



| 1 Identification | |
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| Product identifier | |
| Product name: 6-Heptynoic acid | |
| Stock number: H53519 CAS Number: | |
| 30964-00-2 Relevant identified uses of the substance or mixture and uses advised against. | |
| Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development | |
| Details of the supplier of the safety data sheet Manufacturer/Supplier: | |
| Alfa Aesar | |
| Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill MA 01835-8099 | |
| Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 | |
| Email: tech@alfa.com | |
| www.alfa.com Information Department: Health, Safety and Environmental Department | |
| Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928- | 0789. |
| 2 Hazard(s) identification | |
| Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) | |
| GHS05 Corrosion | |
| | |
| Skin Corr. 1B H314 Causes severe skin burns and eye damage. Eve Dam 1 H318 Causes serious eve damage. | |
| Eye Dam. 1 H318 Causes serious eye damage. Hazards not otherwise classified No information known. | |
| Label elements GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) | |
| Hazard pictograms | |
| | |
| GHS05 | |
| | |
| Signal word Danger Hazard Statements | |
| H314 Causes severe skin burns and eye damage. Precautionary statements | |
| P260 Do not breathe dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. | |
| P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN FYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsin | a. |
| P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsin P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. | 9. |
| P310 Immediately call a POISON CENTER/doctor. | |
| P405 Store locked up. | |
| P501 Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification | |
| D2B - Toxic material causing other toxic effects E - Corrosive material | |
| $\widehat{\mathbf{A}}$ | |
| | |
| Classification system | |
| HMIS ratings (scale 0-4) (Hazardous Materials Identification System) | |
| HEALTH B Health (acute effects) = 3 | |
| File I REACTIVITY I Physical Hazard = 1 | |
| Other hazards | |
| Results of PBT and vPvB assessment PBT: Not applicable. | |
| vPvB: Not applicable. | |
| 3 Composition/information on ingredients | |
| Chemical characterization: Substances CAS# Description: | |
| 30964-00-2 6-Heptynoic acid | |
| 4 First-aid measures | |
| Description of first aid measures General information Immediately remove any clothing soiled by the product. | |
| After inhalation | |
| Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. | |
| After skin contact Immediately wash with water and soap and rinse thoroughly. | |
| Seek immédiate medical advice. | (Contd. on page 2) |
| | USA — |
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(Contd. of page 1) After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed Causes severe skin burns. Causes serious eye damage. Indication of any immediate medical attention and special treatment needed No further relevant information available. 5 Fire-fighting measures Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit. 6 Accidental release measures Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away Ensure adequate ventilation Environmental precautions: Do not allow product to reach sewage system or any water course. Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Dispose of contaminated material as waste according to section 13. Environmental product on the section of th Ensure adequate ventilation. Prevention of secondary hazards: No special measures required. 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. 7 Handling and storage Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Information about protection against explosions and fires: No information known. Conditions for safe storage, including any incompatibilities Storage Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. **Specific end use(s)** No further relevant information available. 8 Exposure controls/personal protection Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. Control parameters Components with limit values that require monitoring at the workplace: he product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data Exposure controls Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid context with the aves and skin. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Recommended filter device for short term use: Use a respirator with multi-purpose combination (US) or type ABEK (EN 14387) as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards such as NIOSH (USA) or CEN (EU). Protection of hands: Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Eye protection: Tightly sealed goggles Full face protection Body protection: Protective work clothing. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Odor: Liauid Not determined (Contd. on page 3)

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| Product name: 6-Heptynoic acid | | | |
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| | | (Contd. of page 2) | |
| Odor threshold: | Not determined. | | |
| pH-value: | Not determined. | | |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: | Not determined 93-94 °C (199-201 °F) (1mm) Not determined | | |
| Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: | 113 °C (235 °F) Not determined Not determined Not determined | | |
| Auto igniting: Danger of explosion: | Not determined. Not determined. | | |
| Explosion limits: Lower: Upper: | Not determined Not determined | | |
| Vapór pressure: Density at 20 °C (68 °F): Relative density Vapor density | Not determined 0.997 g/cm ³ (8.32 lbs/gal) Not determined. Not determined. | | |
| Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water | Not determined. Not determined : Not determined. | | |
| Viscosity: dynamic: kinematic: | Not determined. Not determined. | | |
| Other information | No further relevant information available. | | |
| 10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recom Thermal decomposition / conditions Possibility of hazardous reactions Re Conditions to avoid No further relevar Incompatible materials: Oxidizing age Hazardous decomposition products: | to be avoided: Decomposition will not occur if used and store eacts with strong oxidizing agents t information available. nts | ed according to specifications. | |
| Information on toxicological effects Acute toxicity: Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach. LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: Causes series eye damage. Eye irritation or corrosion: Causes series eye damage. Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No effects known. Seproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Subacute to chronic toxicity: No effects known. | | | |
| Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. Carcinogenic categories OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed. | | | |
| | internet allong cabolance to not listed. | | |
| 12 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. | | | |
| Avoid transfer into the environment. Results of PBT and vPvB assessmer PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relev | t | | |
| 13 Disposal considerations Waste treatment methods Recommendation Consult state, local Uncleaned packagings: Recommendation: Disposal must be n | or national regulations to ensure proper disposal. Pade according to official regulations. | | |
| 14 Transport information | | | |
| UN-Number DOT, IMDG, IATA | UN3265 | | |
| UN proper shipping name DOT IMDG, IATA | Corrosive liquid, acia CORROSIVE LIQUI | idic, organic, n.o.s. (6-Heptynoic acid) ID, ACIDIC, ORGANIC, N.O.S. (6-Heptynoic acid) | |
| | | (Contd. on page 4) | |

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| acc. to OSHA HCS | Printing date 09/22/2016 Revision date 09/21/2016 | | | |
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| Product name: 6-Heptynoic acid | | | | |
| | (Contd. of page 3) | | | |
| Transport hazard class(es) DOT | | | | |
| | | | | |
| Class | 8 Corrosive substances. | | | |
| Label Class | 8 8 (C3) Corrosive substances | | | |
| Label IMDG, IATA | 8 | | | |
| | | | | |
| Class Label | 8 Corrosive substances. 8 | | | |
| Packing group DOT, IMDG, IATA | | | | |
| DOT, IMDG, IATA Environmental hazards: | III Not applicable. | | | |
| Environmental hazards: Special precautions for user | Not applicable. Warning: Corrosive substances | | | |
| EMS Number: Segregation groups | F-A,S-B Acids | | | |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Cod | le Not applicable. | | | |
| Transport/Additional information: | | | | |
| DOT Marine Pollutant (DOT): | No | | | |
| UN "Model Regulation": | UN3265, Corrosive liquid, acidic, organic, n.o.s. (6-Heptynoic acid), 8, III | | | |
| Hazard pictograms GHS05 Signal word Danger Hazard statements H314 Causes severe skin burns and eye damage. Precautionary statements P280 Do not breathe dust/fume/gas/mist/vapours/spray. P281 P281 P291 P281 P291 P281 P291 P281 P293 IF INFALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 Immediately call POISON CONTENTER/doctor. P363 Wash contaminated clothing before reuse. | | | | |
| 16 Other information Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in | | | | |
| Conformance with this Material Safety Data Sheet, or in combination with any of Department issuing SDS: Global Marketing Department Date of preparation / last revision 09/22/2016 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport des marchandises dangereuses par Route (European Agreement IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association (ATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal dose, 50 percent LD50: Lethal dose, 50 percent | other product or process, is the responsibility of the user. | | | |
| | (Contd. on page 5) USA | | | |
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ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA) Skin Corr. 1B: Skin corrosion/intition, Hazard Category 1B Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1 (Contd. of page 4)

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