

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product name: **BSH8080T**

Product Identifier: BSH8080T

Relevant identified uses: Hydrogen sulfide scavenger.

PECOM SERVICIOS ENERGÍA S.A

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SECTION 2 – HAZARDS IDENTIFICATION

Classification according to Globally Harmonized System.

Hazard pictogram(s):



Flammable liquids (Category 4)
Substances and mixtures corrosive to metals (Category 1)
Acute toxicity, oral (Category 4)
Skin corrosion (Category 1C) – Serious eye damage (Category 1)
Specific target organ toxicity – single exposure (Category 1)
Specific target organ toxicity – single exposure (Category 3)
Specific target organ toxicity – repeated exposure (Category 2)

Signal word: **DANGER**

Hazard statements:

H227 - Combustible liquid.
H290 - May be corrosive to metals.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H335 - May cause respiratory irritation.
H370 - Causes damage to organs.
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P234 - Keep only in original packaging.
P260 - Do not breathe fume, mist, vapours or spray.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves.
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308 + P313 - IF EXPOSED OR CONCERNED: Get medical advice or attention.
 P363 - Wash contaminated clothing before reuse.
 P390 - Absorb spillage to prevent material-damage.
 P405 - Store locked up.
 P406 - Store in a corrosion resistant container with a resistant inner liner.
 P501 - Dispose of contents and/or container in accordance with national and international regulations.

Additional information

There are no other additional hazards of consideration in the classification.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	% WEIGHT
Ethylendioxydimethanol	10 - 20
Formi(diethylenoimidoxide)	10 - 20
Methanol	5 - 15
Sodium 2-propanoate and sodium ethenosulfate, terpolymer	1 - 5

SECTION 5 – FIRST AID MEASURES

GENERAL ADVICE:	Avoid exposure to the product, taking appropriate protective measures. Get medical advice.
EYE CONTACT:	Immediately flush with water for at least 15 minutes, holding eyelids apart to ensure that all eye and lid tissues are rinsed. Washing eyes within several seconds is essential to achieve maximum effectiveness. If you have contact lenses, remove them after the first 5 minutes, then continue rinsing the eyes. Get medical advice. It can cause serious damage to the cornea, conjunctiva, or other parts of the eye.
SKIN CONTACT:	Wash immediately after contact with water for at least 15 minutes. Do not neutralize or use substances other than water. Remove contaminated clothing and wash before reuse.
INHALATION:	For those providing assistance, avoid exposure. Use proper protection if necessary. Move victim and get fresh air. Keep calm. If not breathing, give artificial respiration. Get medical advice.
INGESTION:	DO NOT INDUCE VOMITING. Rinse mouth with water. Never give anything by mouth to an unconscious person. Get medical advice. If vomiting occurs spontaneously, place the victim on the side to reduce the risk of aspiration.
SYMPTOMS:	Inhalation: may cause respiratory tract irritation. Skin Contact: may cause skin burns. Eye Contact: may cause burns. Ingestion: may cause burns.
MEDICAL ADVICE:	Provide symptomatic treatment. For more information, contact a Poison Control Center. May require specific treatment for methanol.

SECTION 5 – FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:	Use dry chemical, alcohol-resistant foam, sand or CO ₂ . Some foams can react with the product. DO NOT USE water jets.
FLASH POINT:	85°C (185°F)
FLAMMABLE LIMITS:	N/D
SPECIAL HAZARDS:	COMBUSTIBLE. The liquid may burn, but it will not ignite easily. In case of fire, it may release irritating and/or toxic fumes and gases, such as carbon monoxide, nitrogen oxides, phosphorous oxides, and other substances derived from incomplete combustion.
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:	For large spills wear protective clothing against chemicals, which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
ADVICE FOR FIREFIGHTERS:	Spray containers and/or tanks with water to keep them cool. Continue cooling with water after fire is out. Prevent water used for fire control from entering watercourses, drains or springs.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:	Avoid ignition sources. Evacuate personnel to a ventilated area. Use SCBA and skin and eye protection. Wear impervious gloves. Ventilate immediately, especially in low areas where vapours may accumulate. Do not allow reuse of the spilled product.
ENVIRONMENTAL PRECAUTIONS:	Contain spilled liquid with a dam or barrier. Prevent entry into navigable waterways, sewers, basements or uncontrolled confined areas.
CONTAINMENT AND CLEANING UP:	Contain and recover the liquid when possible. Collect the liquid product with sand, vermiculite, earth, or inert absorbent material and then completely clean the affected area. Dispose of the waste properly.

SECTION 7 – HANDLING AND STORAGE

Do not eat, drink or smoke during handling.

Avoid contact with eyes, skin and clothing. Wash arms, hands, and nails after handling. Facilitate access to safety showers and eyewash emergency. Avoid inhalation of the product. Use PPE. Keep container closed. Use with adequate ventilation. Handle containers carefully.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Store in a clean, dry, well-ventilated area. Protect from sunlight. Periodically check the containers to warn of losses and breakages. Store at temperatures between 15 and 25 °C, in rooms with a waterproof and resistant to corrosion floor. Do not store near open flames or sources of heat. Good ventilation is required. Do not stow more than 2 plastic drums, more than 2 containers of 1000 liters or more than 3 metal drums. Hazardous residues may remain inside the empty drum, so it must not be reused, marketed or transferred to third parties under any circumstances. The disposal of the empty drum must be carried out in accordance with the applicable legal regulations.

Keep away from Oxidizing substances, strong acids and bases.

Material appropriate packaging: Supplied by the manufacturer.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS:	REL: 3 ppm; Ethanolamine 200 ppm; Methanol REL-STEL: 6 ppm; Ethanolamine 250 ppm; Methanol BEI: methanol in urine at the end of the workshift, 15 mg/l; methanol TLV-TWA (ACGIH): 3 ppm; Ethanolamine 25 ppm; ethylene glycol 200 ppm; Methanol TLV-STEL (ACGIH): 6 ppm; Ethanolamine 50 ppm, as vapor; ethylene glycol 10 mg/m ³ , as particulated; ethylene glycol 250 ppm; Methanol PEL (OSHA): 3 ppm; Ethanolamine 200 ppm; Methanol PEL-C: 40 ppm; ethylene glycol IDLH (NIOSH): 30 ppm; Ethanolamine 6000 ppm; Methanol
EXPOSURE CONTROLS:	Keep workplace ventilated. The normal routine ventilation is usually adequate. Use local hoods for operations that produce or release large amounts of product. In low or confined areas provide mechanical ventilation. Provide showers and eyewash stations near workplace.
PERSONAL PROTECTION EQUIPMENT, INHALATION:	When necessary, wear an organic gas or steam (A) respirator. Pay special attention to oxygen levels in the air. If large releases occur, wear self-contained breathing apparatus (SCBA).
SKIN PROTECTION:	When necessary, wear impermeable protective PVC, nitrile or butyl gloves (complying with standards EN 374), clothes and safety footwear resistant to chemicals.
EYE AND FACE PROTECTION:	When necessary, wear chemical splash-proof safety glasses (complying with EN 166).

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Liquid.
COLOR:	N/D
ODOUR:	N/D
ODOUR THRESHOLD:	N/D
pH:	8,3 ± 2,0 (5% aq. sol.)
POUR POINT:	< -20°C (-4°F)
BOILING POINT:	N/D
FLASH POINT:	85°C (185°F)
EVAPORATION RATE:	N/D
AUTO-IGNITION TEMPERATURE:	N/D
EXPLOSIVE LIMITS:	N/D

VAPOUR PRESSURE (20°C):	N/D
VAPOUR DENSITY (AIR=1):	N/D
RELATIVE DENSITY (20°C):	1,051 ± 0,030 g/cm ³
SOLUBILITY (20°C):	Soluble in water.
HENRY CONSTANT (20°C):	N/D
PARTITION COEFF. (logKo/w):	N/D
VISCOSITY (20°C):	< 100
EXPLOSIVE PROPERTIES:	Not explosive. According to column 2 of Annex VII of REACH, this study is not required because in the molecule no chemical groups are associated with explosive properties.
OXIDIZING PROPERTIES:	According to column 2 of Annex XVII of REACH, this study is not necessary because the substances present in the product, due to their chemical structures, are incapable of reacting exothermically with combustible materials.
OTHER PROPERTIES:	Refractive index: 1,377 ± 0,030 (20°C)

SECTION 10 – STABILITY AND REACTIVITY

REACTIVITY:	It is not expected that product reactions or decomposition may occur under normal storage conditions. It does not contain organic peroxides. May be corrosive to metals. It does not react with water.
CHEMICAL STABILITY:	The product is chemically stable and it does not require stabilizers.
HAZARDOUS REACTIONS:	No hazardous polymerization is expected.
CONDITIONS TO AVOID:	Avoid high temperatures, open flames, sparks and other sources of ignition.
HAZARDOUS DECOMPOSITION PRODUCTS:	When heated, it may release toxic and irritating vapors. In case of fire, see section 5.
INCOMPATIBLE MATERIALS:	Oxidizing substances, strong acids and bases.

SECTION 11 – TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE:	Inhalation, skin and eye contact.
ACUTE EFFECTS:	Inhalation: may cause respiratory tract irritation. Skin Contact: may cause skin burns. Eye Contact: may cause burns. Ingestion: may cause burns.
CARCINOGENICITY, MUTAGENICITY AND REPRODUCTION TOXICITY:	Carcinogenicity: Contains no components in concentrations greater than or equal to 0.1% that are classified as carcinogens by the International Agency for Research on Carcinogens. Mutagenicity: There are no components in this product that are classified as mutagenic under the GHS. Tox. Repr.: There are no components of this product that classify as toxic for reproduction according to the GHS with effects on sexual function and fertility. Teratogenicity: There are no components of this product that classify as toxic for reproduction according to the GHS with effects on the development of the descendants. STOT-SE: Causes effects in specific organs after exposure to the product. Target: optic nerve.

May cause respiratory tract irritation.

STOT-RE: May cause damage to organs through prolonged or repeated exposure. Diana: kidney.

Aspiration: There are no components of this product that are classified as aspiration hazards under the GHS.

ANIMAL TOXICITY VALUES:

There is no information about the toxicity of the product, but acute toxicity estimations are presented.

ATE-LD50 oral (calc.): 300 - 2000 mg/kg

ATE-LD50 der (calc.): > 2000 mg/kg

ATE-LC50 inh. (4 hs., calc.): corrosive to the respiratory tract.

Skin irr. (rabbit, estim.): corrosive

Eye irr. (rabbit, estim.): corrosive

Skin sens (Guinea pig, estim.): not sensitising

Resp. sens (Guinea pig, estim.): not sensitizing

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY:	There is no information about the ecotoxicity of the product, but acute toxicity estimations are presented. ATE-EC50 (fish, calc., 96 h): > 100 mg/l ATE-EC50 (inv., calc., 48 h): > 100 mg/l ATE-EC50 (algae, calc., 72 h): 10 - 100 mg/l ATE-NOEC (fish, calc., 14 d): > 1 mg/l ATE-NOEC (inv., calc., 14 d): > 1 mg/l
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PERSISTENCE AND DEGRADABILITY:	BIODEGRADABILITY (OECD): According to calculations based on the composition, the product is expected to be biodegradable. PNEC (water): N/D PNEC (sea water): N/D PNEC-STP: N/D
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BIOACCUMULATIVE POTENTIAL:	Log Ko/w (OCDE 107 o 117): N/D BIOCONCENTRATION FACTOR - BCF (OCDE 305): N/D
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MOBILITY IN SOIL:	HENRY CONSTANT (20°C): N/D LogKoc: N/D
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OTHER ADVERSE EFFECTS:	Does not contain organic halogens nor metals.
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SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of excess product and empty containers according to current legislation for the protection of the environment and hazardous waste. Disposal procedure: incineration.

SECTION 14 – TRANSPORT INFORMATION

TRANSPORT BY LAND

Proper Shipping Name:	CORROSIVE LIQUID, N.O.S. (contains ethanolamine)	
UN/ID Number:	1760	
Hazard class:	8	
Packing group:	III	
Hazard identification number:	80	
Excepted and limited quantity:	1000 / 5 L	
Special provisions:	223; 274	

AIR TRANSPORT (ICAO/IATA)

Proper Shipping Name:	CORROSIVE LIQUID, N.O.S. (contains ethanolamine)
UN/ID Number:	1760
Hazard class:	8
Packing group:	III
PAX and Cargo Packing instructions:	Y841; 1L / 852; 5L
Cargo Packing instructions:	856; 60L
ERC:	8L
Special provisions:	-

**SEA TRANSPORT (IMO)**

Proper Shipping Name:	CORROSIVE LIQUID, N.O.S. (contains ethanolamine)
UN/ID N°:	1760
Hazard class:	8
Packing group:	III
EMS:	F-A, S-B
Stowage and manipulation:	Category B; SW2
Segregation:	-
Marine pollutant:	NO



Proper Shipping Name: UN1760; CORROSIVE LIQUID, N.O.S. (contains ethanolamine); Class 8; PG III

SECTION 15 – REGULATORY INFORMATION

Regulations and safety legislation specific for the substance or mixture:

Not dangerous for the ozone layer.

Volatile organic compounds (VOC's): N/D

Globally Harmonized System of Classification and Labelling of Chemicals, fifth revised edition, 2013 (GHS 2013 - 'ST / SG / AC 10/30 / Rev.5'). The fifth edition is taken into consideration because it is the one valid for Argentina according to Resolution 801/2015 of the SRT. In any case, the information is contrasted with Revision 7 ('ST / SG / AC 10/30 / Rev.7') and clarification is made if required.

Agreement on Transport of Dangerous Products within the MERCOSUR, MERCOSUR\CMC\DEC N° 2/94.

European Agreement on the International Carriage of Dangerous Goods by Road (ADR 2019) and amendments.

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID 2019) and amendments.

International Maritime Dangerous Goods Code (IMDG 2018 - Amendment 39-18), International Maritime Organization (IMO).

IBC Code 2016, IMO, IMO Resolution MSC.369 (93).

Regulations of the International Air Transport Association (IATA 60 ed., 2019) on the transport of dangerous goods by air.

SECTION 16 – OTHER INFORMATION

ACGIH: American Conference of Governmental Industrial Hygienists.

ATE: Acute toxicity estimate.

CAS: Chemical Abstracts Service.

CMP: maximum concentration allowed.

CMP-C: maximum concentration allowed, ceiling concentration.

CMP-CPT: maximum concentration allowed, short time period.

EC: effect concentration.

EC50: Average Effective Concentration.
 EMS: Emergency management sheet.
 ERC: Emergency response card.
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
 IARC: International Agency for Research on Cancer.
 IATA: International Air Transport Association.
 ICAO: International Civil Aviation Organization.
 IDLH: Immediately dangerous to life or health
 IMDG: International Maritime Dangerous Goods.
 IMO: International Maritime Organization.
 LC: Lethal concentration.
 LD: Lethal dose.
 Log Ko/w: octanol-water partition coefficient.
 Log Koc: organic carbon to water partition coefficient.
 MTESS: Ministry of Labor, Employment and Social Security, Argentina.
 N/A: not applicable.
 N/D: no data available.
 NFPA: National Fire Protection Association.

NIOSH: National Institute for Occupational Safety and Health
 NOEC: No observed effect concentration.
 OECD: Organisation for Economic Co-operation and Development.
 OSHA: Occupational Safety and Health Administration.
 PAX: Passengers.
 PBT: persistent, bioaccumulative or toxic criteria.
 PEL: Permissible Exposure Limit.
 PMCC: Pensky Martens closed cup
 PNEC: Predicted No Effect Concentration
 PNEC-STP: Predicted No Effect Concentration – sewage treatment plant.
 PPE: Personal protection equipment.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals - Europa.
 REL: Recommended Exposure Limit.
 SRT: Superintendence of Labor Risks, Argentina.
 STEL: Short Term Exposure.
 TLV: Threshold Limit Value.
 UN: United Nations.
 vPvB: very persistent or very bioaccumulative.

Key literature references and sources for data

International Agency for Research on Cancer (IARC), carcinogen classification.
 European Regulation 1272/2008, Classification, labelling and packing (CLP)
 European Agreement on the International Carriage of Dangerous Goods by Road (ADR 2019) and amendments.
 Regulations concerning the International Carriage of Dangerous Goods by Rail (RID 2019) and amendments.
 International Maritime Dangerous Goods Code (IMDG 2018 - Amendment 39-18), International Maritime Organization (IMO).
 IBC Code 2016, IMO, IMO Resolution MSC.369 (93).
 Regulations of the International Air Transport Association (IATA 60 ed., 2019) on the transport of dangerous goods by air.

HEALTH	2
FLAMMABILITY	2
REACTIVITY	0
TARGET ORGANS	1



Obligatory safety goggles.



Obligatory gloves.



Obligatory overall.

The classification was performed based on chemical analogues and product information compiled by CIQUIME.

SECTION 2: classification by analogy with other products, and based on product data in CIQUIME database.

SECTION 9: product data.

SECTION 11 and 12: calculation of acute toxicity estimation according to GHS, product data and bibliographic data.

Change's control: v.2 - Phrases and formatting update.
v.1 - Adaptation to the GHS.

The information in this document refers to the product, and not to another product or process that involves it. This document provides health and safety information. The information is correct and complete according to our knowledge. It is provided in good faith, but without guarantee. Use the product according to the recommendations for use. If you use this product you should be informed of the recommended safety precautions and should have access to this information. For any other use, evaluate exposure and implement appropriate handling measures and training programs to ensure safe operations in the workplace. It remains your responsibility that this information is appropriate and complete for the use of the product.

Version:	2	Emmision date:	March, 2022
Replaces:	1		
Created:	CIQUIME	Revised:	PECOM SERVICIOS ENERGÍA S.A