

SAFETY DATA SHEET



SECTION I – PRODUCT AND COMPANY IDENTIFICATION

Product name: SOT-4405

Product Identifier:

Relevant identified uses: H₂S scavenger concentrate.

BOLLAND Y CÍA. S.A.

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SECTION II – HAZARDS IDENTIFICATION

Classification according to Globally Harmonized System.

Hazard pictogram(s):





Acute toxicity, oral (Category 4)

Acute toxicity, inhalation (Category 3)

Eye irritation (Category 2)

Skin sensitization (Category 1)

Specific target organ toxicity – repeated exposure (Category 1)

Short-term (acute) aquatic hazard (Category 2)

Signal word:	DANGER
	H302 - Harmful if swallowed.
	H317 - May cause an allergic skin reaction.
Hazard statements:	H319 - Causes serious eye irritation.
nazaru statements.	H331 - Toxic if inhaled.
	H372 - Causes damage to organs through prolonged or repeated exposure.
	H401 - Toxic to aquatic life.
	P260 - Do not breathe fume, gas, mist, vapours or spray.
	P264 - Wash thoroughly after handling.
	P270 - Do no eat, drink or smoke when using this product.
	P272 - Contaminated work clothing should not be allowed out of the workplace.
Precautionary statements:	P273 - Avoid release to the environment.
	P280 - Wear protective gloves, protective clothing, eye protection and face
	protection.
	P302 + P352 - IF ON SKIN: Wash with plenty of water.
	P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for

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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. P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Additional information

None.

SECTION III - COMPOSITION / INFORMATION ON INGREDIENTS

CONFIDENTIAL COMMERCIAL INFORMATION IF EMERGENCY, CALL BOLLAND PQB 0 800 222 1030 (from Argentina) +5411 4320 7500 (other countries)

	SECTION IV – 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 20 minutes, holding eyelids apart to ensure that all eye and lid tissues 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 eye. Get medical advice.
SKIN CONTACT:	Wash immediately after contact with soap and water for at least 20 minutes. 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. If having difficulty breathing, give oxygen. Get medical advice.
INGESTION:	DO NOT INDUCE VOMITING. Rinse mouth and give water to drink. Never give anything by mouth to an unconscious person. Get medical advice. If vomiting occurs spontaneously, place victim on side to reduce the risk of aspiration.
SYMPTOMS:	Inhalation: can cause irritation of the respiratory system by inhalation. Toxic by inhalation. Skin contact: may cause irritation and dermatitis. May cause allergies. Eye contact: may cause irritation. Ingestion: May cause severe gastrointestinal disorders. May be harmful if swallowed.
MEDICAL ADVICE:	Provide symptomatic treatment. For more information, contact a Poison Control Center.

	SECTION V – FIREFIGHTING MEASURES
EXTINGUISHING MEDIA:	Use dry chemical, foam, sand or CO_2 . Use the product according to surrounding materials. DO NOT use a solid water stream as it may scatter and spread fire.
FLASH POINT:	N/D
FLAMMABLE LIMITS:	N/D
SPECIAL HAZARDS:	Not combustible. The liquid will not readily ignite. After evaporation of the product, the residue can be combustible. In case of fire may release irritating fumes and gases and/or toxic gases, such as carbon monoxide, nitrogen 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 your packaging to prevent ignition if they were exposed to excessive heat or fire. Remove the packaging if you still were not reached by the flames, and can do so without risk. Spray containers with water to keep them cool. Cool containers with flooding quantities of water until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

SE	CTION VI – ACCIDENTAL RELEASE MEASURES
PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:	Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate personnel to a ventilated area. Use SCBA and skin and eye protection. Wear impervious gloves. Ventilate im-mediately, especially in low areas where vapours may accumulate. Do not allow reuse of spilled product. Consider the information and recommendations in sections 5 and 7. Use protective equipment recommended in Section 8.
ENVIRONMENTAL PRECAUTIONS:	Contain spilled liquid with a dam. Prevent entry into waterways, sewers, basements or confined areas.
CONTAINMENT AND CLEANING UP:	Collect the product through sand, vermiculite, or inert absorbent and completely clean or wash the contaminated area.
	SECTION VII – HANDLING AND STORAGE
PRECAUTIONS FOR SAFE HANDLING:	Do not eat, drink or smoke during handling. Avoid contact with eyes, skin and clothing. Wash arms, hands, and nails after handling. The use of gloves is recommended. Facilitate access to safety showers and eyewash emergency.

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CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Store in a clean, dry, well-ventilated area. Keep containers closed. Do not store near open flames or heat sources. Good ventilation is required. It is recommended not to make pallets on top of more than 2 plastic drums, no more than 2 containers of 1000 liters and not more than 3 metal drums. Inside the empty drum can be hazardous waste so it should not be reused, traded or transferred to third parties under any circumstances. Disposal of the empty drum must be in accordance with legal regulations.

Keep away from strong oxidizing agents, acids and bases.

Material appropriate packaging: supplied by the manufacturer. Prolonged contact with bronze, copper or aluminum pipes or containers may cause a corrosive effect on these materials.

NFPA Code: 3 0 1

SECTION V	III – EXPOSURE CONTROLS / PERSONAL PROTECTION
CONTROL PARAMETERS:	TLV-TWA (ACGIH): N/D TLV-STEL (ACGIH): N/D PEL (OSHA 29 CFR 1910.1000): N/D IDLH (NIOSH): N/D
EXPOSURE CONTROLS:	Keep workplace ventilated. The normal routine ventilation is usually adequate. Local hoods should be used for operations that produce or release large amounts of product. In low or confined areas should be provided mechanical ventilation. Provide showers and eyewash stations.
PERSONAL PROTECTION EQUIPMENT, INHALATION:	Where necessary, use an organic vapours (A) respirator. Special attention to oxygen levels in the air should be paid. If large releases occur, wear self-contained breathing apparatus (SCBA).
SKIN PROTECTION:	When handling this product should wear impermeable protective PVC, nitrile or butyl gloves (complying with standards EN 374), clothes and safety footwear resistant to chemicals.
EYE AND FACE PROTECTION:	Should wear safety glasses, chemical splash-proof (complying with EN 166).

SECTION	IX – PHYSICAL AND CHEMICAL PROPERTIES
APPEARANCE:	Liquid.
ODOUR:	N/D
ODOUR THRESHOLD:	N/D
pH:	10,3 ± 0,5 [direct]
MELTING POINT:	N/D
BOILING POINT:	N/D
FLASH POINT:	N/D
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):	1,15 ± 0,02 g/cm ³
SOLUBILITY (in water, 20°C):	Soluble in water.
HENRY CONSTANT (20°C):	N/D
PARTITION COEFFICIENT (logKo/w):	N/D
VISCOSITY (cSt, 20°C):	< 100 cSt
OTHER PROPERTIES:	Refraction index: 1,475 ± 0,01

	SECTION X – STABILITY AND REACTIVITY
REACTIVITY:	It is not expected that reactions or decomposition product occur under normal storage conditions. It contains organic peroxides. It is not corrosive to metals. Does not react with water.
CHEMICAL STABILITY:	The product is chemically stable and does not require stabilizers. No hazardous polymerization is expected.
CONDITIONS TO AVOID:	Avoid high temperatures.
HAZARDOUS DECOMPOSITION PRODUCTS:	When heated, it may release toxic and irritating vapors. In case of fire, see section 5.
INCOMPATIBLE MATERIALS:	strong oxidizing agents, acids and bases.

SE	CTION XI – TOXICOLOGICAL INFORMATION
ROUTES OF EXPOSURE:	inhalation, skin and eye contact.
ACUTE EFFECTS:	Inhalation: can cause irritation of the respiratory system by inhalation. Toxic by inhalation. Skin contact: may cause irritation and dermatitis. May cause allergies. Eye contact: may cause irritation. Ingestion: May cause severe gastrointestinal disorders. May be harmful if swallowed.
CARCINOGENICITY AND MU- TAGENICITY:	There is no information on any component of this product present at levels greater than or equal to 0.1% as probable, possible or confirmed human carcinogen by the IARC (International Agency for Research on Carcinogens).
ANIMAL TOXICITY VALUES:	ATE-LD50 oral (rat, calc.): 1190 mg/kg ATE-LD50 der (rabbit, calc.): > 2000 mg/kg ATE-LC50 inh. (rat, 4hs., calc.): 0,5 mg/l Skin irr. (rabbit, estim.): non irritant Eye irr. (rabbit, estim.): irritant Skin sens (Guinea pig, estim.): sensitising Resp. sens (Guinea pig, stim.): non sensitizing

	SECTION XII – ECOLOGICAL INFORMATION
ECOTOXICITY:	ATE-EC50 (O. mykiss, calc., 48 h): 20 mg/l ATE-EC50 (D. magna, calc., 48 h): 15 mg/l ATE-EC50 (P. subcapitata, calc., 48 h): 8,3 mg/l ATE-EC50 (T. pyriformis, calc., 48 h): > 100 mg/l ATE-NOEC (D. rerio, calc., 14 d): > 1 mg/l ATE-NOEC (D. magna, calc., 14 d): > 1 mg/l
PERSISTENCE AND DEGRADABILITY:	BIODEGRADABILITY (estimated): no test data, but it it is expected that the product is biodegradable. PNEC (water): N/D PNEC (sea water): N/D PNEC-STP: N/D
BIOACCUMULATIVE POTENTIAL:	Log Ko/w (OCDE 107 o 117): N/D BIOCONCENTRATION FACTOR - BCF (OCDE 305): N/D
MOBILITY IN SOIL:	HENRY CONSTANT (20°C): N/D LogKoc: N/D DISTRIBUTION (%):
OTHER ADVERSE EFFECTS:	Does not contain organic halogens nor metals.

SECTION XIII – DISPOSAL CONSIDERATIONS

Both the excess product and empty containers should be disposed of in accordance with current legislation on Environmental Protection and in particular Hazardous Waste Laws. You must classify the waste and dispose of it by an authorized company. Both the excess product and empty containers should be disposed of in accordance with current legislation regarding the Protection of Environment and particularly of hazardous waste. It should classify the waste and dispose of it by an authorized company.

Empty containers may contain residue and thus be dangerous. Do not attempt to refill or clean containers without possessing the appropriate instructions.

SECTION XIV	- TRANSPORT INFORMATION	
TRANSPORT BY LAND	<u> </u>	
Proper Shipping Name:	TOXIC LIQUID, ORGANIC, N.O	.S. (contains triazine)
UN/ID Number:	2810	
Hazard class:	6.1	
Packing group:	III	6
Hazard identification number:	60	
Excepted and limited quantity:	5L/E1	
AIR TRANSPORT (ICAO/IATA)		
Proper Shipping Name:	TOXIC LIQUID, ORGANIC, N.O	.S. (contains triazine)
UN/ID Number:	2810	
Hazard class:	6.1	
Packing group:	III	6
PAX and Cargo Packing instructions:	Y642, 2L / 655, 60L	

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Cargo Packing instructions:	663, 220L	
ERC:	6L	
SEA TRANSPORT (IMO)		
Proper Shipping Name:	TOXIC LIQUID, ORGANIC, N.O.S. (contains triazine)	
UN/ID N°:	2810	
Hazard class:	6.1	
Packing group:	III	6
EMS:	F-A; S-A	
Marine pollutant:	NO	

SECTION XV – REGULATORY INFORMATION

Regulations and safety legislation specific for the substance or mixture:

Not dangerous for the ozone layer (1005/2009/CE).

Volatile organic compounds (VOC's) (1999/13/EC): N/D

Safety Data Sheet according to Resolution 801/2015 of the Superintendency of Occupational Risks MTESS and IRAM 41400: 2013, Argentina.

Resolution 295/2003 Ministry of Labour, Employment and Social Security, Argentina.

National Law No. 24,051 and its regulations, Argentina.

Resolution 195/97 Department of Public Works and Transportation, Republic Argentina.

Regulation (EC) 1272/2008 on classification, labeling and packaging of chemicals and their mixtures, as amended.

Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), as amended.

Dir. 91/689 / EEC on hazardous waste and Dir. 91/156 / EEC waste management.

European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR 2015).

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID 2015).

International Maritime Dangerous Goods Code (IMDG 34 ed.) IMO Resolution MSC 90/28 / Add.2.

IBC Code / MARPOL, IMO Resolution MEPC 64/23 / Add.1.

Regulations of the International Air Transport Association (IATA 56 ed., 2015) on the transport of dangerous goods by air.

Globally Harmonized System of Classification and Labelling of Chemicals, fifth edition, 2015 (GHS 2015). International Agency for Research on Cancer (IARC) classification of carcinogens. Revision: 03/23/2015.

SECTION XVI – OTHER INFORMATION

ATE: acute toxicity estimation. LD: lethal dose.

N/A: no information available. LC: lethal concentration.

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

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

SECTION 9: product data.

SECTION 11 and 12: analogy with other products.

Acute toxicity: calculation method for estimating acute toxicity.

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The information and recommendations given here are to our knowledge correct, and is the responsibility of each user to determine whether they are accurate, appropriate and complete for its particular use. The conditions and / or methods of handling, storage, use and disposal of the product are beyond our control and perhaps of our knowledge. For these and other reasons our company is not liable for loss, damage or caused or related to the handling, storage, use or disposal of this product costs. Our company is not responsible for any damage or incident, direct or indirect, of any nature that may result from the use of this information. Any information not contained in this SDS must be understood as undetermined or unknown.

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