcinogenicity, category 2 |  |
|  **Acute Tox. 4** | Acute toxicity, category 4 |  |
|  **STOT RE 2** | Specific target organ toxicity - repeated exposure, category 2 |  |
|  **Eye Dam. 1** | Serious eye damage, category 1 |  |
|  **Skin Irrit. 2** | Skin irritation, category 2 |  |
|  **Skin Sens. 1** | Skin sensitization, category 1 |  |
|  **STOT SE 3** | Specific target organ toxicity - single exposure, category 3 |  |
|  **Aquatic Acute 1** | Hazardous to the aquatic environment, acute toxicity, category 1 |  |
|  **Aquatic Chronic 2** | Hazardous to the aquatic environment, chronic toxicity, category 2 |  |
|  **H226** | Flammable liquid and vapour. |  |
|  **H351** | Suspected of causing cancer. |  |
|  **H302** | Harmful if swallowed. |  |
|  **H373** | May cause damage to organs through prolonged or repeated exposure. |  |
|  **H318** | Causes serious eye damage. |  |
|  **H315** | Causes skin irritation. |  |
|  **H317** | May cause an allergic skin reaction. |  |
|  **H336** | May cause drowsiness or dizziness. |  |
|  **H400** | Very toxic to aquatic life. |  |
|  **H411** | Toxic to aquatic life with long lasting effects. |  |
|  **EUH066** | Repeated exposure may cause skin dryness or cracking. |  |

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road

- CAS NUMBER: Chemical Abstract Service Number

- CE50: Effective concentration (required to induce a 50% effect)

- CE NUMBER: Identifier in ESIS (European archive of existing substances)

- CLP: EC Regulation 1272/2008

- DNEL: Derived No Effect Level

- EmS: Emergency Schedule

- GHS: Globally Harmonized System of classification and labeling of chemicals

- IATA DGR: International Air Transport Association Dangerous Goods Regulation

- IC50: Immobilization Concentration 50%

- IMDG: International Maritime Code for dangerous goods

- IMO: International Maritime Organization

- INDEX NUMBER: Identifier in Annex VI of CLP

- LC50: Lethal Concentration 50%

- LD50: Lethal dose 50%

- OEL: Occupational Exposure Level

- PBT: Persistent bioaccumulative and toxic as REACH Regulation

- PEC: Predicted environmental Concentration

- PEL: Predicted exposure level

- PNEC: Predicted no effect concentration

- REACH: EC Regulation 1907/2006

- RID: Regulation concerning the international transport of dangerous goods by train

- TLV: Threshold Limit Value

- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.

- TWA STEL: Short-term exposure limit

- TWA: Time-weighted average exposure limit

- VOC: Volatile organic Compounds

- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation

- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament

2. Regulation (EC) 1272/2008 (CLP) of the European Parliament

3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament

4. Regulation (EU) 2015/830 of the European Parliament

5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament

6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament

7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament

8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament

9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament

10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament

11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament

12. Regulation (EU) 2016/1179 (IX Atp. CLP)

13. Regulation (EU) 2017/776 (X Atp. CLP)

- The Merck Index. - 10th Edition

- Handling Chemical Safety

- INRS - Fiche Toxicologique (toxicological sheet)

- Patty - Industrial Hygiene and Toxicology

- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

- IFA GESTIS website

- ECHA website

- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:

The following sections were modified:

13 / 14.