SECTION 1: IDENTIFICATION

1.1 Product Identifier

Product name: HumiSource® Plus
Chemical description: Soluble Humic Acid Concentrate

1.2 Recommended Uses

Industrial uses: Fertilizer additive, soil and water remediation
Restrictions on Use: Do not mix with ammonium sulfate or calcium nitrate

1.3 Responsible Party Contact

Manufacturer:

Supplier Address
Leonardite Products, LLC
13375 Highway 1804
Williston, ND 58801

Mailing Address
Leonardite Products, LLC
PO Box 548
Williston, ND 58802

Information Phone: +1 (701)-572-7659
Competent Person: Source@leonarditeproducts.com

1.4 Emergency Contact

Emergency Phone: +1 (701)-770-5569/ +1 (406)-970-6889

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of Substance/Mixture

This SDS was prepared according to US GHS Rev. 7 as detailed under 29 CFR § 1910.1200 Hazard Communication.

Health Hazards		Physical Hazards	
Skin Corrosion 1A	H314	Corrosive to Metals 1	H290
Eye Damage 1	H318		

2.2 Label Elements

Hazard Pictogram(s):

Signal Word:
Danger

Hazard Statements:

H314 – Causes severe skin burns and eye damage.
H318 – Causes serious eye damage.
H290 – May be corrosive to metals.

Precautionary Statements:

Prevention

P260 – Do not breathe mist/vapors/spray.
P264 – Wash hands and exposed skin thoroughly after handling.
P270 – Do not eat, drink, or smoke when using this product.
P273 – Avoid release to the environment.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.

Response

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 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.
P310 – Immediately call a POISON CENTER or doctor/physician.
P312 – Call a doctor if you feel unwell.
P308+P313 – If exposed or concerned: Get medical advice/attention.
P321 – Specific treatment (see Section 4)
P363 – Wash contaminated clothing before reuse.

Storage

P405 – Store locked up.
P406 – Store in a corrosion-resistant container with a resistant inner liner.
P403 + P233 – Keep container tightly closed.

Disposal

P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Hazards Not Otherwise Classified

None known.

2.4 Ingredient(s) with Unknown Acute Toxicity

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Name	CAS No.	% (w/w)	Classification
Potassium Hydroxide	1310-58-3	1 – 3	Skin Corr. 1A Eye Dam. 1 Met. Corr. 1
Polyalkyleneoxide modified Heptamethyltrisiloxane	Proprietary	< 0.1	Skin Irri. 2B

SECTION 4: FIRST AID MEASURES

4.1 Description of Necessary Measures

Inhalation: Remove to fresh air and ventilate suspected area. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If you feel unwell, seek medical attention.

Skin Contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye Contact: Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. If conscious, drink large quantities of water. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

General information: Treat symptomatically. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

4.2 Most Important Symptoms and Effects

Acute: Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause nausea, coughing, and vomiting.

Delayed: Eye and skin damage symptoms may be delayed. May cause diarrhea

4.3 Indication of Immediate Medical Attention and Special Treatment Needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media: Water spray, fog. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable Extinguishing Media: Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special Hazards Arising from the Chemical(s)

Fire Hazard: Not combustible.

Explosion Hazard: Not an explosion hazard.

Reactivity: Stable at ambient temperature and under normal conditions of use.

5.3 Firefighting Equipment and Instructions

Firefighting Instructions: Use water spray to cool unopened containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment. Use standard firefighting procedures and consider the hazards of other involved materials.

Hazardous Combustion Products: Product will not burn until all water has evaporated. Ammonia gas. Carbon oxides (CO, CO2). Irritating fumes. See "Section 7.1 Precautions for Safe Handling" for details.

SECTION 6: ACCIDENTAL RELEASE MEASURE

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures

General Measures: Handle in accordance with good industrial hygiene and safety practice. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Protective Equipment: Use appropriate personal protection equipment (PPE). For personal protection, see section 8 of the SDS.

Emergency Procedures: Evacuate unnecessary personnel. Keep unnecessary personnel away. Keep people away and upwind of leak/spill.

6.2 Methods and Materials for Containment and Cleaning Up

Methods

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where possible. Cover with plastic sheet to prevent spreading. Absorb spillage in vermiculite, dry sand or earth and place into containers to prevent material damage. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental: Avoid discharge into drains, water courses, or onto the ground.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Safe Handling Procedures: Provide adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Hygiene Measure: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with soap and water before eating, drinking, or smoking and again when leaving work. If in eyes, flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids open. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Wash contaminated clothing before reuse.

7.2 Conditions for Safe Storage

Storage Conditions: Store locked up. Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Keep only in the original container. Do not store in aluminum or steel containers. Store away from incompatible materials (see Section 10 of the SDS).

Incompatible Materials: Do not mix with ammonium sulfate or calcium nitrate. Strong acids.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Occupational Exposure Limits: For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: US ACGIH (TLV), NIOSH (REL), OSHA (PEL).

Component	Advisory Agency	OEL
Potassium Hydroxide (1310-58-3)	OSHA PEL (total dust)	15 mg/m³ (TWA, 8 hr)
	OSHA PEL (respirable fraction)	5 mg/m³ (TWA, 8 hr)
	NIOSH (inhalable particles)	2 mg/m³ (Ceiling)

8.2 Exposure Controls

Appropriate Engineering Controls: Observe all national and local regulations. Good general ventilation (typically 10 air changes per hour) should be used. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

8.3 Individual Protection Measures and Personal Protective Equipment (PPE)

Work/Hygiene Practices: Wash hands with soap and water after handling the material and before eating, drinking, and/or smoking. If in eyes, flush immediately. Remove contacts if safe and able to do so. Hold eye lids open to rinse for at least 15 min. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Routinely wash work clothing and protective equipment to remove contaminants.

Person Protective Equipment (PPE)

Wear safety glasses with side shields (or goggles) and a face shield. Skin contact should be minimized through use of gloves and suitable long-sleeved clothing selected with regard for use condition exposure potential.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Physical State: Liquid
Color: Dark Brown
Odor: Musty, earthy, or like coal
Odor Threshold: N/A
Melting Point: N/A
Boiling Point: >200°F (100°C)
Flash Point: N/A
Auto-ignition Temperature: N/A
Decomposition Temp.: N/A
Flammability: N/A
Lower Flammability Limit: N/A
Upper Flammability Limit: N/A
Caloric Value: N/A
pH: 12.5-13.5
Relative Density/Spec. Gravity: 1.19
Bulk Density: 9.90 lbs/ft³ (0.16 kg/dm³)
Particle Characteristics: N/A
Viscosity: N/A
Solubility: >90%
Partition coefficient n-octanol/ water (log value): N/A
Vapor Pressure: N/A
Vapor Density: N/A

SECTION 10: STABILITY AND REACTIVITY

10.1 Chemical and Hazardous Reactions

Reactivity: Reacts violently with strong acids. May be corrosive to metals.
Chemical Stability: Material is stable under normal conditions of use.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Acids. Metals. Maleic anhydride. Avoid contact with incompatible materials.
Incompatible Materials: Do not store in aluminum or steel containers. Do not mix with ammonium sulfate or calcium nitrate. Strong acids.
Hazardous Decomposition Products: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Likely Routes of Exposure

Inhalation: May cause irritation to the respiratory system. Prolonged inhalation may be harmful. Symptoms may include burning, sore throat and coughing, or wheezing.
Skin Contact: Likely route. Causes severe skin burns. Symptoms may include redness, burning, and pain.
Eye Contact: Likely route. Causes serious eye damage. Symptoms may include redness, pain, swelling, and blurred or hazy vision.
Ingestion: Causes digestive tract burns.

11.2 Symptoms Related to Physical, Chemical, and Toxicological Characteristics (After Exposure)

Inhalation: May cause respiratory irritation. Symptoms may include: Sore throat, cough, or burning sensation.
Skin Contact: Causes burning pain and severe corrosive skin damage. Symptoms may include: Severe skin irritation, redness, dermatitis.
Eye Contact: Causes serious eye damage. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision. Permanent eye damage including blindness could result.
Ingestion: Causes digestive tract burns.

11.3 Immediate and Delayed Effects

Immediate Effects: Severe eye and skin damage from exposure.
Chronic Effects: Prolonged inhalation may be harmful.

11.4 Information on Toxicological Effects

Skin Sensitization: Product is not expected to cause skin sensitization.
Respiratory Sensitization: Product is not expected to cause skin sensitization.
Aspiration Hazard: Not classified

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not classified
Reproductive Toxicity: Not classified

Specific Target Organ Toxicity – Single Exposure (STOT-SE)
Not classified
Specific Target Organ Toxicity – Repeated Exposure (STOT-RE)
Not classified

11.5 Numerical Measures of Toxicity

Acute Toxicity

Potassium Hydroxide (1310-58-3)

Test	Species	Concentration	Result
LD_{50} (oral)	Rat	> 5,000 mg/kg (calc.)	Not acutely toxic

Polyalkyleneoxide modified Heptamethyltrisiloxane (Proprietary)

Test	Species	Concentration	Result
LD_{50} (oral)	Rat	> 2,000 mg/kg	Not acutely toxic
LD_{50} (dermal)	Rat	> 2,000 mg/kg	Not acutely toxic

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Determination: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large spills can have a harmful or damaging effect on the environment.

Aquatic

Potassium Hydroxide (1310-58-3)

Test	Species	Concentration	Duration	Result
LC_{50}	Western mosquitofish (Gambusia affinis)	80 mg/l	96h	Low acute toxicity

Polyalkyleneoxide modified Heptamethyltrisiloxane (Proprietary): Not established. Expected to have low acute toxicity to aquatic organisms.

12.2 Environmental Effects

Persistence and Degradability

Potassium Hydroxide: The methods for determining the biological degradability are not applicable to inorganic substances.
Polyalkyleneoxide modified Heptamethyltrisiloxane: No data available.

Bioaccumulative Potential

Potassium Hydroxide: Partition coefficient - noctanol/water not applicable for inorganic substances.

Polyalkyleneoxide modified Heptamethyltrisiloxane: No data available.

Mobility in Soil

Potassium Hydroxide: No data available.

Polyalkyleneoxide modified Heptamethyltrisiloxane: No data available.

12.3 Other Adverse Effects

Other Information: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal Methods and Waste Codes

Disposal Methods: Dispose of waste material in accordance with all local, regional, and national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Waste Code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

SECTION 14: TRANSPORTATION INFORMATION

14.1 DOT

Proper Shipping Name:	UN 1823, Potassium hydroxide, solution, 8, III
UN Number:	UN 1823
Class:	8
Packing Group:	III
Labels:	Class 8 – Corrosive substances

14.2 Freight Classification

Description: Fertilizing Compounds (Manufactured Fertilizers), NOI, Liquid in container
NMFC: 68140, Sub B
LTL Class: 100

14.3 Special Precautions for User

None

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulation

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated
CERCLA Hazardous Substances List (40 CFR 302.4): Potassium Hydroxide (CAS 1310-58-3)
SARA 304 Emergency Release Notification: Not regulated
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed

15.2 Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazardous Categories
Immediate Hazard – Yes
Delayed Hazard – No
Fire Hazard – No
Pressure Hazard – No
Reactivity Hazard – No
SARA 302 Extremely Hazardous Substances: Not listed
SARA 311/312 Hazardous Chemicals
Immediate (acute) health hazard
SARA 313: Not regulated

15.3 Other Federal Regulation

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated
Clean Water Act (CWA)
Not regulated
Safe Drinking Water Act
Not regulated

15.4 US State Regulations

California Controlled Substances: Not listed
Massachusetts RTK 0 Substance List: Potassium Hydroxide (1310-58-3)
New Jersey Worker and Community Right-to-Know Act: Not regulated
Pennsylvania Worker and Community Right-to-Know Law: Potassium Hydroxide (1310-58-3)

California Proposition 65

WARNING: This product can expose you to chemicals including silica which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

15.5 International Regulations

Canadian Classification

WHIMS Classification

Polyalkyleneoxide modified Heptamethyltrisiloxane (Proprietary)

Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Class D Division 2 Subdivision B - Toxic material causing other toxic effects

WHIMS Classification

Quartz (14808-60-7)

Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Class D Division 2 Subdivision B - Toxic material causing other toxic effects

15.6 International Inventories

Country	Inventory	Yes/No*
USA	Toxic Substances Control Act (TSCA)	Yes
Brazil	Inventário Nacional de Substâncias Químicas (IBAMA)	N/D
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Chile	Inventario Nacional de Sustancias Químicas (INSQ)	N/D
Columbia	National Inventory of Chemical Substances for Industrial Use (INSQUI)	N/D
Egypt	Egyptian Environmental Affairs Agency (EEAA) Hazardous Substance List	N/D
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
India	ChemIndia - Chemicals inventory of India	N/D
Japan	Existing and New Chemical Substances (ENCS) Inventory	Yes
Japan	Chemical Substances Control Law (CSCL)	Yes
Mexico	Inventory of Chemical Substances (INSQ)	N/D
Morocco	Does maintain a national chemical inventory	N/D
Peru	National Chemical Substances Inventory (RENASQ)	N/D
Tunisia	Does maintain a centralized chemical inventory	N/D
United Kingdom	Refer to the European Community (EC) Inventory	Yes

* "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
"No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).
“N/D” indicated that some or all components could not be determined to comply with the inventory requirements administered by the governing country(s).

SECTION 16: OTHER INFORMATION

16.1 HMIS (Hazardous Materials Identification System)

Health	3
Flammability	0
Reactivity	1
PPE	D

16.2 NFPA (National Fire Protection Association)

Health	3
Flammability	0
Instability	1
Special	

16.3 Disclaimer

The information provided in this Safety Data Sheet is correct to the best of the Manufacturer's knowledge, information, and belief as of the date of its publication. However, it is intended only as guidance for the safe handling, use, processing, storage, transportation, disposal, and release of the Product. No warranties, either express or implied—including warranties of merchantability or fitness for a particular purpose—are made with respect to the Product or the information provided herein. Furthermore, no guarantee is made that the Product or information herein can be used without infringing on the intellectual property rights of others. This Safety Data Sheet pertains only to the specific Product identified and may not be valid if the Product is used in combination with other materials or in any other process unless specified. The user assumes all risk and liability for any loss, injury, damage, or expense arising out of the Product's use, handling, storage, or disposal. Manufacturer recommends that users conduct their own testing to determine the Product's suitability for their particular application.

16.4 Version and Revision Date

Version:	2.0
Revision Date:	01/14/26