



1 Identification

Product identifier -t-tife ... £.

Product name: <u>Ketotifen fumarate</u>
Stock number: J63708 CAS Number:
34580-14-8 EC number:
252-100-0 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 Ticken Scientific Chemicala Inc
Alia Aesar Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-323-0660 Fax: 800-322-4757 Email: tech @alfa.com www.alfa.com Information Department: Health Safety and Environmental Department
Tel: 800-343-0660 Fay: 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
Acute Tox. 4 H302 Harmful if swallowed. 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
GHS07
Signal word Warning Hazard statements
H302 Harmful if swallowed. Precautionary statements
P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor//if you feel unwell.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor//if you feel unwell. P330 Rinse mouth.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification Not controlled
Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)
(Hazardou's Materials Identification System) MEALTH 2 Health (acute effects) = 2
PRE I Flammability = 1 REACTIVITYI 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:
34580-14-8 Ketotifen fumarate Identification number(s):
EC number: 252-100-ò ´
4 First-aid measures
Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Supply reshair. In required, provide anincial respiration. Reep 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.
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. (Contd. on page 2)

Product name: Ketotifen fumarate		
Special hazards arising from the sub- If this product is involved in a fire, the fo Carbon monoxide and carbon dioxide Sulfur oxides (SOx) Nitrogen oxides (NOx) Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.	stance or mixture llowing can be released:	(Contd. of page 1)
6 Accidental release measures Personal precautions, protective equ Wear protective equipment. Keep unpro Ensure adequate ventilation Environmental precautions: Do not all Methods and material for containmen Prevention of secondary hazards: No Reference to other sections See Section 7 for information on safe ha See Section 8 for information on person See Section 13 for disposal information.	ntected persons away. Iow material to be released to the environment without proper governmental permits. Int and cleaning up: Dispose of contaminated material as waste according to section 13. Ispecial measures required. International protection equipment.	
Conditions for safe storage, including Storage Requirements to be met by storeroon	e. explosions and fires: No information known. g any incompatibilities ns and receptacles: No special requirements. mon storage facility: Store away from oxidizing agents. nditions: ed containers.	
Control parameters Components with limit values that reaction The product does not contain any releve Additional information: No data Exposure controls Personal protective equipment General protective and hygienic meas The usual precautionary measures for h Keep away from foodstuffs, beverages a Remove all soiled and contaminated clo Wash hands before breaks and at the e Maintain an ergonomically appropriate v Breathing equipment: Use suitable res Protection of hands: Impervious gloves Check protective gloves prior to each us	of technical systems: designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. quire monitoring at the workplace: ant quantities of materials with critical values that have to be monitored at the workplace. sures landling chemicals should be followed. and feed. thing immediately. nd of work. vorking environment. spirator when high concentrations are present. se for their proper condition. c depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.	
9 Physical and chemical properties Information on basic physical and ch General Information Appearance: Form: Color: Odor: Odor threshold:		
pH-value: Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature:	Not applicable. Not determined Not determined Not determined Not determined Not determined	

Information on basic physical and ch General Information Appearance:		
Form:	Powder	
Color:	White Not determined	
Odor: Odor threshold:	Not determined Not determined.	
pH-value:	Not applicable.	
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 Not determined Not determined Not determined Not determined Not determined Not determined	
Danger of explosion: Explosion limits:	Not determined.	
Lower:	Not determined	
Upper:	Not determined	
Vapor pressure:	Not applicable.	
Density: Relative density	Not determined Not determined.	
Vapor density	Not applicable.	
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roduct name: Ketotifen fumarate	Reviewed on 03/28/2
	(Contd. of pag
Evaporation rate Solubility in / Miscibility with	Not applicable.
Water: Partition coefficient (n-octanol/water	Not determined r): Not determined.
Viscosity:	
dynamic: kinematic:	Not applicable. Not applicable.
Other information	No further relevant information available.
Stability and reactivity	
Reactivity No information known.	· · · · · · · · · · · · · · · · · · ·
Chemical stability Stable under recon Thermal decomposition / conditions	s to be avoided: Decomposition will not occur if used and stored according to specifications.
Possibility of hazardous reactions R Conditions to avoid No further relevant	Reacts with strong oxidizing agents ant information available.
Incompatible materials: Oxidizing age Hazardous decomposition products:	ients
Carbon monoxide and carbon dioxide	·
Sulfur oxides (SOx) Nitrogen oxides	
Toxicological information	
Information on toxicological effects Acute toxicity:	
Harmful if swållowed.	ical Substances (RTECS) contains acute toxicity data for this substance.
LD/LC50 values that are relevant for	
Oral LD50 360 mg/kg (rat)	
Skin irritation or corrosion: May caus Eye irritation or corrosion: May caus	se irritation
Sensitization: No sensitizing effects ki Germ cell mutagenicity: No effects ki	nown.
Carcinogenicity: No classification data Reproductive toxicity: No effects kno	ta on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Specific target organ system toxicity	t v - repeated exposure: No effects known
Aspiration hazard: No effects known.	y - single exposure: No effects known.
Subacute to chronic toxicity: The Re	egistry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
Ecological information	
Toxicity	
Aquatic toxicity: No further relevant in Persistence and degradability No fur	nformation available.
Bioaccumulative potential No further	r relevant information available.
Mobility in soil No further relevant info Additional ecological information:	ormation available.
General notes: Do not allow material to be released to	o the environment without proper governmental permits.
Do not allow undiluted product or large Avoid transfer into the environment.	e quantities to reach ground water, water course or sewage system.
Results of PBT and vPvB assessment	int
PBT: Not applicable. vPvB: Not applicable.	
Other adverse effects No further relev	vant information available.
Disposal considerations	
	l or national regulations to ensure proper disposal.
Uncleaned packagings: Recommendation: Disposal must be r	
Transport information	
UN-Number DOT, ADN, IMDG, IATA	Not applicable
UN proper shipping name	
DOT, ADN, IMDG, IATA Transport hazard class(es)	Not applicable
DOT, ADR, ADN, IMDG, IATA	
Class	Not applicable
Packing group DOT, IMDG, IATA	Not applicable
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
	ex II of MARPOL73/78 and the IBC Code Not applicable.
Transport/Additional information:	
DOT Marine Pollutant (DOT):	No

Product name: Ketotifen fumarate

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Conta. of page
15 Regulatory information
Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms
GHS07
Signal word Warning Hazard statements H302 Harmful if swallowed. Precautionary statements
P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/…/if you feel unwell.
P330 Rinse mouth. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
National regulations This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricte to research and development only. This product must be 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 formulations for commercial purposes. This product is not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).
California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed
Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Information about limitation of use: For use only by technically qualified individuals.
Other regulations, limitations and prohibitive regulations
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and 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 Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
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 other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms:
Date of preparation / last revision 1/124/2015 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) DOT: US Department of Transportation EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent VPVB: 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)
HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LCSD: Lethal concernation, 50 percent
LUSU: Lethal dose, su percent vPvB: 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

IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

USA -