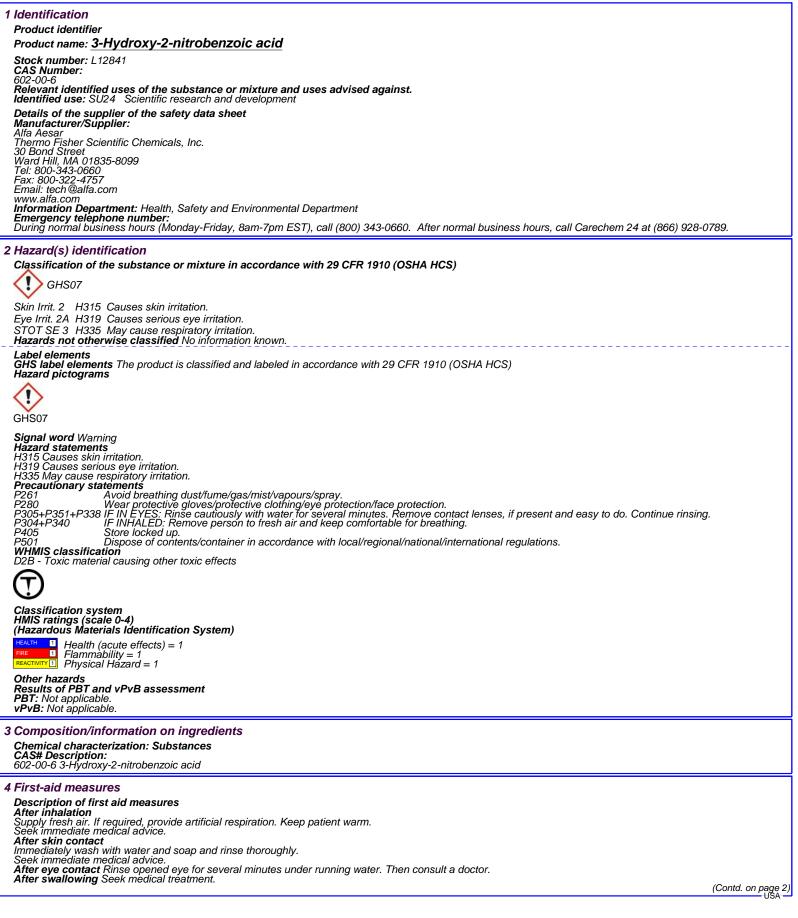


Safety Data Sheet per OSHA HazCom 2012



Product name: 3-Hydroxy-2-nitrobenzoic acid (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) 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. 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 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 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 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: Color: Powder Yellow Odor: Not determined Odor threshold: Not determined pH-value: Not applicable Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 177-181 °C (351-358 °F) Not determined Not determined Flash point: Not applicable Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Not determined. Not determined Not determined (Contd. on page 3)

Product name: 3-Hydroxy-2-nitrobenzoic acid

Product name: 3-Hydroxy-2-nitrobe	enzoic acid	
		(Contd. of page 2)
Auto igniting:	Not determined.	
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.	
Lower: Upper:	Not determined Not determined	
Vapor pressure:	Not applicable.	
Density: Relative density	Not determined Not determined.	
Vapor density	Not applicable.	
Evaporation rate Solubility in / Miscibility with	Not applicable.	
Water: Partition coefficient (n-octanol/water)	Not determined r): Not determined.	
Viscosity: dynamic:	Not applicable.	
kinematic:	Not applicable.	
Other information	No further relevant information available.	
10 Stability and reactivity		
Reactivity No information known		
Chemical stability Stable under recommendations	nmended storage conditions. t o be avoided: Decomposition will not occur if used and stored according to specifications.	
Possibility of hazardous reactions No Conditions to avoid No further relevan	lo dangerous reactions known	
Incompatible materials: Oxidizing age	ents	
Hazardous decomposition products: Carbon monoxide and carbon dioxide		
Nitrogen oxides		
11 Toxicological information		
Information on toxicological effects		
Acute toxicity: No effects known. LD/LC50 values that are relevant for o		
Skin irritation or corrosion: Causes sl Eye irritation or corrosion: Causes se	skin irritation.	
Sensitization: No sensitizing effects kn	nown.	
Germ cell mutagenicity: No effects kno Carcinogenicity: No classification data	a on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Reproductive toxicity: No effects know	wn.	
Specific target organ system toxicity	 repeated exposure: No effects known. single exposure: May cause respiratory irritation. 	
Aspiration hazard: No effects known. Subacute to chronic toxicity: No effect		
Additional toxicological information:	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 ini Persistence and degradability No further Bioaccumulative potential No further Mobility in soil No further relevant info	iformation available.	
Bioaccumulative potential No further	relevant information available.	
Mobility in soil No further relevant infor Additional ecological information:	irmation 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 assessmen	nt	
PBT: Not applicable. vPvB: Not applicable.		
Other adverse effects No further releva	rant information available.	
13 Disposal considerations		
Waste treatment methods		
Recommendation Consult state, local (Uncleaned packagings:	or national regulations to ensure proper disposal.	
Recommendation: Disposal must be m	nade according to official regulations.	
14 Transport information		
Not a hazardous material for transportat	ition.	
UN-Number DOT, IMDG, IATA	None	
UN proper shipping name DOT, IMDG, IATA	None	
Transport hazard class(es)		
DOT, ADR, IMDG, IATA	None	
Class Packing group	None	
Packing group DOT, IMDG, IATA	None	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex Transport/Additional information:	x II of MARPOL73/78 and the IBC Code Not applicable. Not dangerous according to the above specifications.	
		(Contd. on page 4)
4		` ' LICA '

(Contd. on page 4)

oduct name: 3-Hydroxy-2-nitrobenzoic acid		
DOT	(Contd. of pag	
Marine Pollutant (DOT):	No	
Regulatory information		
Safety, health and environmental regulations/	/legislation specific for the substance or mixture ad labeled in accordance with 29 CFR 1910 (OSHA HCS)	
GHS07		
Signal word Warning Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements P261 Avoid breathing dust/fume/gas P280 Wear protective gloves/protect P305+P351+P338 IF IN EYES: Rinse cautiously P304+P340 IF INHALED: Remove person	s/mist/vapours/spray. ctive clothing/eye protection/face protection. with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. to fresh air and keep comfortable for breathing.	
P405 Store locked up. P501 Dispose of contents/container	r in accordance with local/regional/national/international regulations.	
to research and development only. This product r product must not be used for commercial purpose SARA Section 313 (specific toxic chemical list California Proposition 65 Prop 65 - Chemicals known to cause cancer S	s tings) Substance is not listed.	
Prop 65 - Developmental toxicity Substance is Prop 65 - Developmental toxicity, female Subs Prop 65 - Developmental toxicity, male Substa Information about limitation of use: For use on Other regulations, limitations and prohibitive Substance of Very High Concern (SVHC) acco	not listed. stance is not listed. nice is not listed. nly by technically qualified individuals. regulations ording to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.	
The conditions of restrictions according to Ar market and use must be observed. Substance is not listed.	rticle 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on t	
Annex XIV of the REACH Regulations (requiri Chemical safety assessment: A Chemical Safe	i ng Authorisation for use) Substance is not listed. ety Assessment has not been carried out.	
Other information	······	
Employers should use this information only as a s information to ensure proper use and protect the conformance with this Material Safety Data Shee	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 i et, or in combination with any other product or process, is the responsibility of the user.	
Department issuing SDS: Global Marketing Dep Date of preparation / last revision 11/23/2015 / Abbreviations and acconvms:	/-	
ND: Règlement international concernant le transport des marcha ATA-DGR: Dangerous Goods Regulations by the "International A CAO: International Civil Aviation Organization CAO-TI: Technical Instructions by the "International Civil Aviation	, andises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) Air Transport Association" (IATA) n Organization" (ICAO)	
MDG: International Maritime Code for Dangerous Goods OT: US Department of Transportation ATA: International Air Transport Association AS: Chemical Abstracts Service (division of the American Chem IMIS: Hazardous Materials Identification System (USA) VHMIS: Workplace Hazardous Materials Information System (Ca C50: Lethal concentration, 50 percent		
VHMIS: Workplace Hazardous Materials Information System (Ca .C50: Lethal concentration, 50 percent .D50: Lethal dose, 50 percent PvB: verv Persistent and verv Bioaccumulative	anada)	
CSD. Letral Concentration, so percent DSD: Lethal dose, 50 percent IPVB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygien DSHA: Occupational Safety and Health Administration (USA) VTP: National Toxicology Program (USA) ARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	iists (USA)	
EPA: Environmental Protection Agency (USA)	- US	