





Product name: 4,6-Dibromopyrimidine

Melting point/Melting range:

49-52 °C (120-126 °F)

Page 2/4 Printing date 11/24/2015 Reviewed on 09/22/2008

(Contd. of page 1) Information for doctor Most important symptoms and effects, both acute and delayed Causes severe skin burns. Causes serious eve 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. 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 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 Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: Use neutralizing agent. Dispose of contaminated material as waste according to section 13. 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 Recautions for sale manuning 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 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 n **Breathing equipment:** Use suitable respirator when high concentrations are present. **Protection of hands:** 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:** Tightly sealed goggles Full face protection Body protection: Protective work clothing. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Powder Color: Cream Odor: Odor threshold: Not determined Not determined pH-value: Not applicable. Change in condition

Product name: 4 6-Dibromonvrimidine

Page 3/4 Printing date 11/24/2015 Reviewed on 09/22/2008

Product name: 4,6-Dibromopyrimid	ine		
		(0	Contd. of page 2)
Boiling point/Boiling range: Sublimation temperature / start:	Not determined Not determined		
Flash point:	Not applicable		
Flammability (solid, gaseous) Ignition temperature:	Not determined. Not determined		
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:	Not applicable. Not determined		
Density: Relative density	Not determined Not determined.		
Vapor density Evaporation rate	Not applicable. Not applicable.		
Solubility in / Miscibility with			
Water: Partition coefficient (n-octanol/water	Not determined		
Viscosity:	, 		
dynamic: kinematic:	Not applicable. Not applicable.		
Other information	No further relevant information available	le.	
10 Stability and wardinity			
10 Stability and reactivity Reactivity No information known.			
Chemical stability Stable under recom	mended storage conditions.		
Thermal decomposition / conditions Possibility of hazardous reactions N	to be avoided: Decomposition will not out	ccur if used and stored according to specifications.	
Conditions to avoid No further relevant	nt information available.		
Incompatible materials: Oxidizing age Hazardous decomposition products:	nts		
Carbon monoxide and carbon dioxide			
Nitrogen oxides Hydrogen bromide			
11 Toxicological information			
Information on toxicological effects	a strong corrosive affect on mouth and th	nroat and to the danger of perforation of esophagus and stomach.	
LD/LC50 values that are relevant for	classification: No data	noat and to the danger of perioration of esophagus and stomach.	
Skin irritation or corrosion: Causes s Eye irritation or corrosion: Causes se			
Sensitization: No sensitizing effects ki	nown.		
Germ cell mutagenicity: No effects kr Carcinogenicity: No classification data	own. a on carcinogenic properties of this mater	ial is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Reproductive toxicity: No effects kno	wn.		
Specific target organ system toxicity	 repeated exposure: No effects known single exposure: No effects known. 		
Aspiration hazard: No effects known. Subacute to chronic toxicity: No effe	cts known		
Additional toxicological information:	To the best of our knowledge the acute a	and chronic toxicity of this substance is not fully known.	
12 Ecological information			
Toxicity			
Aquatic toxicity: No further relevant in Persistence and degradability No fur	formation available.		
Bioaccumulative potential No further	relevant information available.		
Mobility in soil No further relevant info Additional ecological information:	rmation available.		
General notes:	d	entel a comette	
Do not allow material to be released to Do not allow undiluted product or large	the environment without proper governme quantities to reach ground water, water c	ental permits. course or sewade system.	
Avoid transfer into the environment. Results of PBT and vPvB assessme		<i>.</i> ,	
PBT: Not applicable.	16		
vPvB: Not applicable. Other adverse effects No further relev	ant information available.		
13 Disposal considerations			
Waste treatment methods Recommendation Consult state, local	or national regulations to ensure proper of	disposal.	
Uncleaned packagings: Recommendation: Disposal must be r	0 11		
14 Transport information			
UN-Number DOT, IMDG, IATA		UN3261	
UN proper shipping name			
DOT IMDG, IATA		Corrosive solid, acidic, organic, n.o.s. (4,6-Dibromopyrimidine) CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (4,6-Dibromopyrimi	idine)
			Contd. on page 4

(Contd. on page 4)

	Reviewed on 09/22/2008				
Product name: 4,6-Dibromopyrimidine					
	(Contd. of page 3)				
Transport hazard class(es)					
DOT					
V					
Class	8 Corrosive substances.				
Label Class	8 8 (C4) Corrosive substances				
Label IMDG, IATA	8				
1 H K					
Class	9 Corrective substances				
Label	8 Corrosive substances. 8				
Packing group DOT, IMDG, IATA	III				
Environmental hazards:	Not applicable.				
Special precautions for user	Warning: Corrosive substances				
Segregation groups	Acids				
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Co	ode Not applicable.				
Transport/Additional information: DOT					
DOT Marine Pollutant (DOT):	No				
UN "Model Regulation":	UN3261, Corrosive solid, acidic, organic, n.o.s. (4,6-Dibromopyrimidine), 8, III				
15 Regulatory information					
Safety, health and environmental regulations/legislation specific for the GHS label elements The product is classified and labeled in accordance with Hazard pictograms	substance or mixture h 29 CFR 1910 (OSHA HCS)				
GHS05					
Signal word Danger					
Hazard statements H314 Causes severe skin burns and eye damage.					
Precautionary statements					
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. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.					
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.					
National regulations					
This product is not listed in the U.S. Environmental Protection Agency Toxics to research and development only. This product must be used by or directly u	Substances Control Act Chemical Substance Inventory. Use of this product is restricted inder the supervision of a technically qualified individual as defined by TSCA. This				
product must not be used for commercial purposes or in formulations for com	imercial purposes.				
SARA Section 313 (specific toxic chemical listings) Substance is not liste California Proposition 65	a.				
Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity Substance is not listed					
Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed.					
Pron h5 - Developmental toyicity male Substance is not listed	Pron h5 - Developmental toyicity male Substance is not listed				
Other regulations, limitations and prohibitive regulations					
Other regulations, limitations and prohibitive regulations	dividuals.				
Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regu The conditions of restrictions according to Article 67 and Annex XVII of	dividuals. Iations (EC) No. 1907/2006. Substance is not listed. the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the				
market and use must be observed.	dividuals. Iations (EC) No. 1907/2006. Substance is not listed. the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the				
Substance is not listed.					
market and use must be observed.					
Market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not been 16 Other information	Substance is not listed. n carried out.				
The provided should be approved. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not been 16 Other information Employers should use this information only as a supplement to other information	Substance is not listed. In carried out. tion gathered by them, and should make independent judgement of suitability of this				
The property of the second sec	Substance is not listed. n carried out.				
 market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not beer 16 Other information Employers should use this information only as a supplement to other information to ensure proper use and protect the health and safety of employ conformance with this Material Safety Data Sheet, or in combination with any Department issuing SDS: Global Marketing Department 	Substance is not listed. In carried out. tion gathered by them, and should make independent judgement of suitability of this ees. This information is furnished without warranty, and any use of the product not in other product or process, is the responsibility of the user.				
 market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not beer 16 Other information Employers should use this information only as a supplement to other information to ensure proper use and protect the health and safety of employ conformance with this Material Safety Data Sheet, or in combination with any Department issuing SDS: Global Marketing Department 	Substance is not listed. In carried out. tion gathered by them, and should make independent judgement of suitability of this ees. This information is furnished without warranty, and any use of the product not in other product or process, is the responsibility of the user.				
 market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not beer 16 Other information Employers should use this information only as a supplement to other information to ensure proper use and protect the health and safety of employ conformance with this Material Safety Data Sheet, or in combination with any Department issuing SDS: Global Marketing Department 	Substance is not listed. In carried out. tion gathered by them, and should make independent judgement of suitability of this ees. This information is furnished without warranty, and any use of the product not in other product or process, is the responsibility of the user.				
 market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not beer 16 Other information Employers should use this information only as a supplement to other information to ensure proper use and protect the health and safety of employ conformance with this Material Safety Data Sheet, or in combination with any Department issuing SDS: Global Marketing Department 	Substance is not listed. In carried out. tion gathered by them, and should make independent judgement of suitability of this ees. This information is furnished without warranty, and any use of the product not in other product or process, is the responsibility of the user.				
 market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not beer 16 Other information Employers should use this information only as a supplement to other information to ensure proper use and protect the health and safety of employ conformance with this Material Safety Data Sheet, or in combination with any Department issuing SDS: Global Marketing Department 	Substance is not listed. In carried out. tion gathered by them, and should make independent judgement of suitability of this ees. This information is furnished without warranty, and any use of the product not in other product or process, is the responsibility of the user.				
 market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not beer 16 Other information Employers should use this information only as a supplement to other information to ensure proper use and protect the health and safety of employ conformance with this Material Safety Data Sheet, or in combination with any Department issuing SDS: Global Marketing Department 	Substance is not listed. In carried out. tion gathered by them, and should make independent judgement of suitability of this ees. This information is furnished without warranty, and any use of the product not in other product or process, is the responsibility of the user.				
 Market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not been 16 Other information Employers should use this information only as a supplement to other informat information to ensure proper use and protect the health and safety of employ conformance with this Material Safety Data Sheet, or in combination with any Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: RID: Reglement international concernant le transport des marchandises dangereuses par chemin de f IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Instructions by the "International Civil Aviation Organization" (IATA) ADE: Accord européen sur le transport des marchandises dangereuses par chemin de f MAR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreem IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (USA) WithMIS: Workplace Hazardous Materials Information System (Canada) 	Substance is not listed. In carried out. tion gathered by them, and should make independent judgement of suitability of this ees. This information is furnished without warranty, and any use of the product not in other product or process, is the responsibility of the user.				
 Market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not been 16 Other information Employers should use this information only as a supplement to other informat information to ensure proper use and protect the health and safety of employ conformance with this Material Safety Data Sheet, or in combination with any Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: RID: Reglement international concernant le transport des marchandises dangereuses par chemin de f IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Instructions by the "International Civil Aviation Organization" (IATA) ADE: Accord européen sur le transport des marchandises dangereuses par chemin de f MAR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreem IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (USA) WithMIS: Workplace Hazardous Materials Information System (Canada) 	Substance is not listed. In carried out. tion gathered by them, and should make independent judgement of suitability of this ees. This information is furnished without warranty, and any use of the product not in other product or process, is the responsibility of the user.				
 Market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not been 16 Other information Employers should use this information only as a supplement to other informat information to ensure proper use and protect the health and safety of employ conformance with this Material Safety Data Sheet, or in combination with any Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: RID: Reglement international concernant le transport des marchandises dangereuses par chemin de f IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Instructions by the "International Civil Aviation Organization" (IATA) ADE: Accord européen sur le transport des marchandises dangereuses par chemin de f MAR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreem IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (USA) WithMIS: Workplace Hazardous Materials Information System (Canada) 	tion gathered by them, and should make independent judgement of suitability of this ees. This information is furnished without warranty, and any use of the product not in other product or process, is the responsibility of the user.				
 market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S Chemical safety assessment: A Chemical Safety Assessment has not beer 16 Other information Employers should use this information only as a supplement to other information to ensure proper use and protect the health and safety of employ conformance with this Material Safety Data Sheet, or in combination with any Department issuing SDS: Global Marketing Department 	Substance is not listed. In carried out. tion gathered by them, and should make independent judgement of suitability of this ees. This information is furnished without warranty, and any use of the product not in other product or process, is the responsibility of the user.				