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| SECTION 1: | Identification of the substance/mixture and of the company/undertaking |
|---|--|
| · 1.1 Product iden | tifier |
| • Trade name: iso | butyl acetate |
| • 1.2 Relevant ider No further releva | 1467 nber 01-2119488971-22 ntified uses of the substance or mixture and uses advised against <i>unt information available.</i> the substance / the mixture Solvent for various applications |
| • 1.3 Details of the • Manufacturer/Su Möller Chemie G Bürgerkamp 1 D-48565 Steinfur Tel.: 02551/9340 Fax: 02551/9340 | mbH & Co. KG rt)-0 |
| · 1.4 Emergency to | tion obtainable from: Product safety department elephone number: Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240 |
| SECTION 2: | Hazards identification |
| GHS02 Flam. Liq. 2 H2. | cording to Regulation (EC) No 1272/2008 2 flame 25 Highly flammable liquid and vapour. 7 36 May cause drowsiness or dizziness. |
| | ing to Regulation (EC) No 1272/2008 classified and labelled according to the CLP regulation. ms |
| | its nmable liquid and vapour. drowsiness or dizziness. atements Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No |
| P241 | smoking. Use explosion-proof [electrical/ventilating/lighting] equipment. (Contd. on page 2) |
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|--------------|--|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P303+P361+P3 | 53 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with |
| | water [or shower]. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international |
| | regulations. |

• Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

· 2.3 Other hazards

The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

· Results of PBT and vPvB assessment

· PBT:

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

· vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

SECTION 3: Composition/information on ingredients

- · 3.1 Substances
- CAS No. Description
- 110-19-0 isobutyl acetate
- Identification number(s) • EC number: 203-745-1
- Index number: 607-026-00-7

SECTION 4: First aid measures

• 4.1 Description of first aid measures

- After inhalation: Supply fresh air.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- *After eye contact: Rinse opened eye for several minutes under running water.*
- After swallowing:
- Rinse out mouth and then drink plenty of water.
- If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture
- *In case of fire, the following can be released: Carbon monoxide, carbon dioxide*
- 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

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SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Avoid contact with eyes and skin
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust). Ensure adequate ventilation.
- **6.4 Reference to other sections** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.
- **SECTION 7: Handling and storage**
- 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Avoid contact with skin, eves and clothing.
- Information about fire and explosion protection: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in well closed containers, cool and dry.
- · Information about storage in one common storage facility: Not mandatory.
- Further information about storage conditions: Protect from heat and direct sunlight.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

110-19-0 isobutyl acetate

IOELV Short-term value: 723 mg/m³, 150 ppm

Long-term value: 241 mg/m³, 50 ppm

• Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

- · Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as personal protective equipment
- Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

• Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves Butyl rubber, BR
- Nitrile rubber, NBR
- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye/face protection



Tightly sealed goggles

SECTION 9: Physical and chemical properties

| 9.1 Information on basic physical and chemical p | properties |
|---|---|
| · General Information | |
| · Colour: | Colourless |
| · Odour: | Fruit-like |
| • Odour threshold: | Not determined. |
| Melting point/freezing point: | Undetermined. |
| Boiling point or initial boiling point and boiling | |
| range | 117.2 °C |
| · Flammability | Not applicable. |
| • Lower and upper explosion limit | Not applicable. |
| Lower: | 2.4 Vol % |
| · Upper: | 10.5 Vol % |
| · Flash point: | 22 °C |
| - | 430 °C |
| Ignition temperature: | |
| Decomposition temperature: $rH(4, \alpha/t) \approx 20.9C$ | Not determined. |
| · pH (4 g/l) at 20 °C | 6 |
| Viscosity: | No.4 dotomic of |
| Kinematic viscosity | Not determined. |
| Dynamic at 20 °C: | 0.70 mPas |
| Solubility | |
| water at 20 °C: | 5.6 g/l |
| • Partition coefficient n-octanol/water (log value) | Not determined. |
| · Vapour pressure at 20 °C: | 21 hPa |
| • Density and/or relative density | |
| · Density at 20 °C: | $0.871 \ g/cm^3$ |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| 9.2 Other information | |
| · Appearance: | |
| · Form: | Fluid |
| Important information on protection of health an | |
| environment, and on safety. | |
| Auto-ignition temperature: | Not determined. |
| Explosive properties: | Product is not explosive. However, formation of |
| Explosive properties. | explosive air/vapour mixtures are possible. |
| . Changa in condition | enprosive an / vapour minures are possible. |
| Change in condition Evaporation rate | Not determined. |
| Evaporation rate | Noi uelermineu. |
| Information with regard to physical hazard class | |
| · Explosives | Void |
| · Flammable gases | Void |
| · Aerosols | Void |
| • Oxidising gases | Void |
| · Gases under pressure | Void |
| · Flammable liquids | |
| Highly flammable liquid and vapour. | |
| · Flammable solids | Void |
| Self-reactive substances and mixtures | Void |
| · · · · · · · · · · · · · · · · · · · | |

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|--|------|--------------------|
| · Pyrophoric liquids | Void | |
| · Pyrophoric solids | Void | |
| Self-heating substances and mixtures | Void | |
| · Substances and mixtures, which emit flamma | ble | |
| gases in contact with water | Void | |
| • Oxidising liquids | Void | |
| • Oxidising solids | Void | |
| · Organic peroxides | Void | |
| • Corrosive to metals | Void | |
| · Desensitised explosives | Void | |

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

- 10.3 Possibility of hazardous reactions Reacts with strong oxidising agents.
- · 10.4 Conditions to avoid Heat, flames and sparks.
- 10.5 Incompatible materials:
- Strong oxidizing agents

Acids.

Bases.

• 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Skin corrosion/irritation Slight irritant effect possible does not require labeling.
- · Serious eye damage/irritation Low irritation possible not required for identification.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- *Reproductive toxicity Based on available data, the classification criteria are not met.*
- STOT-single exposure
- May cause drowsiness or dizziness.

• STOT-repeated exposure Based on available data, the classification criteria are not met.

- · Aspiration hazard Based on available data, the classification criteria are not met.
- 11.2 Information on other hazards
- Endocrine disrupting properties Substance is not listed.

SECTION 12: Ecological information

· 12.1 Toxicity

- Aquatic toxicity:
- LC50/96 h: 17 mg/l (Oryzias latipes)
- EC50/48 h: 25 mg/l (Daphnia magna)
- EC50/72 h: 370 mg/l (Pseudokirchneriella subcapitata)
- 12.2 Persistence and degradability biodegradable
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- **PBT:** This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
- vPvB: This substance is not considered to be very persistent nor very bioaccumulative (vPvB).
- 12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11. (Contd. on page 6)

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- · 12.7 Other adverse effects • Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- · Recommendation Disposal according to local regulations.
- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

| 14.1 UN number or ID number ADR, IMDG, IATA | UN1213 | |
|---|---|--|
| 14.2 UN proper shipping name ADR IMDG, IATA | 1213 ISOBUTYL ACETATE ISOBUTYL ACETATE | |
| 14.3 Transport hazard class(es) | | |
| ADR | | |
| | | |
| Class | 3 (F1) Flammable liquids. | |
| Label | 3 | |
| | | |
| Class Label | 3 Flammable liquids. 3 | |
| | 5 | |
| 14.4 Packing group ADR, IMDG, IATA | II | |
| 14.5 Environmental hazards: Marine pollutant: | No | |
| 14.6 Special precautions for user | Warning: Flammable liquids. | |
| Hazard identification number (Kemler code): | 33 | |
| EMS Number: | F-E,S-D | |
| Stowage Category | В | |
| 14.7 Maritime transport in bulk according to IM instruments | <i>IO</i> Not applicable. | |

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|--|--|
| • Transport/Additional information: | |
| · ADR | |
| · Limited quantities (LQ) | 1L |
| · Excepted quantities (EQ) | Code: E2 |
| | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 500 ml |
| · Transport category | 2 |
| · Tunnel restriction code | D/E |
| ·IMDG | |
| · Limited quantities (LQ) | 1L |
| \cdot Excepted quantities ($\widetilde{E}Q$) | Code: E2 |
| | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 500 ml |
| · UN "Model Regulation": | UN 1213 ISOBUTYL ACETATE, 3, II |

SECTION 15: Regulatory information

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

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

Substance is not listed.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department

- · Contact: Mrs. Steyer
- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 2: Flammable liquids Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) Category 3

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