# Laboratorios Conda S.A - REACTIVO DE KOVACS - KOVACS REAGENT 5205

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

**1.1 Product identifier:** Laboratorios Conda S.A - REACTIVO DE KOVACS - KOVACS REAGENT 5205

**Other means of identification:**

Non-applicable

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

Relevant uses: Culture medium. For professional users only.

Uses advised against: All uses not specified in this section or in section 7.3

**1.3 Details of the supplier of the safety data sheet:**

Laboratorios Conda S.A
C/ La Forja, Nº 9
28850 Torrejón de Ardoz - Madrid - Spain
Phone: +34 761 02 00 - Fax: 916568228
www.condalab.com

**1.4 Emergency telephone number:** Centro Nacional de Toxicología. Horario continuado 24 horas. Teléfono de contacto: +34 915620420

## SECTION 2: HAZARDS IDENTIFICATION **

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

**CLP Regulation (EC) No 1272/2008:**

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Acute Tox. 4: Acute toxicity if swallowed, Category 4, H302
Eye Dam. 1: Serious eye damage, Category 1, H318
Flam. Liq. 3: Flammable liquids, Category 3, H226
Met. Corr. 1: Corrosive to metals, Category 1, H290
Resp. Sens. 1B: Sensitisation, respiratory, Category 1B, H334
Skin Corr. 1: Skin corrosion, Category 1, H314
Skin Sens. 1: Sensitisation, skin, Category 1, H317
STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

**2.2 Label elements:**

**CLP Regulation (EC) No 1272/2008:**

**Danger**

**Hazard statements:**

Acute Tox. 4: H302 - Harmful if swallowed.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Met. Corr. 1: H290 - May be corrosive to metals.
Resp. Sens. 1B: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Corr. 1: H314 - Causes severe skin burns and eye damage.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

**Precautionary statements:**

** *Changes with regards to the previous version*

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## SECTION 2: HAZARDS IDENTIFICATION ** (continued)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P280: Wear protective gloves/protective clothing/eye protection.
P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.3 Other hazards:**

Product fails to meet PBT/vPvB criteria
Endocrine-disrupting properties: The product fails to meet the criteria.

*** Changes with regards to the previous version*

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

**3.1 Substance:**

Non-applicable

**3.2 Mixture:**

**Chemical description:** Mixture of substances

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

| Identification | Chemical name/Classification | | Concentration |
|---|---|---|---|
| CAS: 71-36-3<br>EC: 200-751-6<br>Index: 603-004-00-6<br>REACH: 01-2119484630-38-XXXX | **butan-1-ol**☐¹☐ | ATP CLP00 | **50 - <75 %** |
| | Regulation 1272/2008 | Acute Tox. 4: H302; Eye Dam. 1: H318; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H335; STOT SE 3: H336 - Danger  | |
| CAS: Non-applicable<br>EC: 231-595-7<br>Index: 017-002-01-X<br>REACH: 01-2119484862-27-XXXX | **Hydrochloric acid** ☐¹☐ | ATP CLP00 | **20 - <50 %** |
| | Regulation 1272/2008 | Skin Corr. 1B: H314; STOT SE 3: H335 - Danger  | |
| CAS: 100-10-7<br>EC: 202-819-0<br>Index: Non-applicable<br>REACH: 01-2120752553-54-XXXX | **4-dimethylaminobenzaldehyde**☐¹☐ | Self-classified | **2 - <10 %** |
| | Regulation 1272/2008 | Acute Tox. 3: H301; Aquatic Chronic 3: H412 - Danger  | |

☐¹☐ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

**Other information:**

| Identification | Specific concentration limit |
|---|---|
| Hydrochloric acid<br>CAS: Non-applicable<br>EC: 231-595-7 | % (w/w) >=25: Skin Corr. 1B - H314<br>10<= % (w/w) <25: Skin Irrit. 2 - H315<br>% (w/w) >=25: Eye Dam. 1 - H318<br>10<= % (w/w) <25: Eye Irrit. 2 - H319<br>% (w/w) >=10: STOT SE 3 - H335 |

*** Changes with regards to the previous version*

## SECTION 4: FIRST AID MEASURES

**4.1 Description of first aid measures:**

Request medical assistance immediately, showing the SDS of this product.

**By inhalation:**

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## SECTION 4: FIRST AID MEASURES (continued)

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

**By skin contact:**

May cause an allergic skin reaction. In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,…), seek medical advice with this Safety data Sheet

**By eye contact:**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

**By ingestion/aspiration:**

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

## SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing media:**

**Suitable extinguishing media:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers ($CO_2$).

**Unsuitable extinguishing media:**

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

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

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

**For non-emergency personnel:**

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## SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

**For emergency responders:**

See section 8.

**6.2 Environmental precautions:**

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

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

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling:**

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,…) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

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

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

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

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

There are no occupational exposure limits for the substances contained in the product

**8.2 Exposure controls:**

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
|  Mandatory respiratory tract protection | Filter mask for gases and vapours | CE CAT III | EN 405:2002+A1:2010 | Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. |

C.- Specific protection for the hands

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
|  Mandatory hand protection | Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm) | CE CAT III | EN 420:2004+A1:2010 | Replace the gloves at any sign of deterioration. |

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Ocular and facial protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
|  Mandatory face protection | Face shield | CE CAT II | EN 166:2002<br>EN 167:2002<br>EN 168:2002<br>EN ISO 4007:2018 | Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing. |

E.- Body protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|---|---|---|---|
|  Mandatory complete body protection | Disposable clothing for protection against chemical risks, with antistatic and fireproof properties | CE CAT III | EN 1149-1,2,3<br>EN 13034:2005+A1:2009<br>EN ISO 13982-1:2004/A1:2010<br>EN ISO 6529:2013<br>EN ISO 6530:2005<br>EN ISO 13688:2013<br>EN 464:1994 | For professional use only. Clean periodically according to the manufacturer´s instructions. |
|  Mandatory foot protection | Safety footwear for protection against chemical risk, with antistatic and heat resistant properties | CE CAT III | EN ISO 13287:2013<br>EN ISO 20345:2011<br>EN 13832-1:2019 | Replace boots at any sign of deterioration. |

F.- Additional emergency measures

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Emergency measure | Standards | Emergency measure | Standards |
|---|---|---|---|
|  Emergency shower | ANSI Z358-1<br>ISO 3864-1:2011, ISO 3864-4:2011 |  Eyewash stations | DIN 12 899<br>ISO 3864-1:2011, ISO 3864-4:2011 |

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES **

**9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

| | |
|---|---|
| Physical state at 20 ºC: | Liquid |
| Appearance: | Characteristic |
| Colour: | Yellowish |
| Odour: | Characteristic |
| Odour threshold: | Non-applicable * |

**Volatility:**

| | |
|---|---|
| Boiling point at atmospheric pressure: | 118 ºC |
| Vapour pressure at 20 ºC: | 945 Pa |
| Vapour pressure at 50 ºC: | 5790,5 Pa (5,79 kPa) |
| Evaporation rate at 20 ºC: | Non-applicable * |

**Product description:**

| | |
|---|---|
| Density at 20 ºC: | 935,4 kg/m³ |
| Relative density at 20 ºC: | 0,935 |
| Dynamic viscosity at 20 ºC: | 5,05 cP |
| Kinematic viscosity at 20 ºC: | 5,4 mm²/s |
| Kinematic viscosity at 40 ºC: | Non-applicable * |
| Concentration: | Non-applicable * |
| pH: | Non-applicable * |
| Vapour density at 20 ºC: | Non-applicable * |
| Partition coefficient n-octanol/water 20 ºC: | Non-applicable * |
| Solubility in water at 20 ºC: | Non-applicable * |
| Solubility properties: | Non-applicable * |
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |

**Flammability:**

| | |
|---|---|
| Flash Point: | 29 ºC |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature: | 343 ºC |
| Lower flammability limit: | Not available |

*Not relevant due to the nature of the product, not providing information property of its hazards.

** *Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES ** (continued)

| | |
|---|---|
| Upper flammability limit: | Not available |
| **Particle characteristics:** | |
| Median equivalent diameter: | Non-applicable |

**9.2 Other information:**

**Information with regard to physical hazard classes:**

| | |
|---|---|
| Explosive properties: | Non-applicable * |
| Oxidising properties: | Non-applicable * |
| Corrosive to metals: | H290 May be corrosive to metals. |
| Heat of combustion: | Non-applicable * |
| Aerosols-total percentage (by mass) of flammable components: | Non-applicable * |
| **Other safety characteristics:** | |
| Surface tension at 20 ºC: | Non-applicable * |
| Refraction index: | Non-applicable * |

*Not relevant due to the nature of the product, not providing information property of its hazards.

** *Changes with regards to the previous version*

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|---|---|---|---|---|
| Not applicable | Not applicable | Risk of combustion | Avoid direct impact | Not applicable |

**10.5 Incompatible materials:**

| Acids | Water | Oxidising materials | Combustible materials | Others |
|---|---|---|---|---|
| Not applicable | Not applicable | Avoid direct impact | Not applicable | Avoid alkalis or strong bases |

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

## SECTION 11: TOXICOLOGICAL INFORMATION **

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:**

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

** *Changes with regards to the previous version*

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## SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
  IARC: Non-applicable
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Prolonged exposure can result in specific respiratory hypersensitivity.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

| Identification | Acute toxicity | | Genus |
|---|---|---|---|
| butan-1-ol | LD50 oral | 500 mg/kg (ATEi) | |
| CAS: 71-36-3 | LD50 dermal | 3400 mg/kg | Rabbit |
| EC: 200-751-6 | LC50 inhalation | 24,66 mg/L (4 h) | Rat |
| 4-dimethylaminobenzaldehyde | LD50 oral | 100 mg/kg (ATEi) | |
| CAS: 100-10-7 | LD50 dermal | Non-applicable | |
| EC: 202-819-0 | LC50 inhalation | Non-applicable | |

**11.2 Information on other hazards:**

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

## SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

**Endocrine disrupting properties**

Endocrine-disrupting properties: The product fails to meet the criteria.

**Other information**

Non-applicable

*** Changes with regards to the previous version*

## SECTION 12: ECOLOGICAL INFORMATION **

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Toxicity:**

**Acute toxicity:**

| Identification | Concentration | | Species | Genus |
|---|---|---|---|---|
| butan-1-ol | LC50 | 1740 mg/L (96 h) | Pimephales promelas | Fish |
| CAS: 71-36-3 | EC50 | 1983 mg/L (48 h) | Daphnia magna | Crustacean |
| EC: 200-751-6 | EC50 | 500 mg/L (96 h) | Scenedesmus subspicatus | Algae |
| 4-dimethylaminobenzaldehyde | LC50 | >10 - 100 (96 h) | | Fish |
| CAS: 100-10-7 | EC50 | >10 - 100 (48 h) | | Crustacean |
| EC: 202-819-0 | EC50 | >10 - 100 (72 h) | | Algae |

**Chronic toxicity:**

| Identification | Concentration | | Species | Genus |
|---|---|---|---|---|
| butan-1-ol | NOEC | Non-applicable | | |
| CAS: 71-36-3 EC: 200-751-6 | NOEC | 4,1 mg/L | Daphnia magna | Crustacean |

**12.2 Persistence and degradability:**

| Identification | Degradability | | Biodegradability | |
|---|---|---|---|---|
| butan-1-ol | BOD5 | 1,71 g O2/g | Concentration | Non-applicable |
| CAS: 71-36-3 | COD | 2,46 g O2/g | Period | 19 days |
| EC: 200-751-6 | BOD5/COD | 0,7 | % Biodegradable | 98 % |

**12.3 Bioaccumulative potential:**

*** Changes with regards to the previous version*

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## SECTION 12: ECOLOGICAL INFORMATION ** (continued)

| Identification | Bioaccumulation potential | |
|---|---|---|
| butan-1-ol | BCF | 1 |
| CAS: 71-36-3 | Pow Log | 0.88 |
| EC: 200-751-6 | Potential | Low |

**12.4 Mobility in soil:**

| Identification | Absorption/desorption | | Volatility | |
|---|---|---|---|---|
| butan-1-ol | Koc | 2.44 | Henry | 5,39E-2 Pa·m³/mol |
| CAS: 71-36-3 | Conclusion | Very High | Dry soil | Yes |
| EC: 200-751-6 | Surface tension | 2,567E-2 N/m (25 ºC) | Moist soil | Yes |
| 4-dimethylaminobenzaldehyde | Koc | Non-applicable | Henry | Non-applicable |
| CAS: 100-10-7 | Conclusion | Non-applicable | Dry soil | Non-applicable |
| EC: 202-819-0 | Surface tension | 1,751E-2 N/m (316,85 ºC) | Moist soil | Non-applicable |

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

Product fails to meet PBT/vPvB criteria

**12.6 Endocrine disrupting properties:**

Endocrine-disrupting properties: The product fails to meet the criteria.

**12.7 Other adverse effects:**

Not described

*** Changes with regards to the previous version*

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods:**

| Code | Description | Waste class (Regulation (EU) No 1357/2014) |
|---|---|---|
| 16 05 06* | laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals | Dangerous |

**Type of waste (Regulation (EU) No 1357/2014):**

HP3 Flammable, HP8 Corrosive, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity

**Waste management (disposal and evaluation):**

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## SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

## SECTION 14: TRANSPORT INFORMATION **

**Transport of dangerous goods by land:**

With regard to ADR 2021 and RID 2021:

| | | |
|---|---|---|
| **14.1** | **UN number or ID number:** | UN2920 |
| **14.2** | **UN proper shipping name:** | CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Hydrochloric acid ; butan-1-ol) |
| **14.3** | **Transport hazard class (es):** | 8 |
| | Labels: | 8, 3 |
| **14.4** | **Packing group:** | II |
| **14.5** | **Environmental hazards:** | No |
| **14.6** | **Special precautions for user** | |
| | Special regulations: | 274 |
| | Tunnel restriction code: | D/E |
| | Physico-Chemical properties: | see section 9 |
| | Limited quantities: | 1 L |
| **14.7** | **Maritime transport in bulk according to IMO instruments:** | Non-applicable |

**Transport of dangerous goods by sea:**

With regard to IMDG 39-18:

| | | |
|---|---|---|
| **14.1** | **UN number or ID number:** | UN2920 |
| **14.2** | **UN proper shipping name:** | CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Hydrochloric acid ; butan-1-ol) |
| **14.3** | **Transport hazard class (es):** | 8 |
| | Labels: | 8, 3 |
| **14.4** | **Packing group:** | II |
| **14.5** | **Marine pollutant:** | No |
| **14.6** | **Special precautions for user** | |
| | Special regulations: | 274 |
| | EmS Codes: | F-E, S-C |
| | Physico-Chemical properties: | see section 9 |
| | Limited quantities: | 1 L |
| | Segregation group: | Non-applicable |
| **14.7** | **Maritime transport in bulk according to IMO instruments:** | Non-applicable |

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2022:

** *Changes with regards to the previous version*

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## SECTION 14: TRANSPORT INFORMATION ** (continued)

**14.1 UN number or ID number:** UN2920

**14.2 UN proper shipping name:** CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Hydrochloric acid ; butan-1-ol)

**14.3 Transport hazard class (es):** 8

Labels: 8, 3

**14.4 Packing group:** II

**14.5 Environmental hazards:** No

**14.6 Special precautions for user**

Physico-Chemical properties: see section 9

**14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

*** Changes with regards to the previous version*

## SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Hydrochloric acid (Product-type 2)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**Seveso III:**

| Section | Description | Lower-tier requirements | Upper-tier requirements |
|---|---|---|---|
| P5c | FLAMMABLE LIQUIDS | 5000 | 50000 |

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):**

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The product could be affected by sectorial legislation

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

## SECTION 16: OTHER INFORMATION **

**Legislation related to safety data sheets:**

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

*** Changes with regards to the previous version*

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## SECTION 16: OTHER INFORMATION ** (continued)

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):
· New declared substances
butan-1-ol (71-36-3)
· Removed substances
2-methylpropan-1-ol (78-83-1)
Substances that contribute to the classification (SECTION 2):
· Removed substances
2-methylpropan-1-ol (78-83-1)
Hydrochloric acid
4-dimethylaminobenzaldehyde (100-10-7)
CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):
· Pictograms
· Hazard statements
· Precautionary statements
Information on basic physical and chemical properties (SECTION 9):
· Flash Point
TRANSPORT INFORMATION (SECTION 14):
· UN number
· Packing group

**Texts of the legislative phrases mentioned in section 2:**

H226: Flammable liquid and vapour.
H290: May be corrosive to metals.
H314: Causes severe skin burns and eye damage.
H302: Harmful if swallowed.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317: May cause an allergic skin reaction.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H318: Causes serious eye damage.

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

Acute Tox. 3: H301 - Toxic if swallowed.
Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Irrit. 2: H315 - Causes skin irritation.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

**Classification procedure:**

Flam. Liq. 3: Calculation method (2.6.4.3)
Skin Corr. 1: Calculation method
Acute Tox. 4: Calculation method
Resp. Sens. 1B: Calculation method
Skin Sens. 1: Calculation method
STOT SE 3: Calculation method
STOT SE 3: Calculation method
Eye Dam. 1: Calculation method

**Advice related to training:**

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

http://echa.europa.eu
http://eur-lex.europa.eu

**Abbreviations and acronyms:**

** *Changes with regards to the previous version*

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## SECTION 16: OTHER INFORMATION ** (continued)

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

** *Changes with regards to the previous version*



- END OF SAFETY DATA SHEET -