



SECTION 1: Identification

1.1 GHS Product identifier

Product name Huma-K 0-0-15

1.3 Recommended use of the chemical and restrictions on use

Liquid Potash Fertilizer for Agriculture

1.4 Supplier's details

Name 3Tier Technologies
Address 413 W. 13th Street
Sanford FL 32771
USA
Telephone (877) -226-7498

1.5 Emergency phone number

1-877-226-7498

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Component	Concentration
Potassium citrate (CAS no.: 866-84-2; EC no.: 202-733-3)	Not specified
Leonardite Shale (CAS no.: 129521-66-0)	Not specified

Trade secret statement (OSHA 1910.1200(i))

The specific chemical identities and/or actual concentrations or actual concentration ranges for one or more listed components are being withheld as trade secrets under the US regulation 29 CFR 1910.1200(i).

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a poison center/doctor/physician if you feel unwell.
If inhaled	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Obtain medical attention if breathing difficulty persists.
In case of skin contact	Remove contaminated clothing. Rinse with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
In case of eye contact	Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Obtain medical attention if pain or redness persists.
If swallowed	Rinse mouth. Do NOT induce vomiting. Obtain medical attention. Call a poison center/doctor/physician if you feel unwell.

4.2 Most important symptoms/effects, acute and delayed

Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/Injuries after inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries after skin contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries after eye contact: May cause slight irritation to eyes.

Symptoms/Injuries after ingestion: Ingestion may cause adverse effects.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

If exposed or concerned, get medical advice and attention.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

5.2 Specific hazards arising from the chemical

Not considered flammable.

Product is not explosive.

Hazardous reactions will not occur under normal conditions.

5.3 Special protective actions for fire-fighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.

Complete protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid contact with skin and eyes. Use personal appropriate protective equipment.

6.2 Environmental precautions

Prevent entry to sewers and public waters.

6.3 Methods and materials for containment and cleaning up

Clean up spills immediately dispose of waste safely. Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal. Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid contact with skin and eyes.

Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

Always wash hands after handling the product. Wash contaminated clothing before reuse.

Keep away from children and pets.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in the original container in a cool, well ventilated place away direct sunlight, extremely high or low temperatures and incompatible materials. Store in temperatures 40°F-78°F. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

Incompatible products: Strong bases. Strong acids. Strong oxidizers.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Ensure adequate ventilation, especially in confined areas.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear protective gloves and suitable protective clothing.

Body protection

Hand protection: Wear protective gloves.
Eye protection: Chemical goggles or safety glasses.
Skin and body protection: Wear suitable protective clothing

Respiratory protection

Wear appropriate mask

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Color	Dark Brown Liquid
Odor	Mild Odor
Odor threshold	No data available
Melting point/freezing point	No data available
Boiling point or initial boiling point and boiling range	No data available
Flammability	No data available
Lower and upper explosion limit/flammability limit	No data available
Flash point	No data available
Explosive properties	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Oxidizing properties	No data available
pH	11.22
Kinematic viscosity	No data available
Solubility	Complete
Partition coefficient n-octanol/water (log value)	No data available
Vapor pressure	No data available
Evaporation rate	No data available
Density and/or relative density	1.226
Relative vapor density	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability

The product is stable under recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Extremely high temperatures or low temperatures. Direct sunlight. Incompatible materials.

10.5 Incompatible materials

Strong acids, strong bases.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Harmful if swallowed

Skin corrosion/irritation

Not classified

Serious eye damage/irritation

Not classified

Respiratory or skin sensitization

Not classified

Germ cell mutagenicity

Not classified

Carcinogenicity

Not classified

Reproductive toxicity

Not classified

Specific target organ toxicity (STOT) - single exposure

Not classified

Specific target organ toxicity (STOT) - repeated exposure

Not classified

Aspiration hazard

Not classified

SECTION 12: Ecological information

Toxicity

This product is not considered harmful to aquatic organisms or cause long-term adverse effects in the environment.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Dispose of contents/container in accordance with local, state, federal, and international environmental laws and regulations.

Packaging disposal

Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with local, regional, national and/or international regulation.

Waste treatment

Avoid unintentional release to the environment

SECTION 14: Transport information

DOT (US)

Not regulated as a dangerous good

IMDG

Not regulated as a dangerous good

IATA

Not regulated as a dangerous good

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Toxic Substances Control Act (TSCA) Inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

SARA 302 Components

No products were found.

SARA 311/312 Hazards

No SARA hazards.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65 Components

This product does not contain any chemical know to the State of California to cause cancer and birth defects or other reproductive harm.

SECTION 16: Other information

Date of Revision: January 13, 2025

Prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

16.1 Further information/disclaimer

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