

ETALON ALLIGATOR CATALYST

Safety Data Sheet

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

1.1. Product identifier

Code: ET/ALIG-H025
 Product name: ETALON ALLIGATOR CATALYST

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

Intended use: Hardener for Etalon Alligator

1.3. Details of the supplier of the safety data sheet

Name: Alexport
 Full address: Company Pontou
 District and Country: 26, P.C. 546 28
 Thessaloniki,
 Greece, Tel: +30
 2310 501814 Fax:
 +30 2310 524 771
 www.etalon.gr

e-mail address of the competent person
 responsible for the Safety Data Sheet: info@alexport.gr

1.4. Emergency telephone number

For urgent inquiries refer to: 122 or call your doctor/local poison center

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:

| | | |
|--|------|--|
| Flammable liquid, category 3 | H226 | Flammable liquid and vapour. |
| Carcinogenicity, category 2 | H351 | Suspected of causing cancer. |
| Acute toxicity, category 4 | H332 | Harmful if inhaled. |
| Aspiration hazard, category 1 | H304 | May be fatal if swallowed and enters airways. |
| 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. |
| Specific target organ toxicity - single exposure, category 3 | H335 | May cause respiratory 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.

Hazard pictograms:

ETALON ALLIGATOR CATALYST

Signal words:

Danger

Hazard statements:

| | |
|---------------|--|
| H226 | Flammable liquid and vapour. |
| H351 | Suspected of causing cancer. |
| 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. |
| EUH204 | Contains isocyanates. May produce an allergic reaction. |

Precautionary statements:

| | |
|------------------|--|
| 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. |
| P301+P310 | IF SWALLOWED: immediately call a POISON CENTER / doctor / . . . |
| P331 | Do NOT induce vomiting. |
| P342+P311 | If experiencing respiratory symptoms: call a POISON CENTER / doctor / . . . |

| | |
|------------------|---|
| Contains: | 2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate DIPHENYLMETHANE-4,4'-DIISOCYANATE DIPHENYLMETHANE-4,4'-DIISOCYANATE XYLENE (MIXTURE OF ISOMERS) |
|------------------|---|

Product not intended for uses provided for by Dir. 2004/42/CE.

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:

| Identification | x = Conc. % | Classification 1272/2008 (CLP) |
|-----------------------------------|-------------|--------------------------------|
| DIPHENYLMETHANE-4,4'-DIISOCYANATE | | |

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| | | |
|---|-------------|--|
| CAS 9016-87-9 | 47,5 x < 50 | Carc. 2 H351, Acute Tox. 4 H332, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: 2 C |
| EC 202-966-0 | | |
| INDEX 615-005-00-9 | | |
| XYLENE (MIXTURE OF ISOMERS) | | |
| CAS 1330-20-7 | 37,5 x < 40 | 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, Classification note according to Annex VI to the CLP Regulation: C |
| EC 215-535-7 | | |
| INDEX 601-022-00-9 | | |
| Reg. no. 01-2119488216-32 | | |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE | | |
| CAS 101-68-8 | 7 x < 8 | Carc. 2 H351, Acute Tox. 4 H332, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: 2 C |
| EC 202-966-0 | | |
| INDEX 615-005-00-9 | | |
| Reg. no. 01-2119457014-47 | | |
| o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate | | |
| CAS 5873-54-1 | 3,5 x < 4 | Carc. 2 H351, Acute Tox. 4 H332, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: 2 C |
| EC 227-534-9 | | |
| INDEX 615-005-00-9 | | |
| Reg. no. 01-2119480143-45 | | |
| 2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate | | |
| CAS 2536-05-2 | 1 x < 1,5 | Carc. 2 H351, Acute Tox. 4 H332, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: 2 C |
| EC 219-799-4 | | |
| INDEX 615-005-00-9 | | |
| Reg. no. 01-2119927323-43 | | |

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

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.

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

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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.

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

ETALON ALLIGATOR CATALYST**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:

DEU

Deutschland TRGS 900 (Fassung 4.11.2016) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte

DNK

Danmark Graensevaerdier per stoffer og materialer

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

NLD

Nederland Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18

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 - Diário da República I 26; 2012-02-06

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

DIPHENYLMETHANE-4,4'-DIISOCYANATE**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | |
|------|---------|-------------------|-----|-------------------|-----|
| | | mg/m ³ | ppm | mg/m ³ | ppm |

MAK

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| | | | | | |
|-----------|-----|-------|-------|------|--|
| | DEU | 0,05 | | 0,05 | |
| TLV | | | | | |
| | DNK | 0,05 | 0,005 | | |
| VLA | | | | | |
| | ESP | | 0,005 | | |
| VLEP | | | | | |
| | FRA | 0,1 | | 0,2 | |
| WEL | | | | | |
| | GBR | 0,02 | | 0,07 | |
| TLV-ACGIH | | | | | |
| | | 0,051 | 0,005 | | |

XYLENE (MIXTURE OF ISOMERS)**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|-----------|---------|--------|-----|------------|-----|------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| 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 |
| OEL | | | | | | |
| | NLD | 210 | | 442 | | SKIN |
| VLE | | | | | | |
| | PRT | 221 | 50 | 442 | 100 | SKIN |
| OEL | | | | | | |
| | EU | 221 | 50 | 442 | 100 | SKIN |
| TLV-ACGIH | | | | | | |
| | | 434 | 100 | 651 | 150 | |

DIPHENYLMETHANE-4,4'-DIISOCYANATE**Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | |
|------|---------|--------|-----|------------|-----|-------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| MAK | | | | | | |
| | DEU | 0,05 | | 0,05 | | SKIN |
| MAK | | | | | | |
| | DEU | 0,05 | | 0,05 | | INHAL |

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| | | | | | | | | |
|---|---|----------------------|---------------|------------------|--------------------|-------------|----------------|------------------|
| TLV | | | | | | | | |
| | DNK | 0,05 | 0,005 | 0,1 | 0,01 | | | |
| VLA | | | | | | | | |
| | ESP | 0,052 | 0,005 | | | | | |
| VLEP | | | | | | | | |
| | FRA | 0,1 | 0,01 | 0,2 | 0,02 | | | |
| TLV-ACGIH | | | | | | | | |
| | | 0,051 | 0,005 | | | | | |
| Predicted no-effect concentration - PNEC | | | | | | | | |
| | Normal value in fresh water | | | 1,1 | | mg/l | | |
| | Normal value in marine water | | | 0,11 | | mg/l | | |
| | Normal value for fresh water sediment | | | 0 | | | | |
| | Normal value for marine water sediment | | | 0 | | | | |
| | Normal value of STP microorganisms | | | 1,1 | | mg/l | | |
| | Normal value for the food chain (secondary poisoning) | | | 0 | | | | |
| | Normal value for the terrestrial compartment | | | 1,1 | | 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 | 20 mg/kg | | | | | | |
| Inhalation | 0,05 mg/m3 | 0,05 mg/m3 | 0,025 mg/m3 | 0,025 mg/m3 | 0,1 mg/m3 | 0,1 mg/m3 | 0,05 mg/m3 | 0,05 mg/m3 |
| Skin | 17,2 mg/kg | 25 mg/kg | | | 28,7 mg/kg | 50 mg/kg | | |
| o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate | | | | | | | | |
| Predicted no-effect concentration - PNEC | | | | | | | | |
| | Normal value in fresh water | | | 1,01 | | mg/l | | |
| | Normal value in marine water | | | 0,101 | | mg/l | | |
| | Normal value of STP microorganisms | | | 1,01 | | mg/l | | |
| | Normal value for the terrestrial compartment | | | 1,01 | | 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 | 20 mg/kg | | | | | | |
| Inhalation | 0,05 mg/m3 | 0,05 mg/m3 | 0,025 mg/m3 | 0,025 mg/m3 | 0,1 mg/m3 | 0,1 mg/m3 | 0,05 mg/m3 | 0,05 mg/m3 |
| Skin | 17,2 mg/kg | 25 mg/kg | | | 28,7 mg/kg | 50 mg/kg | | |
| 2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate | | | | | | | | |
| Predicted no-effect concentration - PNEC | | | | | | | | |
| | Normal value in fresh water | | | 1,01 | | mg/l | | |
| | Normal value in marine water | | | 0,101 | | mg/l | | |
| | Normal value of STP microorganisms | | | 1,01 | | mg/l | | |
| | Normal value for the terrestrial compartment | | | 1,01 | | 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 |

| | | |
|----------------------------------|--|-----------------------|
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| | | Dated 25/01/2018 |
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| | | | | | | | | |
|------------|------------|------------|-------------|-------------|-----------|------------|------------|------------|
| Oral | VND | 20 mg/kg | | | | | | |
| Inhalation | 0,05 mg/m3 | 0,05 mg/m3 | 0,025 mg/m3 | 0,025 mg/m3 | 0,1 mg/m3 | 0,1 mg/m3 | 0,05 mg/m3 | 0,05 mg/m3 |
| Skin | 17,2 mg/kg | 25 mg/kg | | | | 28,7 mg/kg | 50 mg/kg | |

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.

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

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| | |
|--|-----------------------------|
| Colour | brown |
| Odour | di terra |
| Odour threshold | Not available |
| pH | Not available |
| Melting point / freezing point | Not available |
| Initial boiling point | 155 °C |
| Boiling range | Not available |
| Flash point | > 41 °C |
| Evaporation rate | Not available |
| Flammability (solid, gas) | 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 | 1,06 |
| Solubility | soluble in organic solvents |
| 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

| | |
|------------------------------|--------------------------|
| VOC (Directive 2010/75/EC) : | 38,50 % - 407,15 g/litre |
| VOC (volatile carbon) : | 34,81 % - 368,15 g/litre |

SECTION 10. Stability and reactivity**10.1. Reactivity**

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

DIPHENYLMETHANE-4,4'-DIISOCYANATE

DIPHENYLMETHANE-4,4'-DIISOCYANATE: decomposes at 274°C. With water it develops carbon dioxide and forms an insoluble solid polymer. Consequently any wet material recovered must be stored in open containers.

DIPHENYLMETHANE-4,4'-DIISOCYANATE

Decomposes at 274°C/525°F.

With water it develops carbon dioxide and forms an insoluble solid polymer and consequently any wet material recovered must be stored in open containers.

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.

DIPHENYLMETHANE-4,4'-DIISOCYANATE

DIPHENYLMETHANE-4,4'-DIISOCYANATE: can react dangerously with: alcohols, amines, ammonia, sodium hydroxide, acids, water and strong bases and acids.

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.

ETALON ALLIGATOR CATALYST**DIPHENYLMETHANE-4,4'-DIISOCYANATE**

May react dangerously with: alcohols, amines, ammonia, sodium hydroxide, acids, water, strong acids, strong bases.

10.4. Conditions to avoid

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

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.

DIPHENYLMETHANE-4,4'-DIISOCYANATE

DIPHENYLMETHANE-4,4'-DIISOCYANATE: nitric oxides, carbon oxides, hydrogen cyanide.

DIPHENYLMETHANE-4,4'-DIISOCYANATE

May develop: nitric oxide, carbon oxides, hydrogen cyanide.

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**DIPHENYLMETHANE-4,4'-DIISOCYANATE**

DIFENILMETAN-4,4'-DIISOCIANATO: rischio di sensibilizzazione anche a concentrazioni inferiori al TLV in caso di esecuzione di lavori a spruzzo.

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

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.

DIPHENYLMETHANE-4,4'-DIISOCYANATE

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**XYLENE (MIXTURE OF ISOMERS)**

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

DIPHENYLMETHANE-4,4'-DIISOCYANATE

Causes symptoms of irritation of the eye mucous membranes, upper respiratory and digestive tract and also to the skin; lung irritation of the bronchitis type (chest pains, cough, asthmatic wheezing), neurological symptoms (dizziness, balance disorders, headaches and consciousness disturbances). In severe cases, may give rise to delayed pulmonary edema (INRS, 2009). May cause hypersensitivity pneumonia which, in the event of continuous exposure, may progress to interstitial fibrosis (INRS, 2009).

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 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.

DIPHENYLMETHANE-4,4'-DIISOCYANATE

Cross sensitisations with other isocyanates are possible, in particular with TDI (toluene diisocyanate).

ACUTE TOXICITY

LC50 (Inhalation - mists / powders) of the mixture:2,59 mg/l
LC50 (Inhalation - vapours) of the mixture:Acute Tox. 4
LD50 (Oral) of the mixture:Not classified (no significant component)
LD50 (Dermal) of the mixture:>2000 mg/kg

2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate

LD50 (Oral) > 2000 mg/kg rat

LD50 (Dermal) > 9400 mg/kg

LC50 (Inhalation) 0,527 mg/l/4h rat

o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate

LD50 (Dermal) > 9400 mg/kg coniglio

LC50 (Inhalation) 0,387 mg/l/4h

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral) 3523 mg/kg Rat

LD50 (Dermal) 4350 mg/kg Rabbit

LC50 (Inhalation) 26 mg/l/4h Rat

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DIPHENYLMETHANE-4,4'-DIISOCYANATE

LD50 (Oral) > 2000 mg/kg

LD50 (Dermal) > 9400 mg/kg

LC50 (Inhalation) 1,5 mg/l/4h

DIPHENYLMETHANE-4,4'-DIISOCYANATE

LD50 (Oral) > 5000 mg/kg rat

LD50 (Dermal) > 9400 mg/l rabbit; OECD TG 402

LC50 (Inhalation) 1,5 mg/l/4h rat; OECD TG 403

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skinSensitising for the respiratory system

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Suspected of causing cancer

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".

DIPHENYLMETHANE-4,4'-DIISOCYANATE

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 1999).

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

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Toxic for aspiration

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

2,2'-methylenediphenyl diisocyanate;
diphenylmethane-2,2'-diisocyanate
LC50 - for Fish

> 1000 mg/l/96h Danio rerio

EC50 - for Crustacea

> 1000 mg/l/48h Daphnia Magna

EC50 - for Algae / Aquatic Plants

> 1640 mg/l/72h Scenedesmus subspicatus

o-(p-isocyanatobenzyl)phenyl isocyanate;
diphenylmethane-2,4'-diisocyanate
Chronic NOEC for Crustacea

> 10 mg/l

DIPHENYLMETHANE-4,4'-DIISOCYANATE

LC50 - for Fish

> 1000 mg/l/96h

EC50 - for Crustacea

> 1000 mg/l/48h

EC10 for Algae / Aquatic Plants

> 1640 mg/l/72h

DIPHENYLMETHANE-4,4'-DIISOCYANATE

LC50 - for Fish

> 100 mg/l/96h Brachydanio Rerio; OECD TG 203

EC50 - for Crustacea

83 mg/l/48h Daphnia Magna; OECD TG 202

EC50 - for Algae / Aquatic Plants

> 100 mg/l/72h Desmodesmus subspicatus; OECD TG 201

12.2. Persistence and degradability

XYLENE (MIXTURE OF ISOMERS)

Solubility in water

100 - 1000 mg/l

Degradability: information not available

DIPHENYLMETHANE-4,4'-DIISOCYANATE

Solubility in water

0,1 - 100 mg/l

NOT rapidly degradable

DIPHENYLMETHANE-4,4'-DIISOCYANATE

NOT rapidly degradable

12.3. Bioaccumulative potential

o-(p-isocyanatobenzyl)phenyl isocyanate;

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| | |
|--|------|
| diphenylmethane-2,4'-diisocyanate BCF | 200 |
| XYLENE (MIXTURE OF ISOMERS) | |
| Partition coefficient: n-octanol/water | 3,12 |
| BCF | 25,9 |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE | |
| Partition coefficient: n-octanol/water | 4,51 |
| BCF | 200 |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE | |
| BCF | < 14 |

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, 1263
IATA:

14.2. UN proper shipping name

ADR / RID: PAINT RELATED MATERIAL
IMDG: PAINT RELATED MATERIAL (HYDROCARBONS, C9, AROMATICS)
IATA: PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3



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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: Environmentally
Hazardous

IMDG: Marine Pollutant



IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 30

Limited
Quantities: 5
LTunnel
restriction
code: (D/E)

Special Provision: -

IMDG: EMS: F-E, S-ELimited
Quantities: 5
L

IATA: Cargo:

Maximum
quantity: 220
L

Pass.:

Maximum
quantity: 60 L

Special Instructions:

A3, A72

Packaging
instructions:
366
Packaging
instructions:
355**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 1907/2006Product

Point 3 - 40

Contained substance

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| | | |
|-------|----|---|
| Point | 56 | DIPHENYLMETHAN E-4,4'- DIISOCYANATE |
| Point | 56 | DIPHENYLMETHAN E-4,4'- DIISOCYANATE Reg. no.: 01- 2119457014-47 |
| Point | 56 | o-(p- isocyanatobenzyl)phe nyl isocyanate; diphenylmethane- 2,4'-diisocyanate Reg. no.: 01- 2119480143-45 |
| Point | 56 | 2,2'- methylenediphenyl diisocyanate; diphenylmethane- 2,2'-diisocyanate Reg. no.: 01- 2119927323-43 |

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

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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 |
| 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 |
| H226 | Flammable liquid and vapour. |
| H351 | Suspected of causing cancer. |
| 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. |
| 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).

ETALON ALLIGATOR CATALYST**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:

08 / 11.