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

| 1.1 Product identifier | | |
|--|--|--|
| Trade name | ISOCARB 16 | |
| INCI Substance name (REACH / CLP) | Hexyldecanoic Acid 2-Hexyldecanoic acid | |
| 1.2 Relevant identified uses of the subs | tance or mixture and uses advised against | |
| Use | Industrial use raw material for cosmetic agents anti-corrosion agent | |
| Uses advised against | | |
| 1.3 Details of the supplier of the safety data sheet | | |
| Company | SASOL Germany GmbH Anckelmannsplatz 1 20537 Hamburg | |
| | Telephone: +49 40 63684-1000 Telefax: +49 40 63684-3700 | |
| Information (Product safety): | Telephone: + 49 (0) 23 65 - 49 47 05 Telefax: + 49 (0) 23 65 - 49 92 40 | |
| E-mail address | msds-info.germany@de.sasol.com | |
| | | |
| 1.4 Emergency telephone number | | |
| Emergency telephone number | + 49 (0) 5 51 - 1 92 40 (GIZ-Nord Poisons Centre) | |

SECTION 2: HAZARDS IDENTIFICATION

| 2.1 Classification of the substance or i | nixture | |
|--|--------------------------------------|------|
| Classification (REGULATION (EC | ;) No 1272/2008) | |
| Skin sensitisation Category 1 | May cause an allergic skin reaction. | |
| 2.2 Label elements | | |
| Labelling (REGULATION (EC) No | 1272/2008) | |
| Hazard pictograms | | |
| Signal word | Warning | |
| Hazard statements H317 | May cause an allergic skin reaction. | |
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| Precautionary statements | |
|--------------------------|---|
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/ attention. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |
| | |

2.3 Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a substance in the meaning of regulation (EC) 1907/2006.

COMPONENTS TO BE NAMED IN ACCORDANCE WITH REGULATION (EC) 1907/2006 AS WELL AS OTHER HAZARDOUS INGREDIENTS AND CONTAINED SUBSTANCES WITH WORK PLACE LIMIT VALUES

2-Hexyldecanoic acid

| | | | component type: Active ingredient |
|--|--|------|-----------------------------------|
| EC-No.: 246-885-9 REACH No.: | Index-No.: | | CAS-No.: 25354-97-6 |
| Substance name (REACH / C Classification (Regulation (EC) No 1272/2008): | L P): 2-Hexyldecanoic acid Skin Sens. 1B | H317 | |

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

| General advice | If you feel unwell, seek medical advice (show the label where possible). Take off all contaminated clothing immediately. |
|-------------------------|--|
| lf inhaled | Remove from exposure, lie down. If breathing is irregular or stopped, administer artificial respiration. Monitor breathing, give oxygen if necessary. Consult a physician. |
| In case of skin contact | Wash off immediately with plenty of water. Consult a physician. |
| In case of eye contact | Rinse with plenty of water. |
| If swallowed | Consult a physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. |

4.2 Most important symptoms and effects, both acute and delayed

| Most important symptoms and | Symptoms: No information available. |
|---------------------------------|-------------------------------------|
| effects, both acute and delayed | |



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4.3 Indication of any immediate medical attention and special treatment needed

Indication of any immediate medical attention and special treatment needed Treatment: No information available.

SECTION 5: FIREFIGHTING MEASURES

| 5.1 Extinguishing media | |
|--|--|
| Suitable extinguishing media | Water spray, Dry powder, Foam, Carbon dioxide (CO2) |
| 5.2 Special hazards arising from the su | bstance or mixture |
| Specific hazards during firefighting | Dangerous gases or fumes may occur in case of fire. |
| 5.3 Advice for firefighters | |
| Special protective equipment for firefighters | Wear self-contained breathing apparatus for firefighting if necessary. |
| Further information | Standard procedure for chemical fires. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

| 6.1 Personal precautions, protective equipment and emergency procedures | | |
|---|--|--|
| Personal precautions | Use personal protective equipment. | |
| 6.2 Environmental precautions | | |
| Environmental precautions | Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system. | |
| 6.3 Methods and materials for containment and cleaning up | | |
| Methods for cleaning up | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). | |
| 6.4 Reference to other sections | | |
| | For personal protection see section 8. | |

SECTION 7: HANDLING AND STORAGE

| 7.1 Precautions for safe handling | |
|--|---|
| Advice on safe handling | Wear personal protective equipment. |
| Advice on protection against fire and explosion | No special protective measures against fire required. |
| 7.2 Conditions for safe storage, including any incompatibilities | |

Requirements for storage areas No special storage conditions required. and containers



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|--------------------------|--|--|
| Storage class (TRGS 510) | 10: Combustible liquids not in Storage Class 3 | |
| c () | | |
| Other data | Stable under normal conditions. | |
| 7.3 Specific end use(s) | | |
| Specific use(s) | This information is not available. | |

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

National occupational exposure limits

No data available

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

No data available

8.2 Exposure controls

PERSONAL PROTECTIVE EQUIPMENT

| Hand protection | The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other., Please observe the instructions regarding permeability and breakthrough time which an provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time., Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break throug time measured according to EN 374, due to the numerous outside influences (e temperature). gloves suitable for permanent contact: Material: Nitrile rubber/nitrile latex Break through time: >= 480 min Layer thickness: 0,35 mm Material: butyl-rubber Break through time: >= 480 min Layer thickness: 0,5 mm | e e gh |
|--------------------------|--|--------------|
| Eye protection | Safety glasses | |
| Skin and body protection | Protective suit | |
| Hygiene measures | Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feedingstuffs. Wear suitable gloves and eye/face protection. | 1 |
| Protective measures | Avoid contact with eyes. Wear suitable gloves and eye/face protection. | |
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ENVIRONMENTAL EXPOSURE CONTROLS

General advice

Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| Physical state | liquid; 20 °C; 1.013 hPa |
|--|--|
| Form | liquid |
| Colour | colourless |
| Odour | characteristic |
| Odour Threshold | No valid method available |
| | |
| рН | Not applicable, Justification:, insoluble |
| Melting point/range | ca. 16 - 18 °C |
| Flash Point | ca. 170 °C; DIN 51758 |
| Evaporation rate | Not relevant / not applicable |
| Flammability (solid, gas) | not applicable (liquid) |
| Lauran and a tau that | N 17 11 |
| Lower explosion limit | No data available |
| Upper explosion limit | No data available |
| Vapour pressure | < 0,1 hPa; 20 °C |
| Relative vapour density | No data available |
| Density | ca.0,87 - 0,88 g/cm3; 20 °C; DIN 51757 |
| Water solubility | insoluble |
| Partition coefficient: n- octanol/water | log Pow: 4,6; OECD Test Guideline 107 |
| Ignition temperature | No data available |
| Auto-ignition temperature | not auto-flammable |
| Viscosity, dynamic | ca. 62 mPas; 20 °C |
| Explosive properties | Constituents do not contain chemical groups associated with explosivity. |
| Oxidizing properties | not expected based on structure and functional groups |
| | |

9.2 Other data

None known.

SECTION 10: STABILITY AND REACTIVITY



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| Note | No decomposition if stored and applied as directed. | |
|---|---|--|
| 10.2 Chemical stability | | |
| Note | The product is chemically stable. | |
| 10.3 Possibility of hazardous reactions | 5 | |
| Hazardous reactions | No information available.: Hazardous decomposition products formed under fire conditions. | |
| 10.4 Conditions to avoid | | |
| Conditions to avoid | Direct heating, dirt, chemical contamination, sunlight, UV or ionising radiation. | |
| 10.5 Incompatible materials to avoid | | |
| Materials to avoid | No data available; | |
| | | |
| 10.6 Hazardous decomposition products | | |
| Hazardous decomposition products | No decomposition if stored normally. | |
| Thermal decomposition | No decomposition if used as directed. | |

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

| Acute toxicity | | |
|-----------------------------------|---|---|
| Acute oral toxicity | LD50 Rat: > 2.000 mg/kg; OECD Test Guideline 401 Based on available data, the classification criteria are not met. | |
| Acute inhalation toxicity | No data available | |
| Acute dermal toxicity | No data available | |
| Skin corrosion/irritation | | |
| Skin irritation | Rabbit: not irritating; OECD Test Guideline 404 The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). Based on available data, the classification criteria are not met. Test substance: 2-Butyloctanoic acid | |
| Serious eye damage/eye irritation | I | |
| Eye irritation | Rabbit: slightly irritating; OECD Test Guideline 405 The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). Based on available data, the classification criteria are not met. Test substance: 2-Butyloctanoic acid | |
| Respiratory or skin sensitisation | | |
| Sensitisation | Mouse local lymphnode assay Mouse: sensitizing; OECD Test Guideline 429 May cause an allergic skin reaction. | |
| Germ cell mutagenicity | | |
| Genotoxicity in vitro | Ames test; Salmonella typhimurium; with and without metabolic activation: not mutagenic; OECD Test Guideline 471 | |
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|--------------------------|---|--|
| | | |
| | The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). Test substance: 2-Butyloctanoic acid | |
| Genotoxicity in vivo | No data available | |
| Carcinogenicity | | |
| Carcinogenicity | This information is not available. | |
| Reproductive toxicity | | |
| Reproductive toxicity | This information is not available. | |
| Teratogenicity | This information is not available. | |
| STOT - single exposure | | |
| Remarks | The substance or mixture is not classified as specific target organ toxicant, sing exposure. | |
| STOT - repeated exposure | | |
| Remarks | This information is not available. | |
| Repeated dose toxicity | This information is not available. | |
| Aspiration hazard | | |

SECTION 12: ECOLOGICAL INFORMATION

| 12.1 | Toxicity |
|------|----------|
|------|----------|

| Toxiony | |
|--|---|
| Toxicity to fish | No data available |
| Toxicity to fish - Chronic toxicity | No data available |
| Toxicity to daphnia and other aquatic invertebrates | (48 h) Daphnia magna (Water flea) ; static test; OECD Test Guideline 202 In the range of water solubility not toxic under test conditions. The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). Test substance: 2-Decyltetradecanoic acid |
| Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity | No data available |
| Toxicity to aquatic plants | No data available |
| Toxicity to soil dwelling organisms | The study is not necessary. Justification: Readily biodegradable |
| Toxicity to terrestrial flora | The study is not necessary. Justification: Readily biodegradable |
| Toxicity for other terrestrial non-mammalian fauna | The study is not necessary. Justification: Readily biodegradable |

12.2 Persistence and degradability



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|---|--|--|
| | | |
| Biodegradability | Readily biodegradable; > 60 %; 28 d; aerobic; OECD Test Guideline 301B The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). Test substance: 2-Butyloctanoic acid | |
| | 100 %; 21 d; CEC L-33-T-82 | |
| 12.3 Bioaccumulative potential | | |
| Bioaccumulation | No data available | |
| 12.4 Mobility in soil | | |
| Mobility | No data available | |
| 12.5 Results of PBT and vPvB assessment | | |
| Results of PBT assessment | Based on available data, the classification criteria are not met. | |
| 12.6 Other adverse effects | | |
| General advice | None known. | |
| | | |
| | | |

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

| Product | Can be incinerated, when in compliance with local regulations. |
|--|---|
| waste code of the European Union: EWC | The waste code must be determined in agreement with the regional waste disposal authority or company. A waste code in accordance with the European Waste Catalogue (EWC) may not be assigned to this product since it admits of a classification only when the consumer uses it for some purpose. |

SECTION 14: TRANSPORT INFORMATION

| 14.1 UN number | |
|-----------------------------|---------------------|
| ADR | Not dangerous goods |
| RID | Not dangerous goods |
| ADN | Not dangerous goods |
| IMDG | Not dangerous goods |
| ICAO/IATA | Not dangerous goods |
| 14.2 Proper shipping name | |
| ADR | Not dangerous goods |
| RID | Not dangerous goods |
| ADN | Not dangerous goods |
| IMDG | Not dangerous goods |
| ICAO/IATA | Not dangerous goods |
| | |
| 14.3 Transport hazard class | |
| ADR | Not dangerous goods |
| RID | Not dangerous goods |
| | |



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| | ADN | Not dangerous goods | |
|----------------------------|---------------|---------------------------|----|
| | IMDG | Not dangerous goods | |
| | ICAO/IATA | Not dangerous goods | |
| 14.4 F | Packing group | | |
| | ADR | Not dangerous goods | |
| | RID | Not dangerous goods | |
| | ADN | Not dangerous goods | |
| | IMDG | Not dangerous goods | |
| | ICAO/IATA | Not dangerous goods | |
| 14.5 Environmental hazards | | | |
| | ADR | Environmentally hazardous | no |
| | RID | Environmentally hazardous | no |
| | ADN | Environmentally hazardous | no |
| | IMDG | Marine pollutant | no |

14.6 Special precautions for user

Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks

ICAO/IATA

No information available.

Environmentally hazardous

SECTION 15: REGULATORY INFORMATION

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

Occupational restrictions

Employment restrictions for children and young workers in accordance with Directive 94/33/EC and the respective national provisions are to be observed.

no

NATIONAL/OTHER REGULATIONS

| Legislation on the control of major-accident hazards | Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. |
|--|---|
| involving dangerous substances | list entry in the directive:: Not applicable |



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| NOTIFICATION STATUS | | |
|--|------------|---|
| Switzerland. Consolidated Inventory | CH INV | listed (product or constituents are listed) |
| US. Toxic Substances Control Act | TSCA | listed (product or constituents are listed) |
| Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) | DSL | restricted (product or constituents are listed with quantity restrictions) |
| Australia. Industrial Chemical (Notification and Assessment) Act | AICS | not listed (product or constituents are not listed) |
| Japan. Kashin-Hou Law List | ENCS (JP) | listed (product or constituents are listed) |
| Japan. Industrial Safety & Health Law (ISHL) List | ISHL (JP) | listed (product or constituents are listed) |
| Korea. Existing Chemicals Inventory (KECI) | KECI (KR) | listed (product or constituents are listed) |
| Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act | PICCS (PH) | not listed (product or constituents are not listed) |
| China. Inventory of Existing Chemical Substances | INV (CN) | listed (product or constituents are listed) |

Please note: the names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in chapter 3.

15.2 Chemical Safety Assessment

2-Hexyldecanoic acid

A Chemical Safety Assessment is not required for this substance (quantity threshold for registration not reached).

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H317

May cause an allergic skin reaction.

Safety datasheet sections which have been updated:

- 2. Hazards identification
- 3. Composition/information on ingredients
- 15. Regulatory information

Further information:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material



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designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Key or legend to abbreviations and acronyms used in the safety data sheet

| ADN | Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure |
|-----------|---|
| ADR | Accord européen relatif au transport international des marchandises dangereuses par voie de navigation international des marchandises Dangereuses par Route |
| AICS | Australian Inventory of Chemical Substances |
| ANSI | American National Standards Institute |
| ASTM | American Society of Testing and Materials (US) |
| BCF | Bioconcentration factor |
| CLP | Regulation on Classification, Labelling and Packaging of Substances and Mixtures |
| DIN | Deutsches Institut für Normung |
| DNEL | Derived No-Effect Level |
| DSL | Domestic Substances List |
| EC | Effect concentration % |
| ENCS | Existing Notified Chemical Substances (Japan) |
| EWC | European Waste Catalogue |
| IATA | International Air Transport Association |
| IBC | Intermediate Bulk Container |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| ISHL | Industrial Safety and Health Law (Japan) |
| ISO | International Organization for Standardization |
| IUAPC | International Union of Pure and Applied Chemistry |
| KECI | Korea Existing Chemicals Inventory |
| LC | Lethal Concentration,% |
| LD | Lethal Dose,% |
| MARPOL | International Convention for the Prevention of Pollution From Ships |
| NDSL | Non-Domestic Substances List |
| NOAEL | no observable adverse effect level |
| NOEL/NOEC | No Observed-effect level/concentration |
| NZIOC | New Zealand Inventory of Chemicals |
| OECD | Organisation for Economic Co-operation and Development |
| PBT | persistent, bioaccumulative, toxic |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances |
| PNEC | Predicted No-Effect Concentration |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Règlement concernant le transport international ferroviaire de marchandises dangereuses |
| TG | Test Guideline |
| TRGS | Technische Regeln für Gefahrstoffe |
| TSCA | Toxic Substances Control Act |
| vPvB | very persistent, very bioaccumulative |
| WGK | Wassergefährdungsklasse |
| WGN | wassergerannuningskrasse |