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| 1 Identification Product identifier Product identifier Product name: Cyclopentyl methyl ketone Stock number: H64744 CAS Number: H64744 CAS Number: 6004-60-0 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 Tei: 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) |
| 3 Composition/information on ingredients Chemical characterization: Substances CAS# Description: 6004-60-0 Cyclopentyl methyl ketone Concentration: ≤100% 4 First-aid measures |
| Description of first aid measures 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 immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. (Contd. on page 2) USA |
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Information for doctor Most important symptoms and effects, both acute and delayed Harmful if swallowed. Causes serious eye irritation. 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 Envire 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). Dispose of contaminated material as waste according to section 13. 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: The 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 Personal protective equipment 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. Do not inhale dust / smoke / mist. Avoid contact with the eyes. 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 b 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. **Penetration time of glove material (in minutes)** Not determined **Eye protection:** Safety glasses **Body protection:** Protective work clothing.

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| <i>y Physical and chemical properties</i> | | | | |
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| Information on basic phys General Information Appearance: Form: Odor: Odor threshold: | sical and chemical properties Liquid Not determined Not determined. | | | |
| pH-value: | Not determined. | | | |
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| | | (Contd. of page 2) |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting: | Not determined 151-156 °C (304-313 °F) Not determined Not determined Not determined Not determined Not determined Not determined. | |
| Danger of explosion: Explosion limits: Lower: Upper: Vapor pressure: Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Viscosity: dynamic: | Not determined. Not determined Not determined Not determined 0.913 g/cm ³ (7.619 lbs/gal) Not determined. Not determined. Not determined. Not determined. Not determined. Not determined. | |
| kinematic: Other information | Not determined. No further relevant information available. | |
| 10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recomm Thermal decomposition / conditions to Possibility of hazardous reactions Re Conditions to avoid No further relevant Incompatible materials: Oxidizing agen Hazardous decomposition products: 0 | nended storage conditions. o be avoided: Decomposition will not occur if used and stored according to specifications. acts with strong oxidizing agents i information available. ts Carbon monoxide and carbon dioxide | |
| Reproductive toxicity: No effects know Specific target organ system toxicity Specific target organ system toxicity Aspiration hazard: No effects known. Subacute to chronic toxicity: No effect Additional toxicological information: Carcinogenic categories | e irritation rous eye irritation. wn. wn. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. m | |
| 12 Ecological information Toxicity Aquatic toxicity: No further relevant infor Persistence and degradability No furthe Bioaccumulative potential No further re Mobility in soil No further relevant inforn Additional ecological information: General notes: Do not allow undiluted product or large q Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further releva | er relevant information available. elevant information available. mation available. ruantities to reach ground water, water course or sewage system. | |
| 13 Disposal considerations Waste treatment methods Recommendation Consult state, local o Uncleaned packagings: Recommendation: Disposal must be ma | r national regulations to ensure proper disposal. ade according to official regulations. | |
| 14 Transport information | | |
| UN-Number DOT, ADN, IMDG, IATA | Not applicable | |
| UN proper shipping name DOT, ADR, ADN, IMDG, IATA | Not applicable | |
| Transport hazard class(es) | | |
| DOT, ADR, ADN, IMDG, IATA Class | Not applicable | |
| Packing group DOT, ADR, IMDG, IATA | Not applicable | |
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USA

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| | (Contd. of page 3) |
| Environmental hazards: | Not applicable. |
| Special precautions for user | Not applicable. |
| Transport in bulk according to Annex II of MARPOL73/78 | 8 and the IBC Code Not applicable. |
| Transport/Additional information: | , |
| DOT Marine Pollutant (DOT): | No |
| UN "Model Regulation": | - |
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| 15 Regulatory information | , |
| Safety, health and environmental regulations/legislation GHS label elements The product is classified and labeled in Hazard pictograms | specific for the substance or mixture a accordance with 29 CFR 1910 (OSHA HCS) |
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| GHS07 | |
| Signal word Warning | |
| Hazard statements H302 Harmful if swallowed. | |
| H319 Causes serious eye irritation. Precautionary statements | |
| P280 Wear protective gloves/protective clothing | g/eye protection/face protection. |
| P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using thi | nis product. |
| P305+P351+P338 IF IN EYES: Rinse cautiously with water f P337+P313 If eye irritation persists: Get medical advic | for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P330 Rinse mouth. | |
| | ER/doctor if you feel unwell. ance with local/regional/national/international regulations. |
| National regulations | |
| to research and development only. This product must be use | on Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted ed by or directly under the supervision of a technically qualified individual as defined by TSCA. This multiple for commercial purposed. |
| product must not be used for commercial purposes or in form This product is not listed on the Canadian Domestic Substan | nces List (DSL) or the Canadian Non-Domestic Substances List (NDSL). |
| SARA Section 313 (specific toxic chemical listings) Subs California Proposition 65 | |
| Prop 65 - Chemicals known to cause cancer Substance is | s not listed. |
| Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not | ot listed. |
| Prop 65 - Developmental toxicity, male Substance is not lis Information about limitation of use: For use only by techni | isted. |
| Other regulations, limitations and prohibitive regulations | |
| The conditions of restrictions according to Article 67 and | he REACH Regulations (EC) No. 1907/2006. Substance is not listed. Ind Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the |
| market and use must be observed. Substance is not listed. | |
| Annex XIV of the REACH Regulations (requiring Authoris Chemical safety assessment: A Chemical Safety Assessm | isation for use) Substance is not listed. |
| Chemical safety assessment: A Unernical Salety Assessing | ient has not been carried out. |
| 16 Other information | the stress information anthered by them, and should make independent judgement of suitability of this |
| information to ensure proper use and protect the health and s conformance with this Safety Data Sheet, or in combination v | t to other information gathered by them, and should make independent judgement of suitability of this I safety of employees. This information is furnished without warranty, and any use of the product not in with any other product or process, is the responsibility of the user. |
| Department issuing SDS: Global Marketing Department Date of preparation / last revision 02/15/2017 / - | |
| Abbreviations and corrent mark | to 15 more American the International Contingent of Department Goode by Road) |
| ADK: Accord europeen sur le transport des marchandises dangeredses par room DOT: US Department of Transportation CAS: Chemical Abstracts Service (division of the American Chemical Society) | ute (European Agreement concerning the International Carriage of Dangerous Goods by Road) |
| HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) | |
| LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent | |
| ADD Lettrain dose, Jobercent VPUB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National, Toxicology Program (USA) | |
| OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) | |

OSHA: Occupational Safety and Health Administration (USÅ) MTP: National Toxicology Program (USÅ) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USÅ) Acute Tox. 4: Acute toxicity, Hazard Category 4 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A