

Safety Data Sheet per OSHA HazCom 2012

Neviewed 0/1 00/20/2009
1 Identification
Product identifier Product name: 3-(Trifluoromethyl)benzyl chloride
Stock number: A16253, L11667
CAS Number: 705-29-3
EC number: 211-884-4
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 The manufacturer Scientific Chemicale Inc.
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)
GHS05 Corrosion
Skin Corr. 1C H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage
H227 Combustible liquid. Hazards not otherwise classified Lachrymator
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 H227 Combustible liquid. H314 Causes severe skin burns and eye damage. Precautionary statements
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
WHMIS classification B3 - Combustible liquid D2B - Toxic material causing other toxic effects E - Corrosive material
Classification system HMIS ratings (scale 0-4) Kacie Lingtification System)
(Hazardous Materials Identification System) HEALTH II HEALTH II FIRE III Fire III
REACTIVITY Physical Házard = 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:
705-29-3 3-(Trifluoromethyl)benzyl chloride Identification number(s): EC number: 211-884-4
4 First-aid measures
Description of first aid measures
General information Immediately remove any clothing soiled by the product. After inhalation Supply foods on a first food provide artificial reprintion. Keep patient warm
Supply fresh air. If required, provide artificial respiration. Keep patient warm. (Contd. on page 2)

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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. of page 1)
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. For safety reasons unsuitable extinguishing agents Water with full jet. 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 Hydrogen fluoride (HF) 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: Keep away from ignition sources. 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. Ensure adequate ventilation. Prevention of secondary hazards: Keep away from ignition sources. Reference to other sections See Section 7 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: Keep ignition sources away. 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. Store away from strong bases. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Store ause(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 end 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. 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: Trightly sealed goggles Full face protective work clothing.	
	(Contd. on page

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9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Liquid Color: Colorless Odor: Pungent Odor threshold: Not determined. pH-value: Not determined. Change in condition Mot determined.	
General Information Liquid Appearance: Color: Form: Coloriess Odor: Pungent Odor threshold: Not determined. pH-value: Not determined. Change in condition Vertice	
Color: Colorless Odor: Pungent Odor threshold: Not determined. pH-value: Not determined. Change in condition Not determined.	
Odor threshold: Not determined. pH-value: Not determined. Change in condition Not determined.	
Change in condition	
Boiling point/Boiling range: 68-70 °C (154-158 °F) (12mm Hg) Sublimation temperature / start: Not determined	
Flash point: 74 °C (165 °F) Flammability (solid, gaseous) Not determined. Ignition temperature: Not determined Decomposition temperature: Not determined Auto igniting: Not determined.	
Danger of explosion: Product does not present an explosion hazard. Explosion limits: Product does not present an explosion hazard.	
Lower: Not determined Upper: Not determined Vapor pressure: Not determined Density at 20 °C (68 °F): 1.254 g/cm³ (10.465 lbs/gal) Relative density Not determined.	
Vapor density Not determined. Evaporation rate Not determined. Solubility in / Miscibility with Not miscible or difficult to mix	
Value: Not inisciple of difficult to mix Partition coefficient (n-octanol/water): Not determined. Viscosity: dynamic: Not determined.	
kinematic: Not determined. Other information No further relevant information available.	
Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions No dangerous reactions known Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Bases Hazardous decomposition products: Carbon monoxide and carbon dioxide Hydrogen fluoride Hydrogen chloride (HCI)	
11 Toxicological information 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 LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: Causes severe skin burns. Eye irritation or corrosion: This product is a lachrymator. Causes serious eye damage. Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: 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. 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 knowledge the acute and chronic toxicity of this substance is not fully knowledge the acute and chronic toxicity of this substance is not fully knowledge the acute and chronic toxicity of this substance is not fully knowledge the acute and chronic toxicity of this substance is not fully knowledge the acute and chronic toxicity of this substance is not fully knowledge the acute and chronic toxicity of this substance is not fully knowledge the acute and chronic toxicity of this substance is not fully knowledge the acute and chronic toxicity of this substance is not fully knowledge the acute and chronic toxicity of this substance is not fully knowledge the acute and chronic toxicity of this substance is not fully knowledge the acute and chronic toxicity of this substance is not fully knowled	r ACGIH.
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 material to be released to the environment without proper governmental permits. Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.	
13 Disposal considerations Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal.	(Contd. on page 4) USA

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Uncleaned packagings: Recommendation: Disposal must be made according to offici	(Contd. of page 3
Transport information	
UN-Number DOT, IMDG, IATA	UN3265
UN proper shipping name DOT	Corrosive liquid, acidic, organic, n.o.s. (3-(Trifluoromethyl)benzyl chloride)
IMDG, IATA	Corrosive liquid, acidic, organic, n.o.s. (3-(Trifluoromethyl)benzyl chloride) CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (3-(Trifluoromethyl)benzyl chloride)
Transport hazard class(es) DOT	
$\mathbf{\nabla}$	
Class Label	8 Corrosive substances. 8
Class Label	8 (C3) Corrosive substances 8
IMDG, IATA	
*	
Class Label	8 Corrosive substances. 8
Packing group DOT, IMDG, IATA	
Environmental hazards:	Not applicable.
Special precautions for user Segregation groups	Warning: Corrosive substances Acids
Transport in bulk according to Annex II of MARPOL73/78 a	
Transport/Additional information:	
DOT Marine Pollutant (DOT):	No
UN "Model Regulation": 5 Regulatory information	UN3265, Corrosive liquid, acidic, organic, n.o.s. (3-(Trifluoromethyl)benzyl chloride), 8, III
UN "Model Regulation":	chloride), 8, III
UN "Model Regulation": 5 Regulatory information Safety, health and environmental regulations/legislation s GHS label elements The product is classified and labeled in a Hazard pictograms	chloride), 8, III pecific for the substance or mixture accordance with 29 CFR 1910 (OSHA HCS) hot surfaces. No smoking. Syray. contaminated clothing. Rinse skin with water/shower. r several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. exe with local/regional/national/international regulations. ental Protection Agency Toxic Substances Control Act Chemical substance InventoryDomestic Substances List (NDSL). ance is not listed. isted. ed. ally qualified individuals. REACH Regulations (EC) No. 1907/2006, Substance is not listed. Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the ation for use) Substance is not listed.
UN "Model Regulation": 5 Regulatory information Safety, health and environmental regulations/legislation s GHS label elements The product is classified and labeled in a Hazard pictograms	chloride), 8, III pecific for the substance or mixture accordance with 29 CFR 1910 (OSHA HCS) not surfaces. No smoking. yspray. contaminated clothing. Rinse skin with water/shower. reveral minutes. Remove contact lenses, if present and easy to do. Continue rinsing. xe with local/regional/national/international regulations. ental Protection Agency Toxic Substances Control Act Chemical substance InventoryDomestic Substances List (NDSL). noce is not listed. inter. REACH Regulations (EC) No. 1907/2006. Substance is not listed. Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on th atton for use) Substance is not listed. pother information gathered by them, and should make independent judgement of suitability of this afely of employees. This information is furnished without warranty, and any use of the product not in nation with any other product or process, is the responsibility of the user.

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- ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent UDS0: Lethal dose, 50 percent UPVB: 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) LR60: International Protection Agency (USA)

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USA