



Safety Data Sheet

Section 1: Identification

Product identifier

Product Name • **Black Acid 14**

Relevant identified uses of the substance or mixture and uses advised against

Recommended use • Acid Soil Nutrient; Water treatment product

Details of the supplier of the safety data sheet

Manufacturer • Bio Gro Inc.
581 Glade Rd, Mabton WA 98953
United States

Telephone (General) 509-894-4110

Emergency telephone number

Manufacturer • 1-800-424-9300 - CHEMTREC

Section 2: Hazard Identification

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Corrosive to Metals 1 - H290
Skin Corrosion 1B - H314
Serious Eye Damage 1 - H318

Label elements

OSHA HCS 2012

DANGER



Hazard statements • May be corrosive to metals - H290
Causes severe skin burns and eye damage. - H314
Causes serious eye damage - H318

Precautionary statements

Prevention • Keep only in original container. - P234
Do not breathe mist/vapours/spray. - P260

- Wash thoroughly after handling. - P264
 Wear protective gloves/protective clothing/eye protection/face protection. - P280
- Response**
- Absorb spillage to prevent material damage. - P390
 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P340
 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. - P303+P361+P353
 - Specific treatment, see supplemental first aid information. - P321
 - Wash contaminated clothing before reuse. - P363
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
 - Immediately call a POISON CENTER or doctor/physician. - P310
 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. - P301+P330+P331
- Storage/Disposal**
- Store in corrosive resistant/ container with a resistant inner liner. - P406
 - Store locked up. - P405
 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Urea	Proprietary	44.1%	Ingestion/Oral-Rat LD50 • 8471 mg/kg	OSHA HCS 2012: Skin Irrit. 2, Eye Irrit. 2	NDA
Sulfuric acid	CAS:7664-93-9 EC Number:231-639-5	29.7%	Inhalation-Rat LC50 • 510 mg/m ³ 2 Hour(s) Ingestion/Oral-Rat LD50 • 2140 mg/kg	OSHA HCS 2012: Eye Dam. 1, Skin Corr. 1B	NDA

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If signs/symptoms continue, get medical attention.

Skin

- For minor skin contact, avoid spreading material on unaffected skin. Remove and isolate contaminated clothing. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. If signs/symptoms continue, get medical attention.

- Eye**
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.
- Ingestion**
- If swallowed, rinse mouth with water (only if the person is conscious) Do NOT induce vomiting. Obtain medical attention immediately if ingested.
- Most important symptoms and effects, both acute and delayed**
- Refer to Section 11 - Toxicological Information.
- Indication of any immediate medical attention and special treatment needed**
- Notes to Physician**
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media**
- LARGE FIRES: Dry chemical, CO2 or alcohol-resistant foam.
SMALL FIRES: Dry chemical or CO2.

- Unsuitable Extinguishing Media**
- No data available

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards**
- Containers may explode when heated.

- Hazardous Combustion Products**
- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive fumes.

Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Wear positive pressure self-contained breathing apparatus (SCBA).
SMALL FIRES: Move containers from fire area if you can do it without risk.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- Wear appropriate personal protective equipment, avoid direct contact. Do not walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas.

- Emergency Procedures**
- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Do not get water inside container. Stop leak if you can do it without risk.

Environmental precautions

- Avoid release to the environment.

Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Use only acid compatible equipment due to the corrosive nature of this material.

Section 7 - Handling and Storage

Precautions for safe handling

- Handling**
- Handle and open container with care. Use only with adequate ventilation. Use caution

when combining with water; DO NOT add water to corrosive liquid, ALWAYS add corrosive liquid to water while stirring to prevent release of heat, steam and fumes. Use only acid compatible equipment, pumps, seals, meters, nozzles, etc., due to the corrosive nature of this material. Wear appropriate personal protective equipment, avoid direct contact. Avoid contact with skin, eyes, and clothing.

Conditions for safe storage, including any incompatibilities

Storage

- This material should not be stored in aluminum or mild steel containers, or used in application equipment that has brass, copper, nylon, PVC or any components containing alloys in the fittings or nozzles. This material may be stored or applied in polypropylene or stainless steel containers with sulfuric acid compatible seals and/or valves. Keep container/package tightly closed in a cool, well-ventilated place. Store locked up.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Potassium hydroxide (1310-58-3)	Ceilings	2 mg/m ³ Ceiling	2 mg/m ³ Ceiling	Not established
Sulfuric acid (7664-93-9)	TWAs	0.2 mg/m ³ TWA (thoracic fraction)	1 mg/m ³ TWA	1 mg/m ³ TWA

Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear eye/face protection - safety goggles, - face shield.

Skin/Body

- Wear appropriate gloves. Wear protective clothing

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Dark brown liquid with an earthy, slightly sulfur odor.

Color	Brown	Odor	Earthy Slightly sulfur.
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point	No data available
Decomposition Temperature	No data available	pH	< 1
Specific Gravity/Relative Density	1.53 Water=1	Water Solubility	No data available
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	No data available	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Excess heat.

Incompatible materials

- No data available.

Hazardous decomposition products

- No data available.

Section 11 - Toxicological Information

Information on toxicological effects

Component Name	CAS	Data
Urea (44.1%)	Proprietary	Acute Toxicity: orl-rat LD50:8471 mg/kg; Irritation: skn-hmn 20%/24H MOD; Tumorigen/Carcinogen: orl-rat TDLo:821 gm/kg/1Y-C
Sulfuric acid (29.7%)	7664-93-9	Acute Toxicity: orl-rat LD50:2140 mg/kg; ihl-rat LC50:510 mg/m3/2H; Irritation: eye-rbt 250 ug SEV; Reproductive: ihl-rbt TCLo:20 mg/m3/7H (6-18D preg)
GHS Properties		Classification
Acute toxicity		OSHA HCS 2012 • No data available
Aspiration Hazard		OSHA HCS 2012 • No data available

Carcinogenicity	OSHA HCS 2012 • No data available
Germ Cell Mutagenicity	OSHA HCS 2012 • No data available
Skin corrosion/Irritation	OSHA HCS 2012 • Skin Corrosion 1B
Skin sensitization	OSHA HCS 2012 • No data available
STOT-RE	OSHA HCS 2012 • No data available
STOT-SE	OSHA HCS 2012 • No data available
Toxicity for Reproduction	OSHA HCS 2012 • No data available
Respiratory sensitization	OSHA HCS 2012 • No data available
Serious eye damage/Irritation	OSHA HCS 2012 • Serious Eye Damage 1

Route(s) of entry/exposure • Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

Acute (Immediate)

- May cause corrosive burns - irreversible damage.

Chronic (Delayed)

- Repeated or prolonged exposure to corrosive fumes may cause bronchial irritation with chronic cough.

Skin

Acute (Immediate)

- Causes severe skin burns and eye damage.

Chronic (Delayed)

- Repeated or prolonged exposure to corrosive materials will cause dermatitis.

Eye

Acute (Immediate)

- Causes serious eye damage.

Chronic (Delayed)

- Repeated or prolonged exposure to corrosive materials or fumes may cause conjunctivitis.

Ingestion

Acute (Immediate)

- May cause irreversible damage to mucous membranes.

Chronic (Delayed)

- Repeated or prolonged exposure to corrosive materials or fumes may cause gastrointestinal disturbances.

Carcinogenic Effects

- Sulfuric acid, a component of this material, is listed as a carcinogen. However, this material as a whole is not classified as a carcinogen.

Carcinogenic Effects		
	CAS	IARC
Sulfuric acid	7664-93-9	Group 1-Carcinogenic

Key to abbreviations

LD = Lethal Dose
MOD = Moderate
SEV = Severe
TD = Toxic Dose

Section 12 - Ecological Information

Toxicity

- Material data lacking.

Persistence and degradability

- Material data lacking.

Bioaccumulative potential

- Material data lacking.

Mobility in Soil

- Material data lacking.

Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations**Waste treatment methods****Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	UN1760	Corrosive Liquid, n.o.s. (Sulfuric acid)	8	II	NDA

Special precautions for user

- None known.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

Section 15 - Regulatory Information**Safety, health and environmental regulations/legislation specific for the substance or mixture****SARA Hazard Classifications**

- Acute

State Right To Know				
Component	CAS	MA	NJ	PA
Urea	Proprietary	No	No	No
Sulfuric acid	7664-93-9	Yes	Yes	Yes
Water	7732-18-5	No	No	No
Potassium hydroxide	1310-58-3	Yes	Yes	Yes

Inventory		
Component	CAS	TSCA
Urea	Proprietary	Yes
Sulfuric acid	7664-93-9	Yes
Water	7732-18-5	Yes
Potassium hydroxide	1310-58-3	Yes

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

- Sulfuric acid 7664-93-9 1000 lb final RQ; 454 kg final RQ
- Potassium hydroxide 1310-58-3 1000 lb final RQ; 454 kg final RQ
- Urea *Proprietary* Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

- Sulfuric acid 7664-93-9 1000 lb EPCRA RQ
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

- Sulfuric acid 7664-93-9 1000 lb TPQ
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

- Sulfuric acid 7664-93-9 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

United States - Pennsylvania**Labor****U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List**

- Sulfuric acid 7664-93-9
- Potassium hydroxide 1310-58-3
- Urea *Proprietary* Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

- Sulfuric acid 7664-93-9 Not Listed
- Potassium hydroxide 1310-58-3 Not Listed
- Urea *Proprietary* Not Listed

Section 16 - Other Information**Last Revision Date** 03/May/2023 •**Preparation Date** 10/October/2010 •**Disclaimer/Statement of Liability**

- Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Safety Data

Sheet before handling product.

Key to abbreviations

NDA = No data available
