Safety Data Sheet
EVO Anti Microbial Additive

1. Identification

Product identifier	EVO Anti Microbial Additive
Product code	EAM1
Other means of identification	N.Av.
Recommended use of the chemical and restrictions on use	Antimicrobial. Not recommended for any other use not detailed on product data sheet or label.
Manufacturer	GEMINI INDUSTRIES, INC. 2300 Holloway Drive El Reno, OK 73036 USA Tel. 1-800-262-5710 Fax 1-405-262-9310 http://www.gemini-coatings.com/
Emergency phone number	24-hour Emergency (Spill, Leak, Exposure or Accident) INFOTRAC 800-535-5053 Outside USA, Call Collect 1-352-323-3500 (French & English) HAZMAT Response and Safety Data Sheet Help: EMI 800-510-8510

2. Hazard identification

Summary	Corrosive liquid. May cause burns. Avoid all contact with the skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Do not ingest. If medical advice is needed, have this SDS or label at hand. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.

WHMIS 2015/GHS/OSHA HCS 2012

Skin corrosion/irritation (Category 1)
Serious eye damage/eye irritation (Category 1)
Skin sensitizer (Category 1)

DANGER
H314: Causes severe skin burns and eye damage
H317: May cause an allergic skin reaction
H400: Very toxic to aquatic life
P260: Do not breathe mist, vapours and spray.
P264: Wash skin thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing and eye protection.
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P363: Wash contaminated clothing before reuse.
P333+313: If skin irritation or a rash occurs: Get medical advice or attention.
P304+340+P312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to

do. Continue rinsing.
P310: Immediately call a POISON CENTER or a doctor.
P391: Collect spillage.
P405: Store locked up.
P501: Dispose of contents and container to a licensed chemical disposal agency in accordance with local, regional and national regulations.

Other hazards which do not result in classification
Acute hazard to the aquatic environment (Category 1).

3. Composition/information on ingredients

Common name	**CAS**	**Weight % content**
Potassium hydroxide	1310-58-3	5 - 10 %
1,2-Benzisothiazol-3(2H)-one	2634-33-5	5 - 10 %
Note: The manufacturer withholds the actual concentration range of the ingredients as a trade secret.		

4. First-aid measures

Inhalation	Move person to fresh air. If breathing is difficult, give oxygen by trained personnel. If not breathing, give artificial respiration. If a problem develops or persists, seek medical attention.
Skin contact	Flush with water for at least 15 minutes. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention.
Eye contact	IMMEDIATELY flush with plenty of water. Remove contact lenses if easy to do. Flush with water for at least 20 minutes. Hold eyelids apart to rinse properly. Seek medical attention immediately. Have an ophthalmologist make an evaluation of eye injury.
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. Never give anything by mouth if victim is unconscious or convulsing. If victim is conscious wash out mouth with water and give 1-2 glasses of water to drink. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.
Other	No additional information.
Symptoms	May cause severe eye irritation or eye damage. May cause skin irritation and burns. May cause an allergic reaction of the skin.
Notes to the physician	Treat according to person's condition and specifics of exposure. If gastric lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures

Suitable extinguishing media	Water spray, carbon dioxide (CO2).
Specific hazards arising from the chemical	Burning produces heavy smoke and may liberate toxic or very toxic gases.
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.

Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch damaged containers or spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent product from entering drains and release to the environment. For a large spill, consult the Department of Environment or the relevant authorities.
Methods and materials for containment and cleaning up	Ventilate the area well. Stop leak, if it's possible to do so without risk. Absorb with inert material (soil, sand, vermiculite) and place in an appropriate waste disposal clearly identified. Finish cleaning by rinsing with water contaminated surface. Dispose via a licensed waste disposal contractor.

7. Handling and storage

Precautions for safe handling	Use only in well ventilated area. Avoid all contact with the skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Wear eye protection, gloves, respiratory protection and other protective clothing that are adapted to the task being performed and the risks involved. Keep containers tightly closed when not in use. Do not eat, do not drink and do not smoke during use. After use, wash hands with soap and water. Wash contaminated clothing before reuse.
Conditions for safe storage, including any incompatibilities	Store tightly closed and in properly labelled containers in a cool, dry and well ventilated place. Keep away from direct sunlight and heat. Keep away from freezing.
Storage temperature	10 to 30°C (50 to 86°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	

Potassium hydroxide	Ceiling	2 mg/m^3	ACGIH , BC, ON, RSST

Appropriate engineering controls	Provide sufficient mechanical ventilation (general or local exhaust) to keep the airborne concentrations of vapours, mists, aerosols or dust below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation.
Individual protection measures	
Eye	Wear chemical splash goggles. If risk of contact with eyes or the face, wear a face shield.
Hands	Chemical-resistant, impervious gloves should be worn at all times when handling this chemical product. Wear nitrile or neoprene gloves. Before using, user should confirm impermeability. Discard gloves with tears, pinholes, or signs of wear. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly.
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear appropriate chemical impervious clothing. Wear an apron or long-sleeve protective coverall suit.
Respiratory	

	Respiratory protection is not required for normal use. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) and approved by NIOSH/MSHA. In case of insufficient ventilation or in confined or enclosed space and for an assigned protection factor (APF) up to 10 times the exposure limit, wear a half mask respirator with organic vapour cartridges fitted with P100 filters. For an APF until maximum 100 times of exposure limit, wear a full face respirator mask with organic vapour cartridges and P100 filters.
Feet	Wear rubber boots as needed.

9. Physical and chemical properties

Physical state	Liquid	**Flammability**	Non-flammable
Colour	N.Av.	**Flammability limits**	N/Av.
Odour	Characteristic	**Flash point**	>55°C (131°F)
Odour threshold	N/Av.	**Auto-ignition temperature**	>250°C (482°F)
pH	N/Av.	**Sensibility to electrostatic charges**	N.Av.
Melting point	<1°C (33.8°F)	**Sensibility to sparks and/or friction**	N.Av.
Freezing point	<1°C (33.8°F)	**Vapour density**	N/Av. (Air = 1)
Boiling point	>55°C (131°F)	**Relative density**	1.000 kg/L @ 20°C (68°F) (Water = 1)
Solubility	Soluble in water.	**Partition coefficient n-octanol/water**	N/Av.
Evaporation rate	N/Av.	**Decomposition temperature**	N/Av.
Vapour pressure	N/Av.	**Viscosity**	N/Av.
Percent Wt. Volatile	N/Av.	**Molecular mass**	N/Ap.
VOC (g/L)	N/Av.	**% Volume Volatile (VOC)**	N/Av.
VOC (lb/gal)	N/Av.	**% Wt. Volatile (VOC)**	N/Av.

N/Av.: Not Available N/Ap.: Not Applicable Und.: Undetermined N/E: Not Established

10. Stability and reactivity

Reactivity	No known dangerous reactions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions (including polymerizations)	Hazardous polymerization will not occur.
Conditions to avoid	Protect from freezing.
Incompatible materials	None reported.

Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Numerical measures of toxicity	1,2-Benzisothiazol-3(2H)-one	Ingestion	1020 mg/kg	Rat LD50
		Skin	>2000 mg/kg	Rat LD50
	Potassium hydroxide	Ingestion	273 mg/kg	Rat LD50
			365 mg/kg	Rat LD50

Likely routes of exposure	Skin, eyes, inhalation.	
Delayed, immediate and chronic effects	**Eye contact**	May cause burns and damages to eyes. Eye Irritation/Corrosion, Rabbit (OECD TG 405): tests performed with each ingredient (>1%) of this mixture gave not irritating to corrosive results.
	Skin contact	May cause skin irritation and burns. Skin Irritation/Corrosion, Rabbit (OECD 404) : tests performed with each ingredient (>1%) of this mixture gave not irritating to corrosive results.
	Inhalation	Overexposure may cause irritation and burns to the respiratory tract. The severity of symptoms may vary depending on exposure conditions.
	Ingestion	May be harmful if swallowed. May cause gastro-intestinal irritation and burns to mouth, throat and stomach.
	Respiratory or skin sensitization	May cause an allergic reaction of the skin. The ingredient 1,2-Benzisothiazol-3(2H)-one (CAS no. 2634-33-5) is a skin sensitizer.
	IARC/NTP Classification	No ingredients listed.
	Carcinogenicity	Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.
	Reproductive toxicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause reproduction effects.
	Specific target organ toxicity - single exposure	No target organ is listed.
	Specific target organ toxicity - repeated exposure	No target organ is listed.
Interactive effects	No information available.	
Other information	The oral acute toxicity estimate (ATE) of the mixture was calculated to be greater than 2000 mg/kg but lower than 5000 mg/Kg. This value is classified category 5 by the GHS. The skin acute toxicity estimate (ATE) of the mixture was calculated to be greater than 2000 mg/kg. This value is not classified according to WHMIS and OSHA HCS 2012. The acute toxicity estimate (ATE) by inhalation of the mixture was calculated to be greater than 20 mg/L/4h. This value is not classified according to GHS.	

12. Ecological information

Ecological toxicity	Fish - Cyprinodon variegates	LC50	22 mg/L; 96 h (CAS no 2634-33-5)
	Crustacea - Water Flea (Daphnia magna)	EC50	2.94 mg/L; 48 h (CAS no 2634-33-5)
	Algea - Pseudokirchneriella subcapitata	ECr50	0.110 mg/L (CAS no

	2634-33-5)
Persistence	Not available.
Degradability	Not available.
Bioaccumulative potential	Not available.
Mobility in soil	Not available.
Other adverse effects	This chemical does not deplete the ozone layer.

13. Disposal considerations

Container 	Important! Prevent waste generation. Use in full. DO NOT dispose residue in sewers, streams or drinking water supply. Dispose residues as a hazardous waste. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.

14. Transport information

UN Number	UN 1760
UN Proper Shipping Name	CORROSIVE LIQUID, N.O.S. (potassium hydroxide).
Environmental hazards	Contains marine pollutant.
Special precautions for user	Permit required for transportation with proper DANGER placards displayed on vehicle.
TDG - Transportation of Dangerous Goods (Canada & US DOT)	
Transport hazard class(es)	 Class 8
Packing group	II
IMO/IMDG - International Maritime Transport	
Classification	UN 1760. CORROSIVE LIQUID, N.O.S. (potassium hydroxide). Class 8, PG II. Emergency schedules (EmS-No) F-A, S-B
IATA - International Air Transport Association	
Classification	UN 1760. CORROSIVE LIQUID, N.O.S. (potassium hydroxide). Class 8, PG II.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Potassium hydroxide	1310-58-3		X		
1,2-Benzisothiazol-3(2H)-one	2634-33-5		X		

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act
- DSL: Domestic Substances List Inventory
- NDSL: Non-Domestic Substances List Inventory
- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

Common name	CAS	TSCA	CER CLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Prio.
Potassium hydroxide	1310-58-3	X	X							
1,2-Benzisothiazol-3(2H)-one	2634-33-5	X								

- TSCA: Toxic Substance Control Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances
- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals
- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances
- CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act - Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act - List of Hazardous Substances
- CWA Priority: Clean Water Act - Priority Pollutant list

California Proposition 65

No ingredients listed.

Other regulations	

HMIS

NFPA

16. Other information

Date (YYYY-MM-DD)	GEMINI INDUSTRIES, INC. 2021-06-30
Version	01
Other information	P.S.: The SIMDUT 2015/GHS hazards classification in this SDS is provided by the manufacturer using a Worst-Case Scenario. REFERENCES: - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, https://haz-map.com/ - Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), https://www.cnesst.gouv.qc.ca/fr - NIOSH Pocket Guide to Chemical Hazards, Centers for Disease Control and Prevention, NIOSH Publications, 2007, http://www.cdc.gov/niosh/npg/npg.html

- The National Center for Biotechnology Information, National Institutes of Health (NIH), U.S. National Library of Medicine, https://pubchem.ncbi.nlm.nih.gov

ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
HMIS: Hazardous Materials Identification System
NFPA: National Fire Protection Association
OSHA: Occupational Safety and Health Administration (USA)
NIOSH: National Institute for Occupational Safety and Health
NTP: National Toxicology Program
RSST: Règlement sur la santé et la sécurité du travail (Québec)
GHS: Globally Harmonized System
IARC: International Agency for Research on Cancer
IDLH: Immediately Dangerous to Life or Health
STEL: Short Term Exposure Limit (15 min)
TWA: Time Weighted Averages
WHMIS: Workplace Hazardous Materials Information System