



| Reviewed on 05/30 | //2006 |
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| 1 Identification | |
| Product identifier Product name: Methyl 4-chloro-3-nitrobenzoate | |
| Stock number: L07407 | |
| CAS Number: 14719-83-6 | |
| 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 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) | |
| | |
| GHS07 | |
| Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation. | |
| STOT SE 3 H335 May cause respiratory irritation. 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 | |
| \wedge | |
| | |
| GHS07 | |
| Signal word Warning Hazard statements | |
| H315 Causes skin irritation. H319 Causes serious eye irritation. | |
| H335 May cause respiratory irritation. Precautionary statements | |
| P261 Avoid breathing dust/fume/gas/mist/vapours/sprav | |
| P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. | |
| P405 Store locked up. | |
| WHMIS classification | |
| D2B - Toxic material causing other toxic effects | |
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| Classification system | |
| HMIS ratings (scale 0-4) (Hazardous Materials Identification System) | |
| HEALTH I Health (acute effects) = 1 FIRE I Flammability = 1 | |
| REACTIVITY 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: 14719-83-6 Methyl 4-chloro-3-nitrobenzoate | |
| 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. | |
| Seek îmmediate 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 p | bage 2) USA — |
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Product name: Methyl 4-chloro-3-nitrobenzoate (Contd. of page 1) Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. 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 Nitrogen oxides (NOx) Hydrogen chloride (HCI) 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 material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: 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: Not required. Additional information: No data 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 contact with the eyes and skin. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves The selection of suitable 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. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Crystalline powder Color: Cream Odor: Not determined Odor threshold: Not determined pH-value: Not applicable. Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 77-79 °C (171-174 °F) Not determined Not determined Flash point: Not applicable Flammability (solid, gaseous) Not determined Ignition temperature: Decomposition temperature: Not determined Not determined (Contd. on page 3)

Product name: Mothyl A-chloro-3-nitrohonzoata

Page 3/4 Printing date 11/24/2015 Reviewed on 05/30/2006

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| roduct name: Methyl 4-chloro-3-n | nitrobenzoate | |
| Auto igniting: | Not determined. | (Contd. of page 2 |
| Danger of explosion: | Product does not present an explosion hazard. | |
| Explosion limits: Lower: | Not determined | |
| Upper: | Not determined | |
| Vapor pressure: Density: | Not applicable. Not determined | |
| Relative density | Not determined. | |
| Vapor density Evaporation rate | Not applicable. Not applicable. | |
| Solubility in / Miscibility with | Not determined | |
| Water: Partition coefficient (n-octanol/wate | | |
| Viscosity: dynamic: | Not applicable. | |
| kinematic: | Not applicable. | |
| Other information | No further relevant information available. | |
| 0 Stability and reactivity | | |
| Reactivity No information known. Chemical stability Stable under recor | ommended storage conditions. | |
| Thermal decomposition / condition | ommended storage conditions. Is to be avoided: Decomposition will not occur if used and stored according to specifications. | |
| Possibility of hazardous reactions N Conditions to avoid No further releva | vant information available. | |
| Incompatible materials: Oxidizing ag | gents | |
| Hazardous decomposition products Carbon monoxide and carbon dioxide | S: ; | |
| Nitrogen oxides Hydrogen chloride (HCI) | | |
| 11 Toxicological information | | |
| Information on toxicological effects | s | |
| Acute toxicity: No effects known. | | |
| LD/LC50 valúes that are relevant for Skin irritation or corrosion: Causes | s skin irritation. | |
| Eve irritation or corrosion: Causes s | serious eve irritation. | |
| Germ cell mutagenicity: No effects k | known. known. ata on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. | |
| Carcinogenicity: No classification dat | ata on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. | |
| Reproductive toxicity: No effects kno Specific target organ system toxicit | ity - repeated exposure: No effects known. | |
| Specific target organ system toxicit Aspiration hazard: No effects known. | ity - single exposure: May cause respiratory irritation. | |
| Subacute to chronic toxicity: No effe | ffects known. | |
| | n : To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. | |
| 12 Ecological information | | |
| Toxicity Aquatic toxicity: No further relevant in | information available. | |
| Persistence and degradability No fu Bioaccumulative potential No further | urther relevant information available. | |
| Mobility in soil No further relevant info | | |
| Additiónal ecological information: General notes: | | |
| Do not allow material to be released to | to the environment without proper governmental permits. ge quantities to reach ground water, water course or sewage system. | |
| Avoid transfer into the environment. | | |
| Results of PBT and vPvB assessme PBT: Not applicable. | ent | |
| vPvB: Not applicable. | · · · · · · · · · · · · · · · · · · · | |
| Other adverse effects No further rele | evant information available. | |
| 13 Disposal considerations | | |
| Waste treatment methods Recommendation Consult state. loca | al or national regulations to ensure proper disposal. | |
| Uncleaned packagings: | | |
| | e made according to official regulations. | |
| 14 Transport information Not a hazardous material for transport | tation. | |
| UN-Number DOT, IMDG, IATA | None | |
| UN proper shipping name | | |
| DOT, IMDG, IATA Transport hazard class(es) | None | |
| DOT, ADR, IMDG, IATA | | |
| Class | None | |
| Packing group DOT, IMDG, IATA | None | |
| Environmental hazards: | Not applicable. | |
| Special precautions for user | Not applicable. | |
| Transport in bulk according to Anne | nex II of MARPOL73/78 and the IBC Code Not applicable. | (Contd on page |
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| oduct name: Methyl 4-chloro-3-nitrobenzoate | |
| | (Contd. of pag |
| Transport/Additional information: | Not dangerous according to the above specifications. |
| DOT Marine Pollutant (DOT): | No |
| Regulatory information | |
| Safety, health and environmental regulations/legislatio | on specific for the substance or mixture |
| GHS label elements The product is classified and labeled Hazard pictograms | in accordance with 29 CFR 1910 (OSHA HCS) |
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| Signal word Warning | |
| Hazard statements | |
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| P305+P351+P338 IF IN EYES: Rinse cautiously with wate | if for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P405 Store locked up. | dance with local/regional/national/international regulations. |
| National regulations | |
| to research and development only. This product must be us | tion Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restrict used by or directly under the supervision of a technically qualified individual as defined by TSCA. This |
| product must not be used for commercial purposes or in fo. SARA Section 313 (specific toxic chemical listings) Sul | rmulátions for commercial purposes. Ibstance is not listed. |
| California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance | e is not listed. |
| Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is n | not listed |
| Prop 65 - Developmental toxicity, male Substance is not Information about limitation of use: For use only by tech | t listed. |
| Other regulations, limitations and prohibitive regulation | nnically qualified individuals. ons the REACH Regulations (EC) No. 1907/2006. Substance is not listed. |
| The conditions of restrictions according to Article 67 a | the REACH Regulations (EC) No. 1907/2006. Substance is not listed. and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on |
| market and use must be observed. Substance is not listed. | |
| Annex XIV of the REACH Regulations (requiring Autho Chemical safety assessment: A Chemical Safety Assess | r risation for use) Substance is not listed. |
| | |
| Other information Employers should use this information only as a supplement of the supplement of t | ent 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 conformance with this Material Safety Data Sheet, or in co | nd safety of employees." This information is furnished without warranty, and any use of the product not ombination with any other product or process, is the responsibility of the user. |
| Department issuing SDS: Global Marketing Department | |
| Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation | |
| IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation | |
| CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) | 1 |
| DOT: US Department of Transportation IATA: 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 concentration, 50 percent LD50: Lethal dose, 50 percent 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) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA) | |
| vPvB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) | |
| OSHA: Occupational Safety and Health Administration (USÁ) NTP: National Toxicology Program (USA) | |
| IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA) | |

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