



DATASHEET

EZ-STRIP SS

DESCRIPTION

Liquid neutralizing chemical agent for hydrogen sulfide and other compounds. This product provides a very fast reaction with hydrogen sulfide. The unique blend of additives and sodium hydroxide provide the environment for an ultra-fast and safe reaction to form soluble salts. Excellent for use in scrubber systems. Non-foaming formula. May also be used to neutralize chlorine, acetates and acids. Corrosive mixture!

PRODUCT USES & APPLICATIONS

- Tank Cleaning
- H₂S Abatement
- Line Cleaning
- Vapor Scrubber Systems
- Rail Car Cleaning

APPLICATION INSTRUCTIONS

Dilution Rate	4:1 with water
Application Method	Spray Systems or in Scrubber Systems
Special Instructions	Maintain pH level of 11.7

Additional Instructions: For maximum H₂S removal, maintain a pH of 11.7 or higher in scrubber systems. If stream has high CO₂ levels, EZ-STRIP SS will be consumed by CO₂ as well as H₂S. Thus, expect higher usage rates of EZ-STRIP SS when high CO₂ levels exist.

HAZARDOUS INFORMATION

Specific Hazard	Corrosive liquid
Flash Point (°F)	Above 220°
Biodegradability	Good
pH	13.0-13.7
Unusual Hazards	Avoid soft metals
Other Information	Degrades with CO ₂ presence

PACKAGING INFORMATION

Available Quantities	5,30,55,275 and bulk
Packaging Material	Poly
Other Information	Do not let product freeze.

CASE STUDY & APPLICATION INFO:

January 20, 2008 Asphalt Manufacturing Facility

EZ-STRIP SS was used in a scrubber system at an asphalt plant to help control H₂S levels during a specialty product mix. H₂S levels were 500 ppm before the scrubber. EZ-STRIP was added to the scrubber unit and the pH level kept at 12. A twin column vapor scrubber was used to control the H₂S emissions (Model SST-40). After the first tower the H₂S levels were reduced to 29. After the 2nd tower the reading was 0 ppm. Thus, the scrubber was able to reduce the H₂S levels from 500 to 0 ppm without the use of any carbon media.

August 12, 2007 Chemical Facility

EZ-STRIP SS was used to neutralize chlorine vapors stemming from a process at a chemical facility. One of Vapor Tech's twin column units (CST-18) was used to neutralize the effluent chlorine gas coming from their reactor. CFM levels were low (200 CFM) and the ppm of chlorine before the scrubber was 180. After both towers the chlorine levels were 0-1 without any carbon or post treatment.

GHS SAFETY DATA SHEET 'EZ-STRIP SS'

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name..... EZ STRIP SS
 Chemical Use..... Alkaline Neutralizing/Scrubbing Agent
 Chemical Family..... Mixture
 Issue Date of SDS..... June 30, 2014
 Revision Date of SDS..... 1/31/2022

MANUFACTURER:

Vapor Technologies, Inc.
 7200 Williams Street
 Hitchcock, TX 77563
 (409) 316-0173
www.vapor-tech.net

EMERGENCY TELEPHONE NUMBER: (877) 840-0646

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

<u>Health</u>		<u>Environmental</u>	<u>Physical</u>		
Skin Corrosion:	Category 1A	Acute Toxicity:	Category 3	Corrosive to Metals:	Category 1
Acute Toxicity - Oral:	Category 4	(Aquatic Environment)			
Acute Toxicity-Inhalation	Category 4				
Eye Damage:	Category 1				

GHS LABEL:

SIGNAL WORD:

DANGER



GHS05 Corrosive



GHS07 Irritant

Hazard Statements

- H290: May be corrosive to metals.
- H302: Harmful if swallowed.
- H314: Causes severe skin burns and eye damage.
- H318: Causes serious eye damage.
- H332: Harmful if inhaled.
- H402: Harmful to aquatic life.

Precautionary Statements

- P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264: Wash hands thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P271: Use only outdoors or in a well ventilated area.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P301 + P312: IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
- P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
- P310: Immediately call a POISON CENTER or doctor/physician.
- P363: Wash contaminated clothing before reuse.
- P390: Absorb spillage to prevent material damage.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

	<u>NFPA</u>
Health	2
Flammability	0
Reactivity	1
Special Notice	COR

<u>HMIS</u>	
2	Health
0	Flammability
1	Physical Hazard
B	PPE

0 - Minimal
 1 - Slight
 2 - Moderate
 3 - Serious
 4 - Severe
 B - Safety Glasses & Gloves

INGREDIENTSCAS#CONCENTRATION

Sodium Hydroxide

1310-73-2

25%

SECTION 4 - FIRST AID MEASURES

Eye Contact..... Immediately flush eyes with plenty of water lifting eyelids frequently. Continue to flush eyes for 15 minutes. Repeat if necessary. Get medical attention!

Skin Contact..... Remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation develops or persists.

Inhalation..... If exposed to excessive levels of fumes, remove to fresh air. Get medical attention if cough or other symptoms develop.

Ingestion..... **DO NOT INDUCE VOMITING!** Drink one or two glasses of water and get medical attention immediately!

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Use foam, carbon dioxide, or water spray to extinguish flames.

Unsuitable Extinguishing Media:..... No further relevant information available.

Combustion Products: Not considered to be an explosion hazard.

Fire Fighting Instructions..... As with any fire, wear sealed contained breathing apparatus, pressure demand MSHA/NIOSH (approved or equivalent) and full protective gear. Water runoff may cause environmental damage. Dike and collect water used to fight fire.

SECTION 6 - ACCIDENTAL RELEASE MEASURE

Personal Precautions:..... Prevent contact with skin and eyes. See Section 8.

Environmental Precautions..... Prevent entry of product into drains, sewers, surface or ground water.

Methods for Cleaning Up:..... Clean up spills immediately. Absorb spill with inert material (e.g., dry sand or earth), then place in a suitable container for disposal.

SECTION 7 - HANDLING AND STORAGE

Handling:..... Avoid contact with eyes, skin and clothing.
Do not eat, drink or smoke when using this product.
Wear protective gloves, clothing and eye protection when handling this product.
Use in well ventilated areas.

Storage..... Store in cool, dry place in original container and keep away from direct sunlight.
Keep container closed when not in use.

Shelf-Life..... One to two years normally.

Storage Temperature..... 5 - 43°C (41 - 110°F)

SECTION 8 EXPOSURE CONTROL / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH (TLV)	ACGIH (STEL)	OSHA (PEL)
	Sodium Hydroxide	Not Known	2m/gm3 over 8 hours	Not Known

Engineering Controls..... Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment (PPE):

Eye Protection..... Wear safety-goggles with side shields (or goggles). Contact lenses should not be worn.

Skin Protection..... Wear chemical resistant gloves.

Respiratory Protection..... For most situations, no respiratory protection is necessary.

General Hygiene Consideration..... There are no known health hazards associated with this product when used as recommended.
The following general hygiene considerations are recognized as common, good industrial hygiene practices:

- Wash hands after use and before eating.
- Avoid breathing vapors.
- Wear safety glasses and gloves.

Exposure Limits..... Not established for product as whole.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance..... Clear Solution.

Odor..... No Odor.

Vapor Pressure..... Not Determined.

Odor Threshold..... Not Determined.

Vapor density (Air=1)..... Not Determined.

pH..... 12.9 to 13.7

Relative Density..... Not Determined.

Melting point/Freezing point:..... Not Determined / 30°F

Solubility in water..... 100%

Initial boiling point and range..... 220°F / Not Determined.

Flash Point..... Not Flammable.

Evaporation rate..... Not Determined.

Flammability (solid, gas):..... Not Flammable.

Upper/Lower flammability or explosive limits:..... Non-Flammable product.
 Partition coefficient..... Not Determined.
 Auto igniting temperature..... Product is not self igniting.
 Decomposition temperature..... Not Determined.
 Viscosity..... Not Determined.
 Specific Gravity (water = 1)..... 1.14 to 1.16

SECTION 10 - STABILITY & REACTIVITY

Reactivity..... No dangerous reaction known under conditions of normal use.
 Chemical Stability..... Stable.
 Hazardous Polymerization..... Will not occur.
 Incompatibilities..... May etch aluminum and zinc.
 Decomposition Products..... None determined.

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:..... Inhalation, Eye and Skin Contact

Acute symptoms and effects:

Eye..... Corrosive! Causes severe burns to eye tissue.
 Skin..... Corrosive! Exposure to skin will cause mild to severe burns.
 Ingestion..... Severe gastric damage.
 Inhalation:..... Burning to nasal passages and soft tissue.

Chronic Exposure:..... Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

Toxicity Data:

LD50	LC50
Not Known	Not Known

Carcinogenicity..... Not a known carcinogen

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:..... Harmful to aquatic life. Product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
 Mobility in soil:..... No further relevant information available.
 Degradability:..... Expected to readily biodegrade.
 Bioaccumulation:..... No further relevant information available.

SECTION 13 - DISPOSAL CONSIDERATION

EZ-STRIP SS is not considered a hazardous waste under Federal Hazardous Waste Regulations 40 CFR 261. Please be advised, however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local authorities regarding the proper disposal of this material.

(Note: Adding chemicals, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate).

SECTION 14 - TRANSPORTATION INFORMATION

Required Shipping Label

A. USA: UN Number..... UN1760
 D.O.T UN Proper Shipping Name..... Corrosive Liquid, 8, N.O.S. (Sodium Hydroxide).
 Packaging group..... III
 D.O.T. Label..... UN1760, Corrosive Liquid, 8.
 D.O.T. Placard..... Corrosive.
 Freight Class Package..... Class 55

B. CANADA: TDG..... Corrosive Liquid.

C. ENGLAND: Approved Carriage List..... Corrosive Liquid.

SECTION 15 - REGULATORY INFORMATION

A. USA: TSCA Status..... All ingredients listed on TSCA Inventory.
 SARA TITLE III, 302/303 EHS..... None
 SARA TITLE III, 304 HS..... None
 SARA TITLE III, 311/312..... None
 SARA TITLE III, 313..... None

B. CANADA: DSL/NDSL..... All ingredients are listed.
 WHMIS..... Not Classified.

C. EC: EINECS..... All ingredients are listed.

SECTION 16 - OTHER INFORMATION

For details on specific requirements, you should contact the appropriate agency in your state.

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