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Safety data sheet

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

1.1. Product identifier

Code: \$433

Product name UHS HARDENER FAST

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

Intended use Automobile coating

1.3. Details of the supplier of the safety data sheet

Name BS REFINISH - ELLINKO

Full address 15 KLM THESSALONIKI-PERAIA

District and Country 57001 THESSALONIKI

GREECE

Tel. +30 6939731260

Fax

e-mail address of the competent person

responsible for the Safety Data Sheet steve_gagas@yahoo.gr
Product distribution by TSAFA STOYGIANNA

1.4. Emergency telephone number

For urgent inquiries refer to +30 210 7793777

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

| Flammable liquid, category 3 | H226 | Flammable liquid and vapour. |
|--|------|--------------------------------------|
| Acute toxicity, category 4 | H332 | Harmful if inhaled. |
| Specific target organ toxicity - single exposure, category 3 | H335 | May cause respiratory irritation. |
| Skin sensitization, category 1A | H317 | May cause an allergic skin reaction. |
| Specific target organ toxicity - single exposure, category 3 | H336 | May cause drowsiness or dizziness. |
| | | |

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Hazardous to the aquatic environment, chronic toxicity, category 3

H412

Harmful to aquatic life with long lasting effects.

2.2. Label elements.

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

Hazard pictograms:





Signal words:

Warning

Hazard statements:

H226 Flammable liquid and vapour.

H332 Harmful if inhaled.

H335
 H317
 H336
 May cause en allergic skin reaction.
 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Contains isocyanates. May produce an allergic reaction.

EUH208 Contains:

Dibutyl Tin Dilaurate

May produce an allergic reaction.

Precautionary statements:

P102 Keep out of reach of children.

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 / eye protection / face protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER / doctor if you feel unwell.

Contains: ALIPHATIC POLYISOCYANATE

N-BUTYL ACETATE

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2.3. Other hazards.

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

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

| Identification. | Conc. %. | Classification 1272/2008 (CLP). |
|--|------------|--|
| ALIPHATIC POLYISOCYANATE | | |
| CAS. 28182-81-2 | 47,5 - 50 | Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1 H317 |
| EC | | |
| INDEX | | |
| N-BUTYL ACETATE | | |
| CAS. 123-86-4 | 45 - 47,5 | Flam. Liq. 3 H226, STOT SE 3 H336, EUH066 |
| EC. 204-658-1 | | |
| INDEX. 607-025-00-1 | | |
| Solvent naphtha (petroleum), light arom. | | |
| CAS. 64742-95-6 | 2,5 - 3 | Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066 |
| EC. 265-199-0 | | |
| INDEX | | |
| BUTYLGLYCOL ACETATE | | |
| CAS. 112-07-2 | 2,5 - 3 | Acute Tox. 4 H312, Acute Tox. 4 H332 |
| EC. 203-933-3 | | |
| INDEX. 607-038-00-2 | | |
| Dibutyl Tin Dilaurate | | |
| CAS. 77-58-7 | 0,15 - 0,2 | Muta. 2 H341, Repr. 1B H360, STOT SE 1 H370, STOT RE 1 H372, Skin Corr. 1B H314, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 |
| EC | | |
| | | |

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Note: Upper limit is not included into the range.

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

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

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

UNSUITABLE EXTINGUISHING EQUIPMENT

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

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

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

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5.3. Advice for firefighters.

GENERAL INFORMATION

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

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

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

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard.

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

6.2. Environmental precautions.

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

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

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

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

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

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7.2. Conditions for safe storage, including any incompatibilities.

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

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

Country

TWA/8h

mg/m3

ppm

8.1. Control parameters.

Regulatory References:

N-BUTYL ACETATE
Threshold Limit Value.

Туре

| Декември 2003 г Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci DEU Deutschland MAK-und BAT-Werte-Liste 2012 FRA France JORF n°0109 du 10 mai 2012 page 8773 texte n° 102 GBR United Kingdom EH40/2005 Workplace exposure limits GRC Ελλάδα ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012 HRV Hrvatska NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva ITA Italia Decreto Legislativo 9 Aprile 2008, n.81 NLD Nederland Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18 TUR Türkiye 2000/39/EC say Direktifin ekidir Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. TLV-ACGIH ACGIH 2014 | BGR | България | МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 |
|--|------------|-----------------|--|
| FRA France JORF n°0109 du 10 mai 2012 page 8773 texte n° 102 GBR United Kingdom EH40/2005 Workplace exposure limits GRC Ελλάδα ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012 HRV Hrvatska NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva ITA Italia Decreto Legislativo 9 Aprile 2008, n.81 NLD Nederland Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18 TUR Türkiye 2000/39/EC say Direktifin ekidir EU OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. | CZE | Česká Republika | Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany |
| GBR United Kingdom EH40/2005 Workplace exposure limits GRC Ελλάδα ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012 HRV Hrvatska NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva ITA Italia Decreto Legislativo 9 Aprile 2008, n.81 NLD Nederland Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18 TUR Türkiye 2000/39/EC say I Direktifin ekidir EU OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. | DEU | Deutschland | MAK-und BAT-Werte-Liste 2012 |
| GRC Ελλάδα ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012 HRV Hrvatska NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva ITA Italia Decreto Legislativo 9 Aprile 2008, n.81 NLD Nederland Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18 TUR Türkiye 2000/39/EC say I Direktifin ekidir EU OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. | FRA | France | JORF n°0109 du 10 mai 2012 page 8773 texte n° 102 |
| Φεβρουαρίου 2012 HRV Hrvatska NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva ITA Italia Decreto Legislativo 9 Aprile 2008, n.81 NLD Nederland Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18 TUR Türkiye 2000/39/EC say Direktifin ekidir EU OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. | GBR | United Kingdom | EH40/2005 Workplace exposure limits |
| ITA Italia Decreto Legislativo 9 Aprile 2008, n.81 NLD Nederland Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18 TUR Türkiye 2000/39/EC say I Direktifin ekidir EU OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. | GRC | Ελλάδα | · · · · · · · · · · · · · · · · · · · |
| NLD Nederland Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18 TUR Türkiye 2000/39/EC say I Direktifin ekidir EU OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. | HRV | Hrvatska | NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva |
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| 2000/39/EC say Direktifin | NLD | Nederland | |
| Direktifin ekidir EU OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. | TUR | Türkiye | |
| ekidir EU OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. | 2000/39/EC | say | |
| EU OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC. | | | |
| Directive 2000/39/EC. | | OFI FII | Directive 2000/404/ELL Directive 2000/45/EQ. Directive 2004/27/EQ. |
| TLV-ACGIH ACGIH 2014 | EU | UEL EU | |
| | | TLV-ACGIH | ACGIH 2014 |

STEL/15min

ppm

mg/m3

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| TLV | BGR | 710 | | 950 | | | |
|---|-------------|-----|-----|------|-----|-------|--|
| TLV | CZE | 950 | | 1200 | | | |
| MAK | DEU | 480 | 100 | 960 | 200 | | |
| VLEP | FRA | 710 | 150 | 940 | 200 | | |
| WEL | GBR | 724 | 150 | 966 | 200 | | |
| TLV | GRC | 710 | 150 | 950 | 200 | | |
| GVI | HRV | 724 | 150 | 966 | 200 | | |
| | NLD | 150 | | | | | |
| OEL TLV-ACGIH | | 713 | 150 | 950 | 200 | | |
| Predicted no-effect concentration - PNEC. | | | | | | | |
| Normal value in marine wa | | | | 18 | | mg/l | |
| Normal value for fresh water sediment | | | | 981 | | mg/kg | |
| Normal value of STP microorganisms | | | | 356 | | mg/l | |
| Normal value of STF IIICI | Julyanisins | | | | | | |

| Health - Derived no-effect level - DNEL / DMEL | | | | | | | | |
|--|-----------------------|----------------|---------------|---------------------|--------------------|----------------|---------------|------------------|
| | Effects on consumers. | | | | Effects on workers | | | |
| Route of exposure | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Inhalation. | | | VND | 859.7 mg/m3 | | | VND | 960 mg/m3 |

| BUTYLGLYCOL ACETATE | | | | | | | |
|------------------------|---------|--------|-----|------------|-----|-------|--|
| Threshold Limit Value. | | | | | | | |
| Туре | Country | TWA/8h | | STEL/15min | | | |
| | | mg/m3 | ppm | mg/m3 | ppm | | |
| TLV | BGR | 133 | | 333 | | SKIN. | |
| TLV | CZE | 130 | | 300 | | SKIN. | |
| AGW | DEU | 130 | 20 | 520 | 80 | SKIN. | |
| MAK | DEU | 66 | 10 | 132 | 20 | SKIN. | |
| VLEP | FRA | 66,5 | 10 | 333 | 50 | SKIN. | |
| WEL | GBR | 133 | 20 | 332 | 50 | SKIN. | |
| TLV | GRC | 135 | 20 | 270 | 40 | | |
| GVI | HRV | 133 | 20 | 333 | 50 | SKIN. | |
| TLV | ITA | 133 | 20 | 333 | 50 | SKIN. | |
| OEL | NLD | 135 | | 333 | | SKIN. | |
| ESD | TUR | 133 | 20 | 333 | 50 | SKIN. | |
| OEL | EU | 133 | 20 | 333 | 50 | SKIN. | |
| TLV-ACGIH | | 131 | 20 | | | | |
| | | | | | | | |
| Legend: | | | | | | | |

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

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

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8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

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

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

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

SKIN PROTECTION

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

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

FYF PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

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

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

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

ENVIRONMENTAL EXPOSURE CONTROLS.

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

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance liquid

Colour transparent

Odour characteristic of solvent

Odour threshold. Not available. PH. Not available. Melting point / freezing point. Not available.

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Initial boiling point.

Not available.

Boiling range.

Not available.

Flash point. 27 °C.

Not available. Evaporation rate Not available. Flammability (solid, gas) Not available. Lower inflammability limit. Not available. Upper inflammability limit. Not available. Lower explosive limit. Not available. Upper explosive limit. Not available. Vapour pressure. Not available. Vapour density 0,883 Kg/l Relative density. Not available. Solubility Not available. Partition coefficient: n-octanol/water Not available. Auto-ignition temperature. Not available. Decomposition temperature. Not available. Viscosity Not available. Explosive properties Not available. Oxidising properties

9.2. Other information.

Information not available.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

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

N-BUTYL ACETATE: decomposes readily with water, especially when warm.

10.2. Chemical stability.

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

10.3. Possibility of hazardous reactions.

The vapours may also form explosive mixtures with the air.

N-BUTYL ACETATE: risk of explosion on contact with: strong oxidising agents. Can react dangerously with alkaline hydroxides, potassium tert-butoxide.

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Forms explosive mixtures with the air.

10.4. Conditions to avoid.

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

N-BUTYL ACETATE: avoid exposure to moisture, sources of heat and naked flames.

10.5. Incompatible materials.

N-BUTYL ACETATE: water, nitrates, strong oxidising agents, acids and alkalis and potassium tert-butoxide.

10.6. Hazardous decomposition products.

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

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Acute effects: inhalation of this product is harmful. Exposure symptoms may include: stinging and irritated eyes, mouth, nose, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness. In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema and irritation, chemical pneumonia and pulmonary edema.

Acute effects: inhalation of this product may irritate the lower and upper respiratory tract and cause cough and respiratory disorders; at higher concentrations it can also cause pulmonary edema. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurvies, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas. Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

This product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) and have negative effects, such as drowsiness, dizziness, slow reflexes, narcosis.

This product may have a degreasing action on the skin, producing dryness and chapped skin after repeated exposure.

This product contains isocyanates. Producer's specifications are as follows: Ready-to-use products containing isocyanates may irritate mucosas, particularly those of the respiratory system, and may give rise to hypersensitivity reactions. Vapour or aerosol inhalation may lead to sensitization. Please take all the measures used for all solvent-containing products while manipulating isocyanate-containing products. Avoid vapour and aerosol inhalation. People with allergic or asthmatic precedents or subject to respiratory disorders should not handle products containing isocyanates.

N-BUTYL ACETATE: in humans the substance's vapours cause irritation to the eues and nose. In the event of repeated exposure, there is skin irritation, dermatosis (with driness and flaking of the skin) and keratitis.

N-BUTYL ACETATE

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LD50 (Oral).> 6400 mg/kg Rat LD50 (Dermal).> 5000 mg/kg Rabbit LC50 (Inhalation).21,1 mg/l/4h Rat

SECTION 12. Ecological information.

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity.

Information not available.

12.2. Persistence and degradability.

ALIPHATIC POLYISOCYANATE

Solubility in water. mg/l 0,1 - 100

Biodegradability: Information not available.

N-BUTYL ACETATE

Solubility in water. mg/l 1000 - 10000

BUTYLGLYCOL ACETATE Rapidly biodegradable.

12.3. Bioaccumulative potential.

ALIPHATIC

POLYISOCYANATE

Partition coefficient: 5,54

n-octanol/water.

BCF. 367,7

N-BUTYL ACETATE

Partition coefficient: 2,3

n-octanol/water.

BCF. 15,3

BUTYLGLYCOL ACETATE

Partition coefficient: 1,51

n-octanol/water.

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12.4. Mobility in soil.

ALIPHATIC

POLYISOCYANATE

Partition coefficient: 7,3

soil/water.

N-BUTYL ACETATE

Partition coefficient: < 3

soil/water.

12.5. Results of PBT and vPvB assessment.

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

12.6. Other adverse effects.

Information not available.

SECTION 13. Disposal considerations.

13.1. Waste treatment methods.

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

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

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

SECTION 14. Transport information.

14.1. UN number.

ADR / RID, IMDG,

1123

IATA:

14.2. UN proper shipping name.

ADR / RID: BUTYL

ACETATES

SOLUTION

IMDG: BUTYL ACETATES

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code: (D/E)

Packaging

instructions:

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SOLUTION

BUTYL

ACETATES

SOLUTION

14.3. Transport hazard class(es).

Label: 3 Class: 3 ADR / RID:

Class: 3 Label: 3 IMDG:

Class: 3 Label: 3 IATA:



14.4. Packing group.

Ш ADR / RID, IMDG,

IATA:

IATA:

IATA:

14.5. Environmental hazards.

NO ADR / RID: NO IMDG:

NO IATA:

14.6. Special precautions for user.

HIN - Kemler: 33 Limited Tunnel ADR / RID: Quantities: 1 restriction

Special Provision: -

Limited EMS: F-E, S-D IMDG: Quantities: 1

Cargo: Maximum quantity: 60 L

364 Packaging Pass.: Maximum

instructions: quantity: 5 L 353

Special Instructions: А3

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

SECTION 15. Regulatory information.

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

Seveso category. 6

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

Product.

Point. 3 - 40

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisarion (Annex XIV REACH).

None.

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

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Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

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

15.2. Chemical safety assessment.

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

SECTION 16. Other information.

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

Flam. Liq. 3 Flammable liquid, category 3

Muta. 2 Germ cell mutagenicity, category 2

Repr. 1B Reproductive toxicity, category 1B

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STOT SE 1 Specific target organ toxicity - single exposure, category 1

Acute Tox. 4 Acute toxicity, category 4

Specific target organ toxicity - repeated exposure, category 1

Asp. Tox. 1 Aspiration hazard, category 1
Skin Corr. 1B Skin corrosion, category 1B

Specific target organ toxicity - single exposure, category 3

Skin Sens. 1 Skin sensitization, category 1
Skin Sens. 1A Skin sensitization, category 1A

Aquatic Acute 1

Aquatic Chronic 1

Aquatic Chronic 2

Aquatic Chronic 3

Hazardous to the aquatic environment, chronic toxicity, category 1

Hazardous to the aquatic environment, chronic toxicity, category 2

Hazardous to the aquatic environment, chronic toxicity, category 3

H226 Flammable liquid and vapour.

H341 Suspected of causing genetic defects.
H360 May damage fertility or the unborn child.

H370 Causes damage to organs.
H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H372 Causes damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.
 H317 May cause an allergic skin reaction.
 H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.
 Toxic to aquatic life with long lasting effects.
 Hatter
 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Contains isocyanates. May produce an allergic reaction.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%

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- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

Note for users:

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

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

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

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