





Product name: 3-Bromoveratrole (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 Hydrogen bromide (HBr) 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 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: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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 context with the everage and exin 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: Protection of nands: 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. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Liquid Colorless Color: Not determined Odor: Odor threshold: Not determined. Not determined. pH-value: Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined Not determined Not determined Flash point: Not determined Flammability (solid, gaseous) Ignition temperature: Not determined. Not determined (Contd. on page 3)

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Decomposition temperature:	Not determined	
Auto igniting: Danger of explosion:	Not determined. Product does not present an explosion hazard.	
Explosion limits:		
Lower: Upper:	Not determined Not determined	
Vapor pressure: Density:	Not determined Not determined	
Relative density	Not determined.	
Vapor density Evaporation rate	Not determined. Not determined.	
Solubility in / Miscibility with Water:	Not determined	
Partition coefficient (n-octanol/water		
Viscosity: dynamic:	Not determined.	
kinematic: Other information	Not determined. No further relevant information available.	
10 Stability and reactivity		
Reactivity No information known. Chemical stability Stable under recon	nmended storage conditions.	
Thermal decomposition / conditions Possibility of hazardous reactions N	nmended storage conditions. to be avoided: Decomposition will not occur if used and stored according to specifications. In denersus reactions known.	
Conditions to avoid No further relevant	nt information available.	
Incompatible materials: Oxidizing age Hazardous decomposition products:	ants :	
Carbon monoxide and carbon dioxide Hydrogen bromide		
11 Toxicological information		
Information on toxicological effects		
Acute toxicity: No effects known. LD/LC50 values that are relevant for	classification: No data	
Skin irritation or corrosion: Causes s	skin irritation.	
Eye irritation or corrosion: Causes so Sensitization: No sensitizing effects ki	erious eye irritation. nown.	
Germ cell mutagenicity: No effects kr	10WN.	
Reproductive toxicity: No effects kno	a on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. wn.	
Specific target organ system toxicity	 repeated exposure: No effects known. single exposure: May cause respiratory irritation. 	
Aspiration hazard: No effects known.		
Additional toxicological information:	ncts known. : 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	iformation available. ther relevant information available	
Persistence and degradability No fur Bioaccumulative potential No further	relevant information available.	
Mobility in soil No further relevant info Additional ecological information:	ormation available.	
General notes:	the environment without proper governmental permits.	
Do not allow undiluted product or large	quantities to reach ground water, water course or sewage system.	
Avoid transfer into the environment. Results of PBT and vPvB assessme	nt	
PBT: Not applicable. vPvB: Not applicable.		
Other adverse effects No further relev	/ant information available.	
13 Disposal considerations		
Waste treatment methods	la se a l'anna la classa da companya anna a classa a l	
Uncleaned packagings:	or national regulations to ensure proper disposal.	
Recommendation: Disposal must be r	nade according to official regulations.	
14 Transport information Not a hazardous material for transporta	ation.	
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.	
i ransport in bulk according to Anne.	x II of MARPOL73/78 and the IBC Code Not applicable.	(Contd. on page 4
		USA

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roduct name: 3-Bromoveratrole	
Transport/Additional information:	(Contd. of page) Not dangerous according to the above specifications.
DOT Marine Pollutant (DOT):	No
5 Domilatory information	
5 Regulatory information Safety, health and environmental regulations/legisla GHS label elements The product is classified and labe	ation specific for the substance or mixture vled in accordance with 29 CFR 1910 (OSHA HCS)
Hazard pictograms	
$\langle \mathbf{v} \rangle$	
GHS07	
Signal word Warning Hazard statements H215 Courses ekin irritotion	
H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.	
Precautionary statements	'vapours/sprav.
P280 Wear protective gloves/protective clo P305+P351+P338 IF IN EYES: Rinse cautiously with w	vapours/spray. othing/eye protection/face protection. vater for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. sh air and keep comfortable for breathing.
P405 Store locked up.	
National regulations	cordance with local/regional/national/international regulations. tection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restrict
to research and development only. This product must be product must not be used for commercial purposes or in	e used by or directly under the supervision of a technically qualified individual as defined by TSCA. This
SARA Section 313 (specific toxic chemical listings) California Proposition 65	Substance is not listed.
Prop 65 - Chemicals known to cause cancer Substan Prop 65 - Developmental toxicity Substance is not list	ted
Prop 65 - Developmental toxicity, female Substance Prop 65 - Developmental toxicity, male Substance is	is not listed. not listed.
Information about limitation of use: For use only by t Other regulations, limitations and prohibitive regula	technically qualified individuals. ations to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.
The conditions of restrictions according to Article 6 market and use must be observed.	To the REACH Regulations (EC) No. 1907/2000. Substance is not listed. T and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on th
Substance is not listed. Annex XIV of the REACH Regulations (requiring Aut	thorisation for use) Substance is not listed
Chemical safety assessment: A Chemical Safety Ass	essment has not been carried out.
16 Other information Employers should use this information only as a supple	ment to other information gathered by them, and should make independent judgement of suitability of this
information to ensure proper use and protect the health conformance with this Material Safety Data Sheet, or in	ment to other information gathered by them, and should make independent judgement of suitability of this and safety of employees. This information is furnished without warranty, and any use of the product not in combination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Departme Date of preparation / last revision 11/23/2015 / -	nt
Abbreviations and acronyms:	
IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Soc HMIS: Hazardous Materials Identification System (USA)	siety)
WHMIS: Workplace Hazardous Materials Information System (Canada)	
LCS0: Lethal dose, 50 percent LDS0: Lethal dose, 50 percent vPvB: very Persistent and very Bioaccumulative ACGIH: American Conterence of Governmental Industrial Hygienists (US/ OSHA: Occupational Safety and Health Administration (USÅ) NTP: National Toxicology Program (USÅ) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USÅ)	A)
OSHA: Occupational Safety and Health Administration (USÁ) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer	
EPA: Environmental Protection Agency (USA)	