

1000H HARDENER

Safety data sheet

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

1.1. Product identifier

Product name **1000H HARDENER**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use **Aromatic polyurethane adduct**

1.3. Details of the supplier of the safety data sheet

Name **INKCUPS CORPORATION**
 Full address **310 ANDOVER ST.**
 District and Country **DANVERS, MA 01945**
USA
 Tel. **978-646-8980**

e-mail address of the competent person

responsible for the Safety Data Sheet **compliance@inkcups.com**
 Product distribution by: **INKCUPS CORP.**

1.4. Emergency telephone number

For urgent inquiries refer to **1.800.424.9300**

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 EC Regulation 1907/2006 and subsequent amendments. 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:

| | | |
|--|------|--|
| Flammable liquid, category 3 | H226 | Flammable liquid and vapour. |
| Acute toxicity, category 4 | H332 | Harmful if inhaled. |
| Specific target organ toxicity - repeated exposure, category 2 | H373 | May cause damage to organs through prolonged or repeated exposure. |
| Eye irritation, category 2 | H319 | Causes serious eye irritation. |
| Skin irritation, category 2 | H315 | Causes skin irritation. |
| Respiratory sensitization, category 1 | H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin sensitization, category 1 | H317 | May cause an allergic skin reaction. |

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:

Danger

Hazard statements:

| | |
|---------------|--|
| H226 | Flammable liquid and vapour. |
| H332 | Harmful if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction. |
| EUH204 | Contains isocyanates. May produce an allergic reaction. |
| EUH208 | Contains: m-Tolilidene diisocyanate |
| | May produce an allergic reaction. |

Precautionary statements:

| | |
|------------------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P280 | Wear personal protective equipment / face protection. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P312 | Call a POISON CENTRE or a doctor if you feel unwell. |
| P314 | Get medical advice / attention if you feel unwell. |
| P342+P311 | If experiencing respiratory symptoms: Call a POISON CENTER and/or a doctor. |
| P370+P378 | In case of fire: use chemical powder, CO2 or dry send to extinguish. |

Contains: Aromatic polyurethane adduct
XYLENE (MIXTURE OF ISOMERS)

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%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

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

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| Identification | x = Conc. % | Classification 1272/2008 (CLP) |
|--|--------------------|--|
| Aromatic polyurethane adduct | | |
| CAS 53317-61-6 | $66 \leq x < 70$ | Eye Irrit. 2 H319, Skin Sens. 1 H317 |
| EC 500-120-8 | | |
| INDEX - | | |
| XYLENE (MIXTURE OF ISOMERS) | | |
| CAS 1330-20-7 | $16,5 \leq x < 18$ | Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Note C |
| EC 215-535-7 | | |
| INDEX 601-022-00-9 | | |
| Reg. no. 01-2119488216-32-xxxx | | |
| 2-METHOXY-1-METHYLETHYL ACETATE | | |
| CAS 108-65-6 | $16,5 \leq x < 18$ | Flam. Liq. 3 H226 |
| EC 203-603-9 | | |
| INDEX 607-195-00-7 | | |
| Reg. no. 01-2119475791-29-xxxx | | |
| m-Tolilidene diisocyanate | | |
| CAS 26471-62-5 | $0,4 \leq x < 0,5$ | Carc. 2 H351, Acute Tox. 2 H330, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Aquatic Chronic 3 H412 |
| EC 247-722-4 | | |
| INDEX 615-006-00-4 | | |
| Reg. no. 01-2119454791-34-xxxx | | |

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. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly 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.

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

Information not available

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).

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.

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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.

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

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

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| | | |
|-----|-----------------|--|
| BGR | България | МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г |
| CZE | Česká Republika | Nářizení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci |
| DEU | Deutschland | MAK-und BAT-Werte-Liste 2012 |
| DNK | Danmark | Graensevaerdier per stoffer og materialer |
| ESP | España | INSHT - Límites de exposición profesional para agentes químicos en España 2015 |
| 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 16 grudnia 2011r |
| PRT | Portugal | Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diaro da Republica I 26; 2012-02-06 |
| SWE | Sverige | Occupational Exposure Limit Values, AF 2011:18 |
| TUR | Türkiye | 2000/39/EC sayılı Direktifin ekidir |
| 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 2016 |

2-METHOXY-1-METHYLETHYL ACETATE

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | |
|------|---------|--------|-----|------------|-----|------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV | BGR | 275 | | 550 | | SKIN |
| TLV | CZE | 270 | | 550 | | SKIN |
| AGW | DEU | 270 | 50 | 270 | 50 | |
| MAK | DEU | 270 | 50 | 270 | 50 | |
| TLV | DNK | 275 | 50 | | | SKIN |
| VLA | ESP | 275 | 50 | 550 | 100 | SKIN |
| VLEP | FRA | 275 | 50 | 550 | 100 | SKIN |
| WEL | GBR | 274 | 50 | 548 | 100 | |
| VLEP | ITA | 275 | 50 | 550 | 100 | SKIN |
| NDS | POL | 260 | | 520 | | |
| VLE | PRT | 275 | 50 | 550 | 100 | SKIN |
| MAK | SWE | 250 | 50 | 400 | 75 | SKIN |
| ESD | TUR | 275 | 50 | 550 | 100 | SKIN |
| OEL | EU | 275 | 50 | 550 | 100 | SKIN |

Predicted no-effect concentration - PNEC

| | | |
|--|--------|-------|
| Normal value in fresh water | 0,635 | mg/l |
| Normal value in marine water | 0,0635 | mg/l |
| Normal value for fresh water sediment | 3,29 | mg/kg |
| Normal value for marine water sediment | 0,329 | mg/l |
| Normal value for water, intermittent release | 6,35 | mg/l |
| Normal value of STP microorganisms | 100 | mg/l |
| Normal value for the terrestrial compartment | 0,29 | mg/kg |

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Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | Effects on workers | | |
|-------------------|----------------------|----------------|---------------|--------------------|----------------|---------------|
| | Acute local | Acute systemic | Chronic local | Acute local | Acute systemic | Chronic local |
| Oral | | | VND | | 1,67 mg/kg | |
| Inhalation | | | VND | | 33 mg/m3 | VND |
| Skin | | | VND | | 54,8 mg/kg | VND |

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | |
|-----------|---------|--------|-----|------------|-----|------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV | BGR | 221 | | 442 | | SKIN |
| TLV | CZE | 200 | | 400 | | SKIN |
| AGW | DEU | 440 | 100 | 880 | 200 | SKIN |
| MAK | DEU | 440 | 100 | 880 | 200 | SKIN |
| VLA | ESP | 221 | 50 | 442 | 100 | SKIN |
| VLEP | FRA | 221 | 50 | 442 | 100 | SKIN |
| WEL | GBR | 220 | 50 | 441 | 100 | |
| VLEP | ITA | 221 | 50 | 442 | 100 | SKIN |
| NDS | POL | 100 | | | | |
| VLE | PRT | 221 | 50 | 442 | 100 | SKIN |
| MAK | SWE | 221 | 50 | 442 | 100 | SKIN |
| ESD | TUR | 221 | 50 | 442 | 100 | SKIN |
| OEL | EU | 221 | 50 | 442 | 100 | SKIN |
| TLV-ACGIH | | 434 | 100 | 651 | 150 | |

Predicted no-effect concentration - PNEC

| | | |
|--|-------|-------|
| Normal value in fresh water | 0,327 | mg/l |
| Normal value in marine water | 0,327 | mg/l |
| Normal value for fresh water sediment | 12,46 | mg/kg |
| Normal value for marine water sediment | 12,46 | mg/kg |
| Normal value for water, intermittent release | 0,327 | mg/l |
| Normal value of STP microorganisms | 6,58 | mg/l |
| Normal value for the terrestrial compartment | 2,31 | mg/kg |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | Effects on workers | | |
|-------------------|----------------------|----------------|---------------|--------------------|----------------|---------------|
| | Acute local | Acute systemic | Chronic local | Acute local | Acute systemic | Chronic local |
| Oral | | | VND | | 1,6 mg/kg/d | |
| Inhalation | 174 mg/m3 | 174 mg/m3 | VND | 14,8 mg/m3 | 289 mg/m3 | 77 mg/m3 |
| Skin | | | VND | 108 mg/kg/d | 174 mg/m3 | VND |

m-Tolilidene diisocyanate

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | |
|-----------|---------|--------|-------|------------|------|
| | | mg/m3 | ppm | mg/m3 | ppm |
| TLV-ACGIH | | 0,036 | 0,005 | 0,14 | 0,02 |

Legend:

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(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.

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.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

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.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--------------------------------|--------------------|
| Appearance | liquid |
| Colour | colourless |
| Odour | typical of solvent |
| Odour threshold | Not available |
| pH | Not available |
| Melting point / freezing point | Not available |

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| | |
|--|--------------------|
| Initial boiling point | > 130 °C |
| Boiling range | Not available |
| Flash point | 27 °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 | 1 % (V/V) |
| Upper explosive limit | 7 % (V/V) |
| Vapour pressure | Not available |
| Vapour density | Not available |
| Relative density | Not available |
| Solubility | insoluble in water |
| 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 |

9.2. Other information

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

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

2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

2-METHOXY-1-METHYLETHYL ACETATE

May react violently with: oxidising substances, strong acids, alkaline metals.

XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.

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10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5. Incompatible materials

2-METHOXY-1-METHYLETHYL ACETATE

Incompatible with: oxidising substances, strong acids, alkaline metals.

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.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

2-METHOXY-1-METHYLETHYL ACETATE

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

Information on likely routes of exposure

XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation; contact with the skin.

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

2-METHOXY-1-METHYLETHYL ACETATE

WORKERS: inhalation; contact with the skin.

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

XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

2-METHOXY-1-METHYLETHYL ACETATE

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

Interactive effects

XYLENE (MIXTURE OF ISOMERS)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by

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phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

LC50 (Inhalation - vapours) of the mixture:LC50 (Inhalation - vapours) of the mixture:

> 20 mg/l

LC50 (Inhalation - mists / powders) of the mixture:LC50 (Inhalation - mists / powders) of the mixture:

Not classified (no significant component)

LD50 (Oral) of the mixture:LD50 (Oral) of the mixture:

Not classified (no significant component)

LD50 (Dermal) of the mixture:LD50 (Dermal) of the mixture:

>2000 mg/kg

m-Tolilidene diisocyanate

6170 mg/kg

LD50 (Oral)

XYLENE (MIXTURE OF ISOMERS)

3523 mg/kg Rat

LD50 (Oral)

4350 mg/kg Rabbit

LD50 (Dermal)

26 mg/l/4h Rat

LC50 (Inhalation)

2-METHOXY-1-METHYLETHYL ACETATE

8530 mg/kg Rat

LD50 (Oral)

> 5000 mg/kg Rat

LD50 (Dermal)

> 4345 ppm/6h Ratto / Rat

LC50 (Inhalation)

SKIN CORROSION / IRRITATION

Causes skin irritationCauses skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritationCauses serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skinSensitising for the skin

Sensitising for the respiratory systemSensitising for the respiratory system

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard classDoes not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard classDoes not meet the classification criteria for this hazard class

XYLENE (MIXTURE OF ISOMERS)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).

The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard classDoes not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard classDoes not meet the classification criteria for this hazard class

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STOT - REPEATED EXPOSURE

May cause damage to organs May cause damage to organs

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

12.1. Toxicity

XYLENE (MIXTURE OF ISOMERS)

| | |
|---------------------------------|--|
| LC50 - for Fish | 2,6 mg/l/96h Fish |
| EC50 - for Crustacea | 1 mg/l/48h Daphnia magna |
| EC10 for Algae / Aquatic Plants | 1,9 mg/l/72h Selenastrum capricornutum |

2-METHOXY-1-METHYLETHYL ACETATE

| | |
|-----------------------------------|--|
| LC50 - for Fish | 134 mg/l/96h Pesce, Oncorhynchus mykiss OECD 203 |
| EC50 - for Crustacea | > 500 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | > 1000 mg/l/72h Selenastrum capricornutum OECD 201 |
| Chronic NOEC for Fish | 47,5 mg/l Oryzias latipes 14 gg OECD 204 |
| Chronic NOEC for Crustacea | 100 mg/l Daphnia magna 21 gg OECD 202 |

12.2. Persistence and degradability

XYLENE (MIXTURE OF ISOMERS)

| | |
|---------------------|---------------------|
| Solubility in water | 100 - 100 mg/l mg/l |
|---------------------|---------------------|

Rapidly biodegradable

2-METHOXY-1-METHYLETHYL ACETATE

| | |
|---------------------|--------------|
| Solubility in water | > 10000 mg/l |
|---------------------|--------------|

Rapidly biodegradable

12.3. Bioaccumulative potential

XYLENE (MIXTURE OF ISOMERS)

| | |
|--|------|
| Partition coefficient: n-octanol/water | 3,12 |
| BCF | 25,9 |

2-METHOXY-1-

1000H HARDENER

METHYLETHYL ACETATE

Partition coefficient: n-octanol/water 1,2

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water 2,73

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

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.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 1866

14.2. UN proper shipping name

ADR / RID: RESIN SOLUTION
IMDG: RESIN SOLUTION
IATA: RESIN SOLUTION

14.3. Transport hazard class(es)

1000H HARDENER

ADR / RID: Class: 3 Label: 3



IMDG: Class: 3 Label: 3



IATA: Class: 3 Label: 3



14.4. Packing group

ADR / RID, IMDG, III
IATA:

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: 640E | | |
| IMDG: | EMS: F-E, <u>S-E</u> | Limited Quantities: 5 L | |
| IATA: | Cargo: | Maximum quantity: 220 L | Packaging instructions: 366 |
| | Pass.: | Maximum quantity: 60 L | Packaging instructions: 355 |
| | Special Instructions: | A3 | |

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

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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 authorisation (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. 2 | Acute toxicity, category 2 |
| Acute Tox. 4 | Acute toxicity, category 4 |
| Asp. Tox. 1 | Aspiration hazard, category 1 |
| STOT RE 2 | Specific target organ toxicity - repeated exposure, category 2 |
| Eye Irrit. 2 | Eye irritation, category 2 |
| Skin Irrit. 2 | Skin irritation, category 2 |
| STOT SE 3 | Specific target organ toxicity - single exposure, category 3 |
| Resp. Sens. 1 | Respiratory sensitization, category 1 |
| Skin Sens. 1 | Skin sensitization, category 1 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment, chronic toxicity, category 3 |
| H226 | Flammable liquid and vapour. |
| H351 | Suspected of causing cancer. |
| H330 | Fatal if inhaled. |

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| | |
|---------------|--|
| H312 | Harmful in contact with skin. |
| H332 | Harmful if inhaled. |
| H304 | May be fatal if swallowed and enters airways. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H335 | May cause respiratory irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH204 | Contains isocyanates. May produce an allergic reaction. |

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 (EU) 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
- The Merck Index. - 10th Edition
 - Handling Chemical Safety

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- 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:

01 / 02 / 03 / 04 / 06 / 08 / 09 / 10 / 11 / 12 / 14 / 15.