



## Product name: Lidocaine N-ethyl bromide (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 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: 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. 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: Refrigerate Information about storage in one common storage facility: Protect from heat. Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Refrigerate 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: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data Exposure controls Personal protective equipment General protective and hygienic measures 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 present. Protection of hands: Impervious gloves Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable 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: Crystalline solid White Color: Not determined Odor: Odor threshold: Not determined pH-value: Not applicable. Change in condition Melting point/Melting range: Not determined Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Not determined Not determined Not determined. Ignition temperature: Not determined (Contd. on page 3)

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Explosion limits:         Net determined           Upper presure:         Net determined           Upper presure:         Net determined           Variation:         Net applicable           Perturbits:         Net applicable           Perurbits:			
Vapor dansity Market Stream Andrew Stream An	Explosion limits: Lower: Upper: Vapor pressure: Density:	Not determined Not determined Not applicable. Not determined	
Viscosity: Mean in the intervention in the probabile intervent information available.  Stability and reactivity Reactivity to information in the intervent information available.  Stability and reactivity Reactivity to information incombine the available incomposition will not occur if used and stored according to specifications. Prosticity of the available intervent information available.  Composition of notice there in the available incomposition will not occur if used and stored according to specifications. Prosticity of head of the available incomposition products: Composition of notice there in the available.  Composition of notice and according in the available.  Composition of notice and according in the available.  Composition of notice and according in the instead in the instead and stored according to specifications.  Provide the available intervent information available.  Composition of notice and according in the instead intervent information available.  Composition of notice and according in the instead intervent information available.  Composition of notice and according in the instead intervent information available.  DICCO values that are relevant for classification: No data is available from the EPA, IARC, NTP, OSHA or ACGH.  Composition of the avail-information  For coll ungreentity: No enalizing effects known.  Sectific target orgen is ystem toxicity - repeated exposure: No effects known.  Sectific target orgen is ystem toxicity - repeated exposure: No effects known.  Sectific target orgen is ystem toxicity - repeated exposure in the acute and choraic toxicity of this substance is no fully known.  Ecological information  Toxicity  Addition allow the section information available.  Additing and	Vapor density Evaporation rate Solubility in / Miscibility with Water:	Not applicable. Not applicable. Not determined	
Reactivity No information known. Thermal descriptions known. Thermal descriptions known. Thermal descriptions in conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Compatible materials: Incompatible materials: Inc	Viscosity: dynamic: kinematic:	Not applicable. Not applicable.	
Information on toxicological effects         Information on toxicological effects         LDLCSQ values that are relevant to classification: No data         LDLCSQ values that are relevant to classification: No data         LDLCSQ values that are relevant to classification: No data         Exercised to correspond: Classes serious experimitation.         Semination or correspond: Classes serious experimitation.         Semination or correspond: Classes serious experimitation.         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.         Additional toxicological information:         Toxicity         Additional toxicological information available.         Bioeccumulative potential No turber relevant information available.         Bioeccumulative potential No turber relevant information available.         Mobility in soll No further relevant information available.         Bioeccumulative potential No turber relevant information available.         Mobility in soll No further relevant information available.         Bioeccumulative potential No turber relevant information available.         Mobility in soll No further relevant information available.	Chemical stability Stable under recommender Thermal decomposition / conditions to Possibility of hazardous reactions Re- Conditions to avoid No further relevant Incompatible materials: Oxidizing agents Heat Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides	o be avoided: Decomposition will not occur if used and stored according to specifications. acts with strong oxidizing agents	
Toxicity Aquetic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Mobility in soil 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. Do not allow material to be released to 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 assessment PBT: Not applicable. Other adverse effects No further relevant information available. B Disposal considerations Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to oficial regulations. I Transport information UN-Number DOT, ADN, MDG, IATA Transport hazard class(es) DOT, ADN, MDG, IATA Transport hazard class(es) DOT, ADN, MDG, IATA Not applicable DOT, ADN, MDG, IATA Class Not applicable DOT, ADN, MDG, IATA Class Not applicable Environmental hazards: Not applicable Dot aplicable Environmental hazards: Not applicable	Acute toxicity: No effects known. LD/LC50 values that are relevant for c Skin irritation or corrosion: Causes sk Eye irritation or corrosion: Causes se Sensitization: No sensitizing effects kno Germ cell mutagenicity: No effects know Carcinogenicity: No effects know Specific target organ system toxicity Specific target organ system toxicity Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects	in irritation. ious eye irritation. wm. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. n. - <b>repeated exposure:</b> No effects known. - <b>single exposure:</b> May cause respiratory irritation. ts known.	
Aquatic toxicity: No further relevant information available.       Persistence and degradability No further relevant information available.         Bioaccumulative potential No further relevant information available.       Additional ecological information:         Additional ecological information:       General notes:         Do not allow material to be released to the environment without proper governmental permits.       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.       Signosal considerations         Waste treatment methods       Recommendation Consult state, local or national regulations to ensure proper disposal.         Incleased packagings:       Not applicable         UN-Number       Dof, ADN, IMDG, IATA         DoT, ADN, IMDG, IATA       Not applicable         UN proper shipping name       Not applicable         DoT, ADN, MDG, IATA       Not applicable         Do, ADN, IMDG, IATA       Not applicable         DoT, ADN, MDG, IATA       Not applicable         DoT, ADN, IMDG, IATA       Not applicable         DoT, ADN, IMDG, IATA       Not applicable         DoT, ADN, IMDG, IATA       Not applicable <tr< th=""><th>12 Ecological information Toxicity</th><th></th><th></th></tr<>	12 Ecological information Toxicity		
Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.         I Transport information         UN-Number DOT, ADN, IMDG, IATA         Not applicable         UN proper shipping name DOT, ADN, IMDG, IATA         Not applicable         Transport hazard class(es)         DOT, ADR, ADN, IMDG, IATA         Not applicable         Packing group DOT, IMDG, IATA         Not applicable         Environmental hazards:         Not applicable.         Special precautions for user	Aquatic toxicity: No further relevant info Persistence and degradability No furth Bioaccumulative potential No further m Mobility in soil No further relevant inform Additional ecological information: General notes: Do not allow material to be released to th Do not allow undiluted product or large q Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.	er relevant information available. elevant information available. mation available. ne environment without proper governmental permits. uantities to reach ground water, water course or sewage system.	
UN-Number DOT, ADN, IMDG, IATA       Not applicable         UN proper shipping name DOT, ADN, IMDG, IATA       Not applicable         Transport hazard class(es)       Not applicable         DOT, ADR, ADN, IMDG, IATA       Not applicable         Packing group DOT, IMDG, IATA       Not applicable         Environmental hazards:       Not applicable         Special precautions for user       Not applicable.	Recommendation Consult state, local o Uncleaned packagings:		
DOT, ADN, IMDG, IATA       Not applicable         UN proper shipping name DOT, ADN, IMDG, IATA       Not applicable         Transport hazard class(es)       Not applicable         DOT, ADR, ADN, IMDG, IATA       Not applicable         Packing group DOT, IMDG, IATA       Not applicable         Environmental hazards:       Not applicable.         Special precautions for user       Not applicable.	14 Transport information		
DOT, ADN, IMDG, IATA       Not applicable         Transport hazard class(es)       Not applicable         DOT, ADR, ADN, IMDG, IATA       Not applicable         Packing group       Not applicable         DOT, IMDG, IATA       Not applicable         Packing group       Not applicable         Dot, IMDG, IATA       Not applicable         Special precautions for user       Not applicable.	DOT, ADN, IMDG, IATA	Not applicable	
DOT, ADR, ADN, IMDG, IATA     Not applicable       Packing group DOT, IMDG, IATA     Not applicable       Environmental hazards:     Not applicable.       Special precautions for user     Not applicable.	DOT, ADN, IMDG, ĬATA	Not applicable	
Class     Not applicable       Packing group DOT, IMDG, IATA     Not applicable       Environmental hazards:     Not applicable.       Special precautions for user     Not applicable.			
Environmental hazards:       Not applicable.         Special precautions for user       Not applicable.	Class	Not applicable	
Environmental hazards:       Not applicable.         Special precautions for user       Not applicable.	Packing group DOT, IMDG, IATA	Not applicable	
	Environmental hazards:		
	Special precautions for user	Not applicable.	(Contd. on page 4)

(Contd. on page 4)

	Reviewed on 11/06/201.
Product name: Lidocaine N-ethyl bromide	
	(Contd. of page 3
Transport in bulk according to Annex II of MA	ARPOL73/78 and the IBC Code Not applicable.
Transport/Additional information:	
DOT Marine Pollutant (DOT):	No
UN "Model Regulation":	-
I5 Regulatory information Safety, health and environmental regulations, GHS label elements The product is classified ar Hazard pictograms	/legislation specific for the substance or mixture nd labeled in accordance with 29 CFR 1910 (OSHA HCS)
GHS07	
P304+P340 IF INHALED: Remove person P405 Store locked up. P501 Dispose of contents/contained National regulations This product is not listed in the U.S. Environmen to research and development only. This product product must not be used for commercial purpos This product is not listed on the Canadian Dome. SARA Section 313 (specific toxic chemical lis California Proposition 65 Prop 65 - Chemicals known to cause cancer S Prop 65 - Developmental toxicity, female Substance is Prop 65 - Developmental toxicity, male Substa Information about limitation of use: For use of Other regulations, limitations and prohibitive Substance of Very High Concern (SVHC) accd The conditions of restrictions according to Au market and use must be observed. Substance is not listed.	ctive clothing/eyé protection/face protection. v with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. n to fresh air and keep comfortable for breathing. r in accordance with local/regional/national/international regulations. Intal Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricter must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This ses or in formulations for commercial purposes. Institute Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL). Substance is not listed. Substance is not listed. Stance is not listed. ance is not listed. ance is not listed. ance is not listed. ance is not listed.
information to ensure proper use and protect the	supplement to other information gathered by them, and should make independent judgement of suitability of this health and safety of employees. This information is furnished without warranty, and any use of the product not in et, or in combination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing De Date of preparation / last revision 11/24/2015 Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dange DOT: US Department of Transportation CAS: Chemical Abstracts Service (division of the American Cher HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (CL CSO: Lethal dose, 50 percent LD50: Lethal dose, 50 percent vPvB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygier OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) INTP: National Toxicology Program (USA) INTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	partment /- ereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) mical Society) Sanada) nists (USA)