



1 Identification Product identifier

Product name: Bifonazole Stock number: J63253 CAS Number: 60628-96-8 EC number: -336-6 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. Inerrito Fisher Scheman C. 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 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.

P330 Rinse mouth. P50 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) 1 Health (acute effects) = 1Flammability = 1 Flammability = 1 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: 60628-96-8 Bifonazole Identification number(s): EC number: 262-336-6 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. 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.

Product name: Bifenozolo		
Product name: Bifonazole		
Special hazards arising from the subs If this product is involved in a fire, the foll Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.	tance or mixture lowing can be released:	(Contd. of page 1)
6 Accidental release measures		
Personal precautions, protective equip Wear protective equipment. Keep unprot Ensure adequate ventilation Environmental precautions: Do not allo Methods and material for containment Prevention of secondary hazards: No Reference to other sections See Section 7 for information on safe han See Section 8 for information on persona See Section 13 for disposal information.	ected persons away. The environment without proper governmental permits. ow material to be released to the environment without proper governmental permits. t and cleaning up: Dispose of contaminated material as waste according to section 13. special measures required. ndling	
7 Handling and storage		
Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed of Ensure good ventilation at the workplace Information about protection against of Conditions for safe storage, including	explosions and fires: No information known.	
Storage Requirements to be met by storeroom	any incompatibilities is and receptacles: No special requirements. mon storage facility: Store away from oxidizing agents. inditions:	
Further information about storage con Keep container tightly sealed. Store in cool, dry conditions in well seale Specific end use(s) No further relevant	ed containers.	
8 Exposure controls/personal prote Additional information about design o Properly operating chemical fume hood of		
Control parameters Components with limit values that req The product does not contain any relevan Additional information: No data	uire monitoring at the workplace: nt quantities of materials with critical values that have to be monitored at the workplace.	
Protection of hands: Impervious gloves Check protective gloves prior to each use	andling chemicals should be followed. nd feed. hing immediately. nd of work. orking environment. oirator when high concentrations are present. e for their proper condition.	
Penetration of suitable gloves not only Penetration time of glove material (in 1 Eye protection: Safety glasses Body protection: Protective work clothin	depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. minutes) Not determined ng.	
9 Physical and chemical properties		
Information on basic physical and che General Information Appearance:		
Form: Color:	Powder White to off-white	
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:	142 °C (288 °F) Not determined Not determined Not determined Not determined Not determined	

3 Filysical and chemical propertie	;ə	
Information on basic physical and cl General Information Appearance: Form: Color: Odor: Odor: Odor threshold:	hemical properties Powder White to off-white 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:	142 °C (288 °F) Not determined Not determined Not determined Not determined Not determined Not determined.	
Danger of explosion: Explosion limits: Lower: Upper: Vapor pressure: Density: Relative density Vapor density Evaporation rate	Not determined. Not determined Not determined Not applicable. Not determined Not determined. Not applicable. Not applicable.	(Contd. on page 3) USA –
		00/1

Solubility in / Miscibility with	(Contd. of pa
Water:	Not determined
Partition coefficient (n-octanol/wat Viscosity:	
dynamic: kinematic:	Not applicable. Not applicable.
Other information	No further relevant information available.
O Stability and reactivity Reactivity No information known. Chemical stability Stable under rec Thermal decomposition / condition Possibility of hazardous reactions Conditions to avoid No further relev Incompatible materials: Oxidizing a Hazardous decomposition produc Carbon monoxide and carbon dioxid Nitrogen oxides	rant information available. gents ts:
1 Toxicological information	
Information on toxicological effect	S
Acute toxicity: Harmful if swallowed.	
	nical Substances (RTECS) contains acute toxicity data for components in this product.
LD/LC50 values that are relevant f Oral LD50 1463 mg/kg (rat)	ท เสสรรทาเป็นแบกไ:
Skin irritation or corrosion: May ca	use irritation
Eye irritation or corrosion: May ca Sensitization: No sensitizing effects	known.
Germ cell mutagenicity: No effects	known
Reproductive toxicity: The Registry	ata on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance. ity - repeated exposure: No effects known.
Specific target organ system toxic Specific target organ system toxic	i ty - repeated exposure : No effects known. ity - single exposure : No effects known.
Aspiration hazard: No effects know	i ty - single exposure: No effects known. n. Facto known
Subacute to chronic toxicity: No e Additional toxicological information	ne to the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
2 Ecological information	
	urther relevant information available. er relevant information available. formation available. to the environment without proper governmental permits. ge quantities to reach ground water, water course or sewage system. pent
3 Disposal considerations	
Waste treatment methods	
Recommendation Consult state, loc Uncleaned packagings:	al or national regulations to ensure proper disposal.
Recommendation: Disposal must b	e made according to official regulations.
4 Transport information	
UN-Number DOT, ADN, IMDG, IATA	Not applicable
UN proper shipping name	Not orplicable
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.
• •	nex II of MARPOL73/78 and the IBC Code Not applicable.
Transport/Additional information:	
DOT Morino Bollutant (DOT):	No
Marine Pollutant (DOT): UN "Model Regulation":	No
	-

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)

(Contd. on page 4)

Product name: Bifonazole

(Contd. of page 3) Hazard pictograms ! GHS07 Signal word Warning Hazard statements 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 P501 Rinse mouth. Dispose of contents/container in accordance with local/regional/national/international regulations. 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 restricted 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). SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male 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. conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the use Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - 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 Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) DOT: US Department of Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) 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: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal concentration, 50 percent LD50: Lethal concentration and the administration (USA) WFP: Next Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) MFP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)