



ARTIDUR GALVANICO GRIS

Code : 12168MARGRIS




Version: 7

Revision: 12/11/2024
















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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

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| 1.1 | <p>PRODUCT IDENTIFIER: ARTIDUR GALVANICO GRIS Code : 12168MARGRIS UFI: SQ10-F0GE-Y00T-9MUS</p> |
| 1.2 | <p>RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST: <u>Intended uses (main technical functions):</u> <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Professional <input type="checkbox"/> Consumers Anticorrosive paint. <u>Sectors of use:</u> Professional uses (SU22). <u>Types of PCN use:</u> Paints/coatings - Protective and functional. <u>Uses advised against:</u> This product is not recommended for any use or sector of use (industrial, professional or consumer) other than those previously listed as "Intended or identified uses". <u>Restrictions on manufacture, placing on market and use, according to Annex XVII of Regulation (EC) No. 1907/2006:</u> Contains diisocyanates: Shall not be placed on the market as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 February 2022, unless: (a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the supplier ensures that the recipient of the substance(s) or mixture(s) is provided with information on the requirements referred to in point (b) of paragraph 1 and the following statement is placed on the packaging, in a manner that is visibly distinct from the rest of the label information: 'As from 24 August 2023 adequate training is required before industrial or professional use'. For more details consult the original legislative text.</p> |
| 1.3 | <p>DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET: ARTIC INDUSTRIAL QUÍMICA, S.A. Ctra. de Gerb, 51-73 - 25600 BALAGUER (Lleida) ESPAÑA Phone number: (+34) 973450717 - www.articsa.net <u>- E-mail address of the person responsible for the Safety Data Sheet:</u> info@articsa.net</p> |
| 1.4 | <p>EMERGENCY TELEPHONE NUMBER: (+34) 973450717 7:00-14:00 h.  National Poisons Information Service (NPIS) - In England, Wales or Scotland: dial 111 - In N Ireland: contact your local GP or pharmacist during normal hours.</p> |

SECTION 2 : HAZARDS IDENTIFICATION

| 2.1 | <p>CLASSIFICATION OF THE SUBSTANCE OR MIXTURE: Classification of mixtures is carried out in accordance with the following principles: a) when data (tests) for the classification of mixtures are available, generally is carried out based on these data, b) in the absence of data (tests) for mixtures are generally used interpolation or extrapolation methods of assessing the risk, using the available data for mixtures similarly classified, and c) in the absence of tests and information which would allow to apply interpolation or extrapolation techniques, methods are used to classify risk assessment based on the data of the individual components in the mixture. <u>Classification in accordance with Regulation (EU) No. 1272/2008~2022/692 (CLP):</u> DANGER:Flam. Liq. 3:H226 Skin Irrit. 2:H315 Eye Irrit. 2:H319 Resp. Sens. 1:H334 Skin Sens. 1:H317 Carc. 2:H351 Aquatic Acute 1:H400 Aquatic Chronic 1:H410 EUH014</p> <table border="1"> <thead> <tr> <th>Danger class</th> <th>Classification of the mixture</th> <th>Cat.</th> <th>Routes of exposure</th> <th>Target organs</th> <th>Effects</th> </tr> </thead> <tbody> <tr> <td>Physicochemical: </td> <td>Flam. Liq. 3:H226 c) EUH014:EUH014 c)</td> <td>Cat.3 -</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>Human health:   </td> <td>Skin Irrit. 2:H315 c) Eye Irrit. 2:H319 c) Resp. Sens. 1:H334 c) Skin Sens. 1:H317 c) Carc. 2:H351 c)</td> <td>Cat.2 Cat.2 Cat.1 Cat.1 Cat.2</td> <td>Skin Eyes Inhalation Skin</td> <td>Skin Eyes Respiratory tract Skin</td> <td>Irritation Irritation Allergy, Asthma Allergy Cancer</td> </tr> <tr> <td>Environment: </td> <td>Aquatic Acute 1:H400 c) Aquatic Chronic 1:H410 c)</td> <td>Cat.1 Cat.1</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p>Full text of hazard statements mentioned is indicated in section 16.</p> <p>Note: When in section 3 a range of percentages is used, the health and environmental hazards describe the effects of the highest concentration of each component, but below the maximum value.</p> | Danger class | Classification of the mixture | Cat. | Routes of exposure | Target organs | Effects | Physicochemical:  | Flam. Liq. 3:H226 c) EUH014:EUH014 c) | Cat.3 - | - | - | - | Human health:    | Skin Irrit. 2:H315 c) Eye Irrit. 2:H319 c) Resp. Sens. 1:H334 c) Skin Sens. 1:H317 c) Carc. 2:H351 c) | Cat.2 Cat.2 Cat.1 Cat.1 Cat.2 | Skin Eyes Inhalation Skin | Skin Eyes Respiratory tract Skin | Irritation Irritation Allergy, Asthma Allergy Cancer | Environment:  | Aquatic Acute 1:H400 c) Aquatic Chronic 1:H410 c) | Cat.1 Cat.1 | - | - | - |
|---|---|---|------------------------------------|---|--|---------------|---------|--|--|------------|---|---|---|---|---|---|------------------------------------|---|--|--|--|----------------|---|---|---|
| Danger class | Classification of the mixture | Cat. | Routes of exposure | Target organs | Effects | | | | | | | | | | | | | | | | | | | | |
| Physicochemical:  | Flam. Liq. 3:H226 c) EUH014:EUH014 c) | Cat.3 - | - | - | - | | | | | | | | | | | | | | | | | | | | |
| Human health:    | Skin Irrit. 2:H315 c) Eye Irrit. 2:H319 c) Resp. Sens. 1:H334 c) Skin Sens. 1:H317 c) Carc. 2:H351 c) | Cat.2 Cat.2 Cat.1 Cat.1 Cat.2 | Skin Eyes Inhalation Skin | Skin Eyes Respiratory tract Skin | Irritation Irritation Allergy, Asthma Allergy Cancer | | | | | | | | | | | | | | | | | | | | |
| Environment:  | Aquatic Acute 1:H400 c) Aquatic Chronic 1:H410 c) | Cat.1 Cat.1 | - | - | - | | | | | | | | | | | | | | | | | | | | |

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| 2.2 | <p>LABEL ELEMENTS:</p> <p> This product is labelled with the signal word DANGER in accordance with Regulation (EU) No. 1272/2008~2022/692 (CLP).</p> <p><u>- Hazard statements:</u></p> <p>H226 Flammable liquid and vapour. H351 Suspected of causing cancer. H319 Causes serious eye irritation. H315 Causes skin irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> |
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| H317 | May cause an allergic skin reaction. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| EUH014 | Reacts violently with water. |
| <u>- Precautionary statements:</u> | |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P280 | Wear protective gloves, clothing and eye protection. In case of inadequate ventilation wear respiratory protection. |
| P363 | Wash contaminated clothing before reuse. |
| P303+P361+P353- P352-P312 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash with plenty of water and soap.. Call a POISON CENTER or doctor if you feel unwell. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P342+P311 | If experiencing respiratory symptoms: Call a POISON CENTER or doctor. |
| P305+P351+P338- P310 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. |
| P273-P391-P501 | Avoid release to the environment. Collect spillage. Dispose of contents/container in accordance with local regulations. |
| <u>- Supplementary statements:</u> | |
| EUH204 | Contains isocyanates. May produce an allergic reaction. |
| - | As from 24 August 2023 adequate training is required before industrial or professional use. |
| <u>- Substances that contribute to classification:</u> | |
| Aromatic polyisocyanate prepolymer | |
| Diphenylmethane diisocyanate polymer (PMDI) | |
| <u>Other sensitizing components:</u> | |
| Tosil-isocyanate | |

2.3

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| <u>OTHER HAZARDS:</u> |
| Hazards which do not result in classification but which may contribute to the overall hazards of the mixture: |
| <u>- Other physicochemical hazards:</u> |
| Vapours may form with air a mixture potentially flammable or explosive. |
| <u>- Other adverse human health effects:</u> |
| Prolonged exposure to vapours may produce transient drowsiness. Prolonged contact may cause skin dryness. People with hypersensitive respiratory tract (by instance, asthma or chronic bronchitis) should not handle this product. |
| <u>- Other negative environmental effects:</u> |
| Does not contain substances that fulfil the PBT/vPvB criteria. |
| <u>Endocrine disrupting properties:</u> |
| This product does not contain substances with endocrine disrupting properties identified or under evaluation. |

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1

SUBSTANCES:

Not applicable (mixture).

3.2

MIXTURES:

This product is a mixture.

Chemical description:

Mixture of pigments, extenders, resins and additives in organic solvents.

HAZARDOUS INGREDIENTS:

Substances taking part in a percentage higher than the exemption limit:

| | | | |
|---------------|--|---|--------------------------------|
| 80 < C < 90 % | | Zinc powder (stabilised) CAS: 7440-66-6, EC: 231-175-3, REACH: 01-2119467174-37 CLP: Warning: Aquatic Acute 1:H400 Aquatic Chronic 1:H410 | CLP00 |
| 5 < C < 10 % | | Reaction mass of ethylbenzene and m-xylene and p-xylene CAS: , EC: 905-562-9, REACH: 01-2119488216-32 CLP: Danger: Flam. Liq. 3:H226 Acute Tox. (inh.) 4:H332 (ATE=11000 mg/m3) Acute Tox. (skin) 4:H312 (ATE=1700 mg/kg) Skin Irrit. 2:H315 Eye Irrit. 2:H319 STOT SE (irrit.) 3:H335 STOT RE 2:H373 Asp. Tox. 1:H304 Aquatic Chronic 3:H412 | REACH STOT RE 2, H373: C ≥10 % |
| 2,5 < C < 5 % | | Aromatic polyisocyanate prepolymer CAS: 67815-87-6, EC: Polymer, REACH: Exempt (polymer) CLP: Danger: Acute Tox. (inh.) 4:H332 (ATE=1500 mg/m3) Skin Irrit. 2:H315 Eye Irrit. 2:H319 Resp. Sens. 1:H334 Skin Sens. 1:H317 STOT SE (irrit.) 3:H335 STOT RE 2:H373 | Notified |
| 1 < C < 3 % | | Diphenylmethane diisocyanate polymer (PMDI) CAS: 9016-87-9, EC: 618-498-9, REACH: Exempt (polymer) CLP: Danger: Acute Tox. (inh.) 4:H332 (ATE=11000 mg/m3) Skin Irrit. 2:H315 Eye Irrit. 2:H319 Resp. Sens. 1:H334 Skin Sens. 1:H317 Carc. 2:H351 STOT SE (irrit.) 3:H335 STOT RE 2:H373 | Notified |



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| 1 < C < 2 % | Solvent naphtha (petroleum), light aromatic CAS: 64742-95-6, EC: 265-199-0, REACH: 01-2119486773-24 CLP: Danger: Flam. Liq. 3:H226 Skin Irrit. 2:H315 STOT SE (narcosis) 3:H336 Asp. Tox. 1:H304 Aquatic Chronic 2:H411 (Note P) | ATP01 |
| 1 < C < 2 % | 1,2,4-trimethylbenzene CAS: 95-63-6, EC: 202-436-9, REACH: 01-2119472135-42 CLP: Danger: Flam. Liq. 3:H226 Acute Tox. (inh.) 4:H332 (ATE=10200 mg/m3) Skin Irrit. 2:H315 Eye Irrit. 2:H319 STOT SE (irrit.) 3:H335 Asp. Tox. 1:H304 Aquatic Chronic 2:H411 | REACH |
| C < 1 % | Tosil-isocyanate CAS: 4083-64-1, EC: 223-810-8, REACH: 01-2119980050-47 CLP: Danger: Skin Irrit. 2:H315 Eye Irrit. 2:H319 Resp. Sens. 1:H334 STOT SE (irrit.) 3:H335 EUH014 | CLP00 Skin Irrit. 2, H315: C ≥ 5 % Eye Irrit. 2, H319: C ≥ 5 % STOT SE (irrit.) 3, H335: C ≥ 5 % |

Impurities:

Content of benzene < 0.1%.

Stabilizers:

None.

Reference to other sections:

For more information on hazardous ingredients, see sections 8, 11, 12 and 16.

SUBSTANCES OF VERY HIGH CONCERN (SVHC):

List updated by ECHA on 27/06/2024.

Substances SVHC subject to authorisation, included in Annex XIV of Regulation (EC) no. 1907/2006:

None.

Substances SVHC candidate to be included in Annex XIV of Regulation (EC) no. 1907/2006:

None.

PERSISTENT, BIOACCUMULABLE AND TOXIC PBT, OR VERY PERSISTENT AND VERY BIOACCUMULABLE VPVB SUBSTANCES:

Does not contain substances that fulfil the PBT/vPvB criteria.

POP substances included in the (EU) REGULATION 2019/1021~2020/784 on persistent organic pollutants:

None.

SECTION 4: FIRST AID MEASURES**4.1 DESCRIPTION OF FIRST AID MEASURES:**

Symptoms may occur after exposure, so that in case of direct exposure to the product, when in doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Lifeguards should pay attention to self-protection and use the recommended protective equipment if there is a possibility of exposure. Wear protective gloves when administering first aid.

| Route of exposure | Symptoms and effects, acute and delayed | Description of first-aid measures |
|-------------------|---|---|
| Inhalation: | Inhalation of solvent vapours may produce headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, unconsciousness. Inhalation produces irritation to mucus, coughing and breathlessness. | Remove the patient out of the contaminated area into the fresh air. If breathing is irregular or stops, administer artificial respiration. If the person is unconscious, place in appropriate recovery position. Keep the patient warm and at rest until medical attention arrives. |
| Skin: | Skin contact causes redness. Prolonged contact may cause skin dryness. | Remove immediately contaminated clothing. Wash thoroughly the affected area with plenty of cold or lukewarm water and neutral soap, or use a suitable skin cleanser. |
| Eyes: | Contact with the eyes produces redness and pain. | Remove contact lenses. Rinse eyes copiously by irrigation with plenty of clean, fresh water for at least 15 minutes, holding the eyelids apart, until the irritation is reduced. Call a physician immediately. |
| Ingestion: | If swallowed, may cause irritation of the throat, abdominal pain, drowsiness, nausea, vomiting and diarrhoea. | If swallowed, seek medical advice immediately and show container or label. Do not induce vomiting, due to the risk of aspiration. Keep the patient at rest. |

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

The main symptoms and effects are indicated in sections 4.1 and 11.1

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:**Notes to physician:**

Treatment should be directed at the control of symptoms and the clinical condition of the patient..

Antidotes and contraindications:

Specific antidote not known.



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SECTION 5: FIREFIGHTING MEASURES

- 5.1 **EXTINGUISHING MEDIA:**
Extinguishing powder or CO₂.
- 5.2 **SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:**
As consequence of combustion or thermal decomposition, hazardous products may be produced: carbon monoxide, Carbon dioxide, nitrogen oxides, isocyanate vapors, traces of hydrocyanic acid. Exposure to combustion or decomposition products may be a hazard to health.
- 5.3 **ADVICE FOR FIREFIGHTERS:**
Special protective equipment:
Depending on magnitude of fire, heat-proof protective clothing may be required, appropriate independent breathing apparatus, gloves, protective glasses or face masks and boots. If the fire-proof protective equipment is not available or is not being used, combat fire from a sheltered position or from a safe distance. The standard EN469 provides a basic level of protection for chemical incidents.
Other recommendations:
Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. Do not allow fire-fighting residue to enter drains, sewers or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 **PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:**
Eliminate possible sources of ignition and when appropriate, ventilate the area. Do not smoke. Avoid direct contact with this product. Avoid breathing vapours. Keep people without protection in opposition to the wind direction.
- 6.2 **ENVIRONMENTAL PRECAUTIONS:**
Avoid contamination of drains, surface or subterranean water and soil. In the case of large scale spills or when the product contaminates lakes, rivers or sewages, inform the appropriate authorities in accordance with local regulations.
- 6.3 **METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:**
Contain and mop up spills with non-combustible absorbent materials (earth, sand, vermiculite, diatomaceous earth, etc.). The contaminated area should be cleaned up immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises: water, ethanol or isopropanol and concentrated ammonia solution (d=0,880) = 45/50/5 parts by volume. Another possible (non-flammable) decontaminant is made up of water and sodium carbonate = 95/5 parts by weight. Add the same decontaminant to any residues and allow to stand for several days in an un-sealed container until no further reaction occurs. Keep the remains in a closed container.
- 6.4 **REFERENCE TO OTHER SECTIONS:**
For contact information in case of emergency, see section 1.
For information on safe handling, see section 7.
For exposure controls and personal protection measures, see section 8.
For waste disposal, follow the recommendations in section 13.

SECTION 7: HANDLING AND STORAGE

- 7.1 **PRECAUTIONS FOR SAFE HANDLING:**
Comply with the existing legislation on health and safety at work.
- General recommendations:
Avoid any type of leakage or escape. Keep the container tightly closed.
- Recommendations for the prevention of fire and explosion risks:
Vapours are heavier than air, may spread along floors to a considerable distance, can form explosive mixtures with air and are able to reach distant ignition sources and flame up or explode. Due to its flammability, this material should only be used in areas from which all naked lights and other sources of ignition have been excluded and away from other heat or electrical sources. Switch mobile phones off and do not smoke. No tools with a potential for sparks should be used.
Flashpoint 29* °C (Pensky-Martens) CLP 2.6.4.3.
Autoignition temperature: 604* °C
- Recommendations for the prevention of toxicological risks:
People with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which isocyanate containing products are used. Do not eat, drink or smoke while handling. After handling, wash hands with soap and water. For exposure controls and personal protection measures, see section 8.
- Recommendations for the prevention of environmental contamination:
Avoid any spillage in the environment. Pay special attention to the cleaning water. In the case of accidental spillage, follow the instructions indicated in section 6.
- 7.2 **CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**
Forbid the entry to unauthorized persons. Keep away from food, drink and animal foodstuffs. Keep out of reach of children. This product should be stored isolated from heat and electrical sources. Do not smoke in storage area. If possible, avoid direct contact with sunlight. Avoid extreme humidity conditions. Precautions should be taken to minimise exposure to atmospheric humidity or water, as carbon dioxide may be formed which, in closed containers can result in pressurisation. Care should be taken when re-opening partly used containers. Due to the sensitivity to humidity of the isocyanates, this product should be kept in the original container, or under pressure of dried nitrogen, for example. In order to avoid leakages, the containers, after use, should be closed carefully and placed in a vertical position. For more information, see section 10.
- Class of store:
According to current legislation.
- Maximum storage period:
12 Months.
- Temperature interval:
min:5 °C, max:40 °C (recommended).
- Incompatible materials:
Keep away from water, oxidizing agents, acids, alkalis, amines, alcohols. Clean the application equipment with a compatible solvent.



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- Type of packaging:

According to current legislation.

- Limit quantity (Seveso III): Directive 2012/18/EU:

- Named dangerous substances/mixtures:None

- Hazard categories and lower-/upperthreshold quantities in tonnes (t):

- Physical hazards:Flammable liquid and vapour. (P5c) (5000t/50000t).
- Health hazards:Not applicable
- Environmental hazards:Very toxic to aquatic life with long lasting effects. (E1) (100t/200t).
- Other hazards:Reacts violently with water. (O1) (100t/500t).
- Threshold quantity for the application of lower-tier requirements:100 tons
- Threshold quantity for the application of upper-tier requirements:200 tons

- Remarks:

The qualifying quantities set out above relate to each establishment. The quantities to be considered for the application of the relevant Articles are the maximum quantities which are present or are likely to be present at any one time. Dangerous substances present at an establishment only in quantities equal to or less than 2 % of the relevant qualifying quantity shall be ignored for the purposes of calculating the total quantity present, if their location within an establishment is such that it cannot act as an initiator of a major accident elsewhere at that establishment. For more details, see note 4 of Annex I of the Seveso Directive.

7.3 SPECIFIC END USE(S):

For the use of this product particular recommendations apart from that already indicated are not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION8.1 CONTROL PARAMETERS:

If a product contains ingredients with exposure limits, may be necessary a personnel monitoring, work place or biological, to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to EN689, EN14042 and EN482 standard concerning methods for assessing the exposure by inhalation to chemical agents, and exposure to chemical and biological agents. Reference should be also made to national guidance documents for methods for the determination of dangerous substances.

- OCCUPATIONAL EXPOSURE LIMIT VALUES (WEL)

| EH40/2005 WELs (United Kingdom) 2018 | Year | WEL-TWA | | WEL-STEL | | Remarks |
|---|------|---------|-------|----------|-------|----------------|
| | | ppm | mg/m3 | ppm | mg/m3 | |
| Zinc powder (stabilised) | 1996 | - | 10 | - | - | |
| Reaction mass of ethylbenzene and m-xylene and p-xylene | 1996 | 100 | 434 | 150 | 651 | BMGV, A4 |
| Diphenylmethane diisocyanate polymer (PMDI) | 1988 | 0,005 | 0,052 | - | - | Sc, Si |
| Solvent naphtha (petroleum), light aromatic | - | 50 | 290 | - | - | Internal value |
| 1,2,4-trimethylbenzene | 1987 | 25 | 123 | - | - | |

WEL - Workplace Exposure Limit, TWA - Time Weighted Average (8 hours), STEL - Short Term Exposure Limit (15 min).

BMGV - Biological monitoring guidance value. BMGVs are non-statutory and any biological monitoring undertaken in association with a guidance value needs to be conducted on a voluntary basis (ie with the fully informed consent of all concerned).

Sc - May cause sensitization by skin contact.

Si - May cause sensitization by inhalation.

A4 - Non classified as carcinogenic in humans.

- BIOLOGICAL LIMIT VALUES:

Biological monitoring can be a very useful complementary technique to air monitoring when air sampling techniques alone may not give a reliable indication of exposure. Biological monitoring is the measurement and assessment of hazardous substances or their metabolites in tissues, secretions, excreta or expired air, or any combination of these, in exposed workers. Measurements reflect absorption of a substance by all routes. Biological monitoring may be particularly useful in circumstances where there is likely to be significant skin absorption and/or gastrointestinal tract uptake following ingestion, where control of exposure depends on respiratory protective equipment, where there is a reasonably well-defined relationship between biological monitoring and effect, or where it gives information on accumulated dose and target organ body burden which is related to toxicity.

This preparation contains the following substances that have established a biological limit value:

-
-
-

- DERIVED NO-EFFECT LEVEL (DNEL):

Derived no-effect level (DNEL) is a level of exposure that is considered safe, derived from toxicity data according to specific guidances included in REACH. DNEL values may differ from a occupational exposure limit (OEL) for the same chemical. OEL values may come recommended by a particular company, a government regulatory agency or an organization of experts. Although considered protective of health, the OEL values are derived by a process different of REACH.

| - DERIVED NO-EFFECT LEVEL, WORKERS:- Systemic effects, acute and chronic: | DNEL Inhalation mg/m3 | | DNEL Cutaneous mg/kg bw/d | | DNEL Oral mg/kg bw/d | |
|--|--------------------------|--------|------------------------------|---------|-------------------------|-------|
| Aromatic polyisocyanate prepolymer | - (a) | - (c) | - (a) | - (c) | - (a) | - (c) |
| Reaction mass of ethylbenzene and m-xylene and p-xylene | 289 (a) | 77 (c) | s/r (a) | 180 (c) | - (a) | - (c) |
| Solvent naphtha (petroleum), light aromatic | - (a) | - (c) | - (a) | - (c) | - (a) | - (c) |



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| Diphenylmethane diisocyanate polymer (PMDI) | - (a) | - (c) | - (a) | - (c) | - (a) | - (c) |
| 1,2,4-trimethylbenzene | 100 (a) | 100 (c) | s/r (a) | 16171 (c) | - (a) | - (c) |
| Tosil-isocyanate | s/r (a) | 3,24 (c) | s/r (a) | 0,92 (c) | - (a) | - (c) |
| Zinc powder (stabilised) | - (a) | 5 (c) | - (a) | 83,3 (c) | - (a) | - (c) |
| - DERIVED NO-EFFECT LEVEL, WORKERS:- Local effects, acute and chronic: | <u>DNEL Inhalation</u> mg/m3 | | <u>DNEL Cutaneous</u> mg/cm2 | | <u>DNEL Eyes</u> mg/cm2 | |
| Aromatic polyisocyanate prepolymer | - (a) | - (c) | - (a) | - (c) | - (a) | - (c) |
| Reaction mass of ethylbenzene and m-xylene and p-xylene | 289 (a) | s/r (c) | s/r (a) | s/r (c) | - (a) | - (c) |
| Solvent naphtha (petroleum), light aromatic | - (a) | - (c) | - (a) | - (c) | - (a) | - (c) |
| Diphenylmethane diisocyanate polymer (PMDI) | - (a) | - (c) | - (a) | - (c) | - (a) | - (c) |
| 1,2,4-trimethylbenzene | 100 (a) | 100 (c) | s/r (a) | s/r (c) | - (a) | - (c) |
| Tosil-isocyanate | m/r (a) | a/r (c) | m/r (a) | s/r (c) | m/r (a) | - (c) |
| Zinc powder (stabilised) | - (a) | - (c) | - (a) | - (c) | - (a) | - (c) |

- Derived no-effect level, general population:

Not applicable (product for professional or industrial use).

(a) - Acute, short-term exposure, (c) - Chronic, long-term or repeated exposure.

(-) - DNEL not available (without data of registration REACH).

s/r - DNEL not derived (not identified hazard).

m/r - DNEL not derived (medium hazard).

a/r - DNEL not derived (high hazard).

- PREDICTED NO-EFFECT CONCENTRATION (PNEC):

| | | | |
|--|---------------------------------|-------------------------------------|-------------------------------------|
| - PREDICTED NO-EFFECT CONCENTRATION, AQUATIC ORGANISMS:- Fresh water, marine water and intermittent release: | <u>PNEC Fresh water</u> mg/l | <u>PNEC Marine</u> mg/l | <u>PNEC Intermittent</u> mg/l |
| Aromatic polyisocyanate prepolymer | - | - | - |
| Reaction mass of ethylbenzene and m-xylene and p-xylene | 0.327 | 0.327 | 0.327 |
| Solvent naphtha (petroleum), light aromatic | -7 | -7 | -7 |
| Diphenylmethane diisocyanate polymer (PMDI) | - | - | - |
| 1,2,4-trimethylbenzene | 0.12 | 0.12 | 0.12 |
| Tosil-isocyanate | 0.03 | 0.003 | 0.3 |
| Zinc powder (stabilised) | 0.0206 | 0.0061 | - |
| - WASTEWATER TREATMENT PLANTS (STP) AND SEDIMENTS IN FRESH- AND MARINE WATER: | <u>PNEC STP</u> mg/l | <u>PNEC Sediments</u> mg/kg dw/d | <u>PNEC Sediments</u> mg/kg dw/d |
| Aromatic polyisocyanate prepolymer | - | - | - |
| Reaction mass of ethylbenzene and m-xylene and p-xylene | 6.58 | 12.46 | 12.46 |
| Solvent naphtha (petroleum), light aromatic | -7 | -7 | -7 |
| Diphenylmethane diisocyanate polymer (PMDI) | - | - | - |
| 1,2,4-trimethylbenzene | 2.41 | 13.56 | 13.56 |
| Tosil-isocyanate | 0.4 | 0.172 | 0.0172 |
| Zinc powder (stabilised) | 0.052 | 117.8 | 56.5 |
| - PREDICTED NO-EFFECT CONCENTRATION, TERRESTRIAL ORGANISMS:- Air, soil and effects for predators and humans: | <u>PNEC Air</u> mg/m3 | <u>PNEC Soil</u> mg/kg dw/d | <u>PNEC Oral</u> mg/kg dw/d |
| Aromatic polyisocyanate prepolymer | - | - | - |
| Reaction mass of ethylbenzene and m-xylene and p-xylene | - | 2.31 | - |
| Solvent naphtha (petroleum), light aromatic | -7 | -7 | -7 |
| Diphenylmethane diisocyanate polymer (PMDI) | - | - | - |
| 1,2,4-trimethylbenzene | - | 2.34 | - |
| Tosil-isocyanate | s/r | 0.0168 | n/b |
| Zinc powder (stabilised) | - | 35.6 | - |
| (-) - PNEC not available (without data of registration REACH). n/b - PNEC not derived (not bioaccumulative potential). s/r - PNEC not derived (not identified hazard). | | | |

8.2 **EXPOSURE CONTROLS:**
ENGINEERING MEASURES:



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Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these measures are not sufficient to maintain concentrations of particulates and vapours below the Occupational Exposure Limits, suitable respiratory protection must be worn.

- Protection of respiratory system:

Avoid the inhalation of vapours.

- Protection of eyes and face:

It is recommended to install water taps, sources or eyewash bottles with clean water close to the working area.

- Protection of hands and skin:

It is recommended to install water taps or sources with clean water close to the working area. Barrier creams may help to protect the exposed areas of the skin. Barrier creams should not be applied once exposure has occurred.

OCCUPATIONAL EXPOSURE CONTROLS: REGULATION (EU) NO. 2016/425:

As a general measure on prevention and safety in the work place, we recommend the use of a basic personal protection equipment (PPE), with the corresponding marking. For more information on personal protective equipment (storage, use, cleaning, maintenance, type and characteristics of the PPE, protection class, marking, category, CEN norm, etc.), you should consult the informative brochures provided by the manufacturers of PPE.

| | |
|---------------------|--|
| Mask: | ✓ For short periods of work, you can consider the utilisation of a combination mask with gas and particle filters, type A2-P2 (EN14387/EN143). In order to obtain a suitable protection level, the filter class must be selected depending on the type and concentration of the contaminating agents present, in accordance with the specifications supplied by the filter producers. If the working area is insufficiently ventilated, or when operators, whether spraying or not, are inside the spraybooth, |
| Safety goggles: | ✓ Safety goggles designed to protect against liquid splashes, with suitable lateral protection (EN166). Clean daily and disinfect at regular intervals in accordance with the instructions of the manufacturer. |
| Face shield: | No. |
| Gloves: | ✓ Gloves resistant against chemicals (EN374). When repeated or prolonged contact with the product is expected, gloves of protection level 5 or higher should be used, with a breakthrough time of >240 min. When short contact with the product is expected, use gloves with a protection level 2 or higher should be used, with a breakthrough time >30 min. The breakthrough time of the selected glove material should be in accordance with the pretended period of use. There are several factors (for example, temperature), they do in practice the period of use of a protective gloves resistant against chemicals is clearly lower than the established standard EN374. Due to the wide variety of circumstances and possibilities, the instructions/specifications provided by the glove supplier should be taken into account. Use the proper technique of removing gloves (without touching glove's outer surface) to avoid contact of the product with the skin. The gloves should be immediately replaced when any sign of degradation is noted. |
| Boots: | No. |
| Apron: | No. |
| Clothing: | Advisable. |

- Thermal hazards:

Not applicable (the product is handled at room temperature).

ENVIRONMENTAL EXPOSURE CONTROLS:

Avoid any spillage in the environment. Avoid any release into the atmosphere.

- Spills on the soil:

Prevent contamination of soil.

- Spills in water:

Do not allow to escape into drains, sewers or water courses.

-Water Management Act:

This product does not contain any substance included in the list of priority substances in the field of water policy under Directive 2000/60/EC~2013/39/EU.

- Emissions to the atmosphere:

Because of volatility, emissions to the atmosphere while handling and use may result. Avoid any release into the atmosphere.

VOC (product ready for use*):

It is applicable the Directive 2004/42/EC, on the limitation of emissions of volatile compounds due to the use of organic solvents: PAINTS AND VARNISHES (defined in the Directive 2004/42/EC, Annex I.1): Emission subcategory i) One-pack primer for ferrous substrates, solvent-borne. VOC (product ready for use*): (ARTIDUR GALVANICO Cod. 12168MARGRIS = 100 in volume): 341 g/l* (VOC max.500 g/l* starting from 01.01.2010)

VOC (industrial installations):

If this product is used in an industrial installation, it must be verified if it is applicable the Directive 2010/75/CE (DL.127/2013, on the limitation of emissions of volatile compounds due to the use of organic solvents in certain activities and installations: Solvents: 9,56 % Weight, VOC (supply): 9,96 % Weight, VOC: 8,87 % C (expressed as carbon), Molecular weight (average): 110,73 , Number C atoms (average): 8,22



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:Appearance

Physical state: Liquid
 Colour: Grey
 Odour: Characteristic
 Odour threshold: Not available (mixture).

Change of state

Freezing point: Not available (mixture).
 Initial boiling point: 136,2* °C at 760 mmHg

- Flammability:

Flashpoint 29* °C (Pensky-Martens) CLP 2.6.4.3.
 Lower/upper flammability or explosive limits: Not available - Not available
 Autoignition temperature: 604* °C

Stability

Decomposition temperature: > 500,00* °C

pH-value

pH: Not applicable (non-aqueous media).

- Viscosity:

Dynamic viscosity: Not available.

Kinematic viscosity: Not available.

- Solubility(ies):

Solubility in water Not applicable

Liposolubility: Not applicable (inorganic product).

Partition coefficient: n-octanol/water: Not applicable (mixture).

- Volatility:

Vapour pressure: 5,1454* mmHg at 20°C

Vapour pressure: 3,3236* kPa at 50°C

Evaporation rate: Not available (lack of data).

Density

Relative density: 3,422* at 20/4°C Relative water

Relative vapour density: 3,71* at 20°C 1 atm. Relative air

Particle characteristics

Particle size: Not applicable.

- Explosive properties:

Vapours can form explosive mixtures with air and are able to flame up or explode in presence of an ignition source.

- Oxidizing properties:

Not classified as oxidizing product.

*Estimated values based on the substances composing the mixture.

9.2

OTHER INFORMATION:Information regarding physical hazard classes

Flammable liquids: Combustibility: Theoretical.

Other security features:

VOC (supply): 10,0 % Weight

VOC (supply): 341,0 g/l

Nonvolatile: 90,04 * % Weight 1h. 60°C

The values indicated do not always coincide with product specifications. The data for the product specifications can be found in the corresponding technical data sheet. For additional information concerning physical and chemical properties related to safety and environment, see sections 7 and 12.



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SECTION 10: STABILITY AND REACTIVITY

| | |
|------|--|
| 10.1 | <p>REACTIVITY:</p> <p>- Corrosivity to metals: It is not corrosive to metals.</p> <p>- Pyrophorical properties: It is not pyrophoric.</p> |
| 10.2 | <p>CHEMICAL STABILITY: Stable under recommended storage and handling conditions.</p> |
| 10.3 | <p>POSSIBILITY OF HAZARDOUS REACTIONS: Possible dangerous reaction with water, oxidizing agents, acids, alkalis, amines, alcohols. Reacts violently with water. Exothermic reaction with amines and alcohols. Reacts with water under evolution of CO₂.</p> |
| 10.4 | <p>CONDITIONS TO AVOID:</p> <p>- Heat: Keep away from sources of heat.</p> <p>- Light: If possible, avoid direct contact with sunlight.</p> <p>- Air: The product is not affected by exposure to air, but should not be left the containers open.</p> <p>- Humidity: Avoid humidity. Not applicable (the product is handled at room temperature).</p> <p>- Pressure: Not relevant.</p> <p>- Shock: The product is not sensitive to shocks, but as a recommendation of a general nature should be avoided bumps and rough handling to avoid dents and breakage of packaging, especially when the product is handled in large quantities, and during loading and download operations.</p> |
| 10.5 | <p>INCOMPATIBLE MATERIALS: Keep away from water, oxidizing agents, acids, alkalis, amines, alcohols. Clean the application equipment with a compatible solvent.</p> |
| 10.6 | <p>HAZARDOUS DECOMPOSITION PRODUCTS: As consequence of thermal decomposition, hazardous products may be produced, including isocyanates.</p> |

SECTION 11: TOXICOLOGICAL INFORMATION

No experimental toxicological data on the preparation is available. The toxicological classification for these mixture has been carried out by using the conventional calculation method of the Regulation (EU) No. 1272/2008~2022/692 (CLP).

11.1 **INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) NO 1272/2008 :****ACUTE TOXICITY:**

| Dose and lethal concentrations for individual ingredients: | DL50 (OECD401) mg/kg bw Oral | DL50 (OECD402) mg/kg bw Cutaneous | CL50 (OECD403) mg/m ³ ·4h Inhalation |
|--|---------------------------------|--------------------------------------|--|
| Reaction mass of ethylbenzene and m-xylene and p-xylene | 4300 Rat | 1700 Rat | > 22080 Rat |
| Solvent naphtha (petroleum), light aromatic | 3900 Rat | 3160 Rabbit | |
| Diphenylmethane diisocyanate polymer (PMDI) | > 10000 Rat | 9400 Rabbit | > 310 Rat |
| 1,2,4-trimethylbenzene | 6000 Rat | 3440 Rat | > 10200 Rat |
| Tosil-isocyanate | 2330 Rat | > 2000 Rat | |

| Estimates of acute toxicity (ATE) for individual ingredients: | ATE mg/kg bw Oral | ATE mg/kg bw Cutaneous | ATE mg/m ³ ·4h Inhalation |
|---|----------------------|---------------------------|---|
| Aromatic polyisocyanate prepolymer | - | - | 1500 |
| Reaction mass of ethylbenzene and m-xylene and p-xylene | - | 1700 | 11000 Vapours |
| Diphenylmethane diisocyanate polymer (PMDI) | - | - | 11000 Vapours |
| 1,2,4-trimethylbenzene | - | - | 10200 Vapours |

(*) - Point estimates of acute toxicity corresponding to the classification category (see GHS/CLP Table 3.1.2). These values are designed to be used in the calculation of the ATE for classification of a mixture based on its components and do not represent test results.

(-) - The components that are assumed to have no acute toxicity at the upper threshold of category 4 for the corresponding exposure route are ignored.

- No observed adverse effect level

Not available

- Lowest observed adverse effect level

Not available

INFORMATION ON LIKELY ROUTES OF EXPOSURE: ACUTE TOXICITY:

| Routes of exposure | Acute toxicity | Cat. | Main effects, acute and/or delayed | Criteria |
|--------------------|----------------|------|------------------------------------|----------|
|--------------------|----------------|------|------------------------------------|----------|



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| | | | | |
|-------------------------------|---------------------|---|--|---------------------|
| Inhalation: Not classified | ATE > 20000 mg/m3 | - | Not classified as a product with acute toxicity if inhaled (based on available data, the classification criteria are not met). | GHS/CLP 3.1.3.6. |
| Skin: Not classified | ATE > 5000 mg/kg bw | - | Not classified as a product with acute toxicity in contact with skin (based on available data, the classification criteria are not met). | GHS/CLP 3.1.3.6. |
| Eyes: Not classified | Not available. | - | Not classified as a product with acute toxicity by eye contact (lack of data). | GHS/CLP 1.2.5. |
| Ingestion: Not classified | ATE > 5000 mg/kg bw | - | Not classified as a product with acute toxicity if swallowed (based on available data, the classification criteria are not met). | GHS/CLP 3.1.3.6. |

GHS/CLP 3.1.3.6: Classification of mixtures based on ingredients of the mixture (additivity formula).

CORROSION / IRRITATION / SENSITISATION :

| Danger class | Target organs | Cat. | Main effects, acute and/or delayed | Criteria |
|---|-----------------------|-------|---|-------------------------------|
| - Respiratory corrosion/irritation: Not classified | - | - | Not classified as a product corrosive or irritant by inhalation (based on available data, the classification criteria are not met). | GHS/CLP 1.2.6. 3.8.3.4. |
| - Skin corrosion/irritation: | Skin | Cat.2 | IRRITANT: Causes skin irritation. | GHS/CLP 3.2.3.3. |
| - Serious eye damage/irritation: | Eyes | Cat.2 | IRRITANT: Causes serious eye irritation. | GHS/CLP 3.3.3.3. |
| - Respiratory sensitisation: | Respiratory tract | Cat.1 | SENSITISING: May cause allergy or asthma symptoms or breathing difficulties if inhaled. | GHS/CLP 3.4.3.3. |
| - Skin sensitisation: | Skin | Cat.1 | SENSITISING: May cause an allergic skin reaction. | GHS/CLP 3.4.3.3. |

GHS/CLP 3.2.3.3: Classification of the mixture when data are available for all components or only for some components.

GHS/CLP 3.3.3.3: Classification of the mixture when data are available for all components or only for some components.

GHS/CLP 3.4.3.3: Classification of the mixture when data are available for all components or only for some components.

GHS/CLP 3.8.3.4: Classification of the mixture when data are available for all components or only for some components.

- ASPIRATION HAZARD:

| Danger class | Target organs | Cat. | Main effects, acute and/or delayed | Criteria |
|--|---------------|------|---|----------------------|
| - Aspiration hazard: Not classified | - | - | Not classified as a product hazardous by aspiration (based on available data, the classification criteria are not met). | GHS/CLP 3.10.3.3. |

GHS/CLP 3.10.3.3: Classification of the mixture when data are available for all components or only for some components.

SPECIFIC TARGET ORGANS TOXICITY (STOT): Single exposure (SE) and/or Repeated exposure (RE):

Not classified as a dangerous product for target organs.

GHS/CLP 3.8.3.4: Classification of the mixture when data are available for all components or only for some components.

CMR EFFECTS:

- Carcinogenic effects:

This preparation contains the following ingredients which can cause cancer: Diphenylmethane diisocyanate polymer (PMDI) (Cat.2)

- Genotoxicity:

It is not considered as a mutagenic product.

- Toxicity for reproduction:

Does not harm fertility. Does not harm the unborn child.

- Effects via lactation:

Not classified as a hazardous product for children breast-fed.

DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:

Routes of exposure

May be absorbed by inhalation of vapour, through the skin and by ingestion.

- Short-term exposure:

Exposure to solvent vapour concentrations in excess of the stated occupational exposure limit, may result in adverse health effects, such as mucous membrane and respiratory system irritation and adverse effects on kidneys, liver and central nervous system. Liquid splashes in the eyes may cause irritation and reversible damage. If swallowed, may cause irritation of the throat; other effects may be the same as described in the exposure to vapours. Causes skin irritation.

- Long-term or repeated exposure:



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Repeated or prolonged contact may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

INTERACTIVE EFFECTS:

Not available.

INFORMATION ABOUT TOXICOCINETICS, METABOLISM AND DISTRIBUTION:**- Dermal absorption:**

This preparation contains the following substances for which dermal absorption can be very high: Reaction mass of ethylbenzene and m-xylene and p-xylene.

- Basic toxicokinetics:

Not available.

ADDITIONAL INFORMATION:

Based on the properties of the isocyanate content of this product and existing technical data of similar preparations,

11.2 INFORMATION ON OTHER HAZARDS:**Endocrine disrupting properties:**

This product does not contain substances with endocrine disrupting properties identified or under evaluation.

Other information:

No additional information available.

SECTION 12: ECOLOGICAL INFORMATION

No experimental ecotoxicological data on the preparation as such is available. The ecotoxicological classification for these mixture has been carried out by using the conventional calculation method of the Regulation (EU) No. 1272/2008~2022/692 (CLP).

12.1 TOXICITY:

| - Acute toxicity in aquatic environment for individual ingredients | CL50 (OECD 203) mg/l·96hours | CE50 (OECD 202) mg/l·48hours | CE50 (OECD 201) mg/l·72hours |
|--|---------------------------------|---------------------------------|---------------------------------|
| Reaction mass of ethylbenzene and m-xylene and p-xylene | 14 - Fishes | 16 - Daphniae | 10 - Algae |
| Solvent naphtha (petroleum), light aromatic | 9.2 - Fishes | 6.1 - Daphniae | |
| Diphenylmethane diisocyanate polymer (PMDI) | 1000 - Fishes | 1000 - Daphniae | 1640 - Algae |
| 1,2,4-trimethylbenzene | 7.7 - Fishes | 3.6 - Daphniae | 2.4 - Algae |
| Tosil-isocyanate | 45 - Fishes | 100 - Daphniae | |
| Zinc powder (stabilised) | 2.3 - Fishes | 0.15 - Daphniae | 0.15 - Algae |

| - No observed effect concentration | NOEC (OECD 210) mg/l · 28 days | NOEC (OECD 211) mg/l · 21 days | NOEC (OECD 201) mg/l · 72 hours |
|---|-----------------------------------|-----------------------------------|------------------------------------|
| Diphenylmethane diisocyanate polymer (PMDI) | | 10 - Daphniae | |

- Lowest observed effect concentration

Not available

ASSESSMENT OF AQUATIC TOXICITY:

| Aquatic toxicity | Cat. | Main hazards to the aquatic environment | Criteria |
|-----------------------------|-------|---|-------------------------|
| - Acute aquatic toxicity: | Cat.1 | VERY TOXIC: Very toxic to aquatic life. | GHS/CLP 4.1.3.5.5.3. |
| - Chronic aquatic toxicity: | Cat.1 | VERY TOXIC: Very toxic to aquatic life with long lasting effects. | GHS/CLP 4.1.3.5.5.4. |

CLP 4.1.3.5.5.3: Classification of a mixture for acute hazards, based on summation of classified components.

CLP 4.1.3.5.5.4: Classification of a mixture for chronic (long term) hazards, based on summation of classified components.

12.2 PERSISTENCE AND DEGRADABILITY:**- Biodegradability:**

Not available.

| Aerobic biodegradation for individual ingredients | COD mgO2/g | %DBO/DQO 5 days 14 days 28 days | Biodegradabilidad |
|---|---------------|------------------------------------|-------------------|
| Aromatic polyisocyanate prepolymer | | - - - | Not easy |
| Reaction mass of ethylbenzene and m-xylene and p-xylene | 2620 | 52 81 88 | Easy |
| Solvent naphtha (petroleum), light aromatic | 3195 | 43 - - | Easy |
| Diphenylmethane diisocyanate polymer (PMDI) | | - - 1 | Not easy |
| 1,2,4-trimethylbenzene | 2620 | 54 68 88 | Easy |



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| | | | | | | |
|------|---|---------------------|---|---|---|---------------|
| | Tosil-isocyanate | | - | - | - | Easy |
| | Note: Biodegradability data correspond to an average of data from various bibliographic sources. | | | | | |
| | - Hydrolysis: | | | | | |
| | Not available. | | | | | |
| | - Photodegradability: | | | | | |
| | Not available. | | | | | |
| 12.3 | BIOACCUMULATIVE POTENTIAL: | | | | | |
| | May bioaccumulate. | | | | | |
| | Bioaccumulation for individual ingredients | logPow | | BCF L/kg | | Potential |
| | Aromatic polyisocyanate prepolymer | | | | | Unlikely, low |
| | Reaction mass of ethylbenzene and m-xylene and p-xylene | 3.16 | | 56.5 (calculated) | | Low |
| | Solvent naphtha (petroleum), light aromatic | 3.3 | | 69.9 (calculated) | | Low |
| | Diphenylmethane diisocyanate polymer (PMDI) | 10.5 | | 14 (calculated) | | Low |
| | 1,2,4-trimethylbenzene | 3.63 | | 100 (calculated) | | Low |
| | Tosil-isocyanate | 2.34 | | 16.3 (calculated) | | Unlikely, low |
| | Zinc powder (stabilised) | | | 16700 (calculated) | | Not available |
| 12.4 | MOBILITY IN SOIL: | | | | | |
| | Not available | | | | | |
| | Mobility for individual ingredients | log P _{oc} | | Constant of Henry Pa·m ³ /mol 20°C | | Potential |
| | Reaction mass of ethylbenzene and m-xylene and p-xylene | 2,25 | | 660 (calculated) | | Low |
| | Solvent naphtha (petroleum), light aromatic | 2,96 | | 440 (calculated) | | Low |
| | Diphenylmethane diisocyanate polymer (PMDI) | 9,08 | | | | Low |
| | 1,2,4-trimethylbenzene | 2,86 | | 624 (calculated) | | Low |
| | Tosil-isocyanate | 2,38 | | | | Unlikely, low |
| 12.5 | RESULTS OF PBT AND VPVB ASSESMENT:(Annex XIII of Regulation (EC) no. 1907/2006): | | | | | |
| | Does not contain substances that fulfil the PBT/vPvB criteria. | | | | | |
| 12.6 | ENDOCRINE DISRUPTING PROPERTIES: | | | | | |
| | This product does not contain substances with endocrine disrupting properties identified or under evaluation. | | | | | |
| 12.7 | OTHER ADVERSE EFFECTS: | | | | | |
| | - Ozone depletion potential: | | | | | |
| | Not available. | | | | | |
| | - Photochemical ozone creation potential: | | | | | |
| | Not available. | | | | | |
| | - Earth global warming potential: | | | | | |
| | Not available. | | | | | |

SECTION 13: DISPOSAL CONSIDERATIONS

| | | |
|------|---|-------------|
| 13.1 | WASTE TREATMENT METHODS:Directive 2008/98/EC~Regulation (EU) no. 1357/2014: | |
| | Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. Do not discharge into drains or the environment, dispose at an authorised waste collection point. Waste should be handled and disposed in accordance with current local and national regulations. For exposure controls and personal protection measures, see section 8. | |
| | LER code | Description |
| | | |
| | | Hazardous |
| | Type of waste according to Regulation (EU) No. 1357/2014: | |
| | HP 3 Flammable | |
| | HP 4 Irritant — skin irritation and eye damage | |
| | HP 13 Sensitising | |
| | HP 7 Carcinogenic | |
| | HP 8 Corrosive | |
| | HP 14 Ecotoxic | |
| | Disposal of empty containers:Directive 94/62/EC~2015/720/EU. Decision 2000/532/EC~2014/955/EU: | |
| | Emptied containers and packaging should be disposed in accordance with currently local and national regulations. The classification of packaging as hazardous waste will depend on the degree of emptying of the same, being the holder of the residue responsible for their classification, in accordance with Chapter 15 01 of Decision 2000/532/EC, and forwarding to the appropriate final destination. With contaminated containers and packaging, adopt the same measures as for the product in itself. | |
| | Procedures for neutralising or destroying the product: | |
| | Controlled incineration in special facilities for chemical waste, in accordance with local regulations. | |



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SECTION 14: TRANSPORT INFORMATION

| | |
|------|--|
| 14.1 | <u>UN NUMBER OR ID NUMBER:</u> 1263 |
| 14.2 | <u>UN PROPER SHIPPING NAME:</u> PAINT |
| 14.3 | <p><u>TRANSPORT HAZARD CLASS(ES):</u> <u>Transport by road (ADR 2023) and</u> <u>Transport by rail (RID 2023):</u></p> <ul style="list-style-type: none"> - Class: 3 - Packing group: III - Classification code: F1 - Tunnel restriction code: (E) - Transport category: 3, max. ADR 1.1.3.6. 1000 L - Limited quantities: 5 L (see total exemptions ADR 3.4) - Transport document: Consignment paper. - Instructions in writing: ADR 5.4.3.4 - Special provisions: 163;367;650 <p><u>Transport by sea (IMDG 41-22):</u></p> <ul style="list-style-type: none"> - Class: 3 - Packing group: III - Emergency Sheet (EmS): F-E,S_E - First Aid Guide (MFAG): 310,313 - Marine pollutant: Yes. - Transport document: Conocimiento de embarque. <p><u>Transport by air (ICAO/IATA 2021):</u></p> <ul style="list-style-type: none"> - Class: 3 - Packing group: III - Transport document: Conocimiento aéreo. <p><u>Transport by inland waterways (ADN):</u> Not available</p> |
| 14.4 | <u>PACKING GROUP:</u> See section 14.3 |
| 14.5 | <u>ENVIRONMENTAL HAZARDS:</u> Classified as hazardous for the environment. |
| 14.6 | <u>SPECIAL PRECAUTIONS FOR USER:</u> Ensure that persons transporting the product know what to do in case of accident or spill. Always transport in closed containers that are upright and secure. Ensure adequate ventilation. |
| 14.7 | <u>MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS:</u> Not available. |



SECTION 15: REGULATORY INFORMATION

| | |
|------|---|
| 15.1 | <p><u>SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:</u> The regulations applicable to this product generally are listed throughout this Safety Data Sheet. <u>Restrictions on manufacture, placing on market and use:</u> See section 1.2 <u>Tactile warning of danger:</u> Not applicable (product for professional or industrial use). <u>Child safety protection:</u> Not applicable (the classification criteria are not met). <u>VOC information on the label:</u> Contains VOC max. 341 g/l* for the product ready for use - The limit value 2004/42/EC-IIA cat. i) One-pack primer for ferrous substrates, solvent-borne. is VOC max. 500 g/l (2010) <u>OTHER REGULATIONS:</u> Not available. <u>Control of the risks inherent in major accidents (Seveso III):</u> See section 7.2 <u>Other local legislations:</u> The receiver should verify the possible existence of local regulations applicable to the chemical.</p> |
| 15.2 | <u>CHEMICAL SAFETY ASSESSMENT:</u> A chemical safety assessment has not been carried out for this mixture. |



ARTIDUR GALVANICO GRIS

Code : 12168MARGRIS



Version: 7

Revision: 12/11/2024

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SECTION 16 : OTHER INFORMATION

16.1 [TEXT OF THE PHRASES AND NOTES REFERENCED IN SECTIONS 2 AND/OR 3:](#)[Hazard statements according the Regulation \(EU\) No. 1272/2008~2022/692 \(CLP\), Annex III:](#)

H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH014 Reacts violently with water. H351 Suspected of causing cancer. H373 May cause damage to organs through prolonged or repeated exposure if inhaled. H373 May cause damage to respiratory system through prolonged or repeated exposure if inhaled. H373 May cause damage to hearing organs through prolonged or repeated exposure if inhaled.

[Notes related to the identification, classification and labelling of the substances or mixtures:](#)

Note P : The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P260-P262-P301 + P310- P331 shall apply.

[EVALUATION OF THE INFORMATION ON THE DANGER OF MIXTURES:](#)

See sections 9.1, 11.1 and 12.1.

[ADVICES ON ANY TRAINING APPROPRIATE FOR WORKERS:](#)

It is recommended for all staff that will handle this product to carry out a basic training in occupational risk and prevention, in order to provide understanding and interpretation of Safety Data Sheets and labelling of products as well.

[MAIN LITERATURE REFERENCES AND SOURCES FOR DATA:](#)

- European Chemicals Agency: ECHA, <http://echa.europa.eu/>
- Access to European Union Law, <http://eur-lex.europa.eu/>
- Industrial Solvents Handbook, Ibert Mellan (Noyes Data Co., 1970).
- Threshold Limit Values, (AGCIH, 2021).
- European agreement on the international carriage of dangerous goods by road, (ADR 2023).
- International Maritime Dangerous Goods Code IMDG including Amendment 41-22 (IMO, 2022).

[ABBREVIATIONS AND ACRONYMS:](#)

List of abbreviations and acronyms that can be used (but not necessarily used) in this Safety Data Sheet:

- REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals of the United Nations.
- CLP: European regulation on Classification, Labelling and Packaging of substances and chemical mixtures.
- EINECS: European Inventory of Existing Commercial Chemical Substances.
- ELINCS: European List of Notified Chemical Substances.
- CAS: Chemical Abstracts Service (Division of the American Chemical Society).
- UVCB: Substances of Unknown or Variable composition, complex reaction products or biological materials.
- SVHC: Substances of Very High Concern.
- PBT: Persistent, bioaccumulable and toxic substances.
- vPvB: Very persistent and very bioaccumulable substances.
- VOC: Volatile Organic Compounds.
- DNEL: Derived No-Effect Level (REACH).
- PNEC: Predicted No-Effect Concentration (REACH).
- LC50: Lethal concentration, 50 percent.
- LD50: Lethal dose, 50 percent.
- UN: United Nations Organisation.
- ADR: European agreement concerning the international carriage of dangerous goods by road.
- RID: Regulations concerning the international transport of dangerous goods by rail.
- IMDG: International Maritime code for Dangerous Goods.
- IATA: International Air Transport Association.
- ICAO: International Civil Aviation Organization.

[SAFETY DATA SHEET REGULATIONS:](#)

Safety Data Sheet in accordance with Article 31 of Regulation (EC) No. 1907/2006 (REACH) and Annex of Regulation (EU) No. 2020/878.

[HISTORIC: REVISION:](#)

Version: 6 02/03/2021

Version: 7 12/11/2024

[Changes since previous Safety Data Sheet:](#)

Changes that have been introduced with respect to the previous version due to the structural and content adaptation of the Safety Data Sheet to Regulation (EU) No. 2020/878: All sections.

The information of this Safety Data Sheet, is based on the present state of knowledge and on current UE and national laws, as the users' working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified, without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this Safety Data Sheet is meant as a description of the safety requirements of the product and it is not to be considered as a guarantee of the product's properties.

Safety Data Sheet (SDS) generated with the 6.0.0.183 version of the JMTCHEM software (www.jmtchemsolutions.com).