SAFETY DATA SHEETS

This SDS packet was issued with item:

078024208

N/A

MSDS Material Safety Data Sheet

JorVet™

Potassium Hydroxide, 10%
Product Codes: J326

Jorgensen Laboratories, Inc.
1450 North Van Buren Avenue
Loveland, CO 80538

24 Hour Emergency Telephone:
CMB: (800)535-5053

All non-emergency questions may be directed to customer service @ (970)669-2500 or fax (970)663-5042

HAZARDOUS IDENTIFICATION

Hazardous Ingredient: Potassium Hydroxide, 10%
Synonyms: Caustic potash, potassium hydrate
CAS #: 1310-58-3
Molecular Weight: 56.11 Chemical Formula: KOH

EMERGENCY OVERVEIW

CAUTION! CORROSIVE! HARMFUL IF SWALLOWED OR INHALED! Causes irritation or burns to eyes, skin and respiratory tract. Avoid contact with eyes, skin and clothing.

SAFETY RATINGS: Health: 1, Slight Reactivity: 0, None
Flammability: 0, None Contact: 1, Slight

Protective Equipment: Goggles, Lab Coat or Apron, Gloves, Local or General Exhaust Ventilation.

Storage Code: Green: Minimal Hazard.

POTENTIAL HEALTH EFFECTS

INHALATION:
May cause irritation. Symptoms may include coughing, sneezing and damage to the nasal or respiratory tract.

INGESTION:
Harmful or may be fatal. May cause nausea, vomiting, diarrhea and burning of the mouth, throat and stomach.

SKIN CONTACT:
May cause irritation and redness.

EYE CONTACT:
May cause irritation, redness and burns.

CHRONIC EXPOSURE:
No information available.

AGGRAVATION of PRE-EXISTING CONDITIONS:
No information available.

FIRST AID MEASURES

INHALATION:
Remove to fresh air if effects occur.

INGESTION:
Do not induce vomiting. Give several glasses of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

SKIN CONTACT:
Wash with mild soap and water. Get medical advice if irritation develops.

EYE CONTACT:
Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical advice.

FIRE FIGHTING MEASURES

FIRE:
Not considered to be a fire hazard.
EXPLOSION:
Not considered to be a explosion hazard.
FIRE EXTINGUISHING MEDIA:
Use any means suitable for extinguishing surrounding fire.
SPECIAL INFORMATION:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.
NFPA RATINGS: Health: 1 Flammability: 0 Reactivity: 0

ACCIDENTAL RELEASE MEASURES

Wear appropriate personal protective equipment as specified in the Personal Protection Section. Collect liquid in an appropriate container or absorb with a paper towel for proper disposal. Wash area with soap and water.

HANDLING AND STORAGE

Store in a cool, dry, ventilated area away from flame, sources of ignition and heat. Keep containers tightly closed and upright. Protect from physical damage. Keep out of direct sunlight and separate from incompatible materials.
Storage and use areas should be non-smoking.

PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS:
None established.
VENTILATION SYSTEM:
In general, dilution ventilation is a satisfactory health hazard control for this substance.
PERSONAL RESPIRATORS (NIOSH) APPROVED:
No information available.
SKIN PROTECTION:
Wear protective clothing, gloves, lab coat or apron, as appropriate, to prevent skin contact.
EYE PROTECTION:
Use chemical safety glasses or goggles. Maintain eye wash fountain in work area.

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear Liquid.
ODOR:	None.
SOLUBILITY:	Miscible with water.
SPECIFIC GRAVITY:	No information available.
pH:	No information available.
% VOLATILES by VOLUME:	No information available.
BOILING POINT:	No information available.
MELTING POINT:	No information available.
VAPOR DENSITY (Air =1):	No information available.
VAPOR PRESSURE (mm Hg):	No information available.
EVAPORATION RATE (BuAc=1):	No information available.

STABILITY AND REACTIVITY

STABILITY:
Stable under ordinary conditions of use and storage.
HAZARDOUS DECOMPOSITION PRODUCTS:
No information available.
HAZARDOUS POLYMERIZATION:
Will not occur.
INCOMPATIBILITIES:
No information available.
CONDITIONS to AVOID:
Heat.

TOXICOLOGICAL/ECOLOGICAL INFORMATION

TOXICOLOGICAL DATA/ENVIRONMENTAL TOXICITY:
No information available.

DISPOSAL INFORMATION

Dispose of container and unused contents in accordance with federal, state and local requirements. State and local disposal regulation may differ from federal disposal regulations.

OTHER INFORMATION

TRANSPORT (Land, DOT):
Not regulated.

PRODUCT USE:
Laboratory Reagent.

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Verified August 2012

SDS

Safety Data Sheet

1. IDENTIFICATION

Product Identifier: **Potassium Hydroxide (KOH) 10%**

Product Code(s): J0326

Synonyms: Caustic Potash Solution.

Recommended Use: For invitro veterinary use only.

Uses Advised Against: Not for use on humans.

Supplier: Jorgensen Laboratories
1450 Van Buren Avenue, Loveland, CO 80538
Phone: (970) 669-2500 or (800) 525-5614 Fax: (970) 663-5042

Emergency Phone Number: U.S. and Canada: (800) 535-5053 International: (352) 323-3500 (INFOTRAC)

2. HAZARDS IDENTIFICATION

Hazard Classifications: Skin Corrosion/Irritation: Category 1A
Eye Damage/ Irritation: Category 1

Signal Word: DANGER

Hazard Statements: Causes severe skin burns and serious eye damage.

Pictograms:

Precautionary Statements:

Prevention: Do not breathe fumes, mists, vapors or spray.
Wash thoroughly after handling.
Wear protective gloves, protective clothing, eye protection, and face protection.

Response: Immediately call a poison center or doctor.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
Wash contaminated clothing before reuse.
If inhaled: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance with local, regional, national, and international regulations.

Hazards Not Otherwise Classified: This product is harmful to aquatic life. Avoid release to the environment. This product may be mutagenic (see Section 11).

Toxicity Statement: Not applicable.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component	Common Name / Synonyms	CAS#	Chemical Formula	% by Weight
Water	-	7732-18-5	H_2O	91.0
Potassium Hydroxide	Caustic Potash	1310-58-3	KOH	9.01

Trade Secret Statement: Not applicable.

4. FIRST AID MEASURES

First Aid Procedures:

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious, or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a poison center or doctor/physician immediately.

Ingestion: Do not induce vomiting, unless directed to do so by medical personnel. Rinse mouth with water. If vomiting occurs, keep head low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person. Call a poison center or doctor/physician immediately.

Skin Contact: Remove contaminated clothing and shoes immediately. Wash skin with plenty of water for at least 15 minutes. Wash clothing before reuse. Call a poison center or doctor/physician immediately.

Eye Contact: Check for and remove contact lenses, if present and easy to do. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a poison center or doctor/physician immediately.

General Advice: Poison information centers in each state can provide additional assistance for scheduled poisons. Ensure that those providing first aid and medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Symptoms and Effects: Corrosive. Causes severe burns and tissue damage if swallowed, inhaled, or exposed to the skin or eyes.

Immediate Medical Care/ Special Treatment: Immediate medical attention is required. Call a poison center or doctor/physician immediately. Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media: Water spray, dry powder, alcohol resistant foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream, as it may scatter and spread fire.

Hazardous Combustion Products: Potassium oxides, hydrogen.

Specific Hazards: Corrosive. Excessive thermal conditions may cause decomposition and yield potassium oxides. Contact with metals may yield hazardous hydrogen gas.

Special Protective Equipment/ Precautions for Firefighters: As in any fire, wear MSHA/NIOSH-approved (or equivalent), self-contained, positive-pressure or pressure-demand breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protective Equipment: Ventilate area of leak or spill. Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Keep upwind. Wear appropriate personal protective equipment (see Section 8). Avoid contact with eyes, skin, and clothing.

Emergency Procedures: In case of chemical emergency, or if unsure how to address an accidental release, consult a professional (see Section 1).

Methods for Containment: Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements, or confined areas. Dike the spilled material, where this is possible. Product should not be released to the environment. Contain and recover liquid when possible.

Methods for Cleanup: Absorb spill with an inert material (e.g. vermiculite, dry sand, earth, cloth, or fleece) and place in a non-combustible container for reclamation or disposal. Do not flush to sewer. Clean contaminated surface thoroughly. Residues from spills can be diluted with water and neutralized with an acidic material. Never return spills in original containers for reuse. Clean up in accordance with all applicable regulations.

7. HANDLING AND STORAGE

Handling: Wear personal protective equipment (see Section 8). Provide sufficient air exchange and/or exhaust in work areas. Avoid contact with skin, eyes, and clothing. Do not breathe vapors or spray mist. Do not ingest. When using, do not eat, drink, or smoke. Keep away from incompatible materials (see Section 10). Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Containers of this material may be hazardous when empty, as they retain product residues. Observe all warnings and precautions listed for this product. As with all bases, never add water directly to this product. Instead, add bases to water to prevent violent eruption of the solution.

Storage: Store in a dry, ventilated area. Store at 15-25 °C. Store away from heat and incompatible materials (see section 10). Store in original container. Do not store in metallic containers. Keep containers tightly closed and upright. Keep away from food, drink, and animal foodstuffs. Keep out of the reach of children. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of this product.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits: Water: No information found.

Potassium Hydroxide:	OSHA (PEL):	2 mg/m^3
	ACGIH (TLV):	2 mg/m^3

Engineering Controls: Ensure adequate ventilation. 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 Measures:

Eye/Face Protection: Wear safety glasses with side shields or safety goggles. Wear a face shield. Maintain approved eye wash station and accessible rinse facilities in work area.

Skin Protection: Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical resistant gloves.

Respiratory Protection: An air-purifying, NIOSH-approved respirator with appropriate cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use a positive-pressure, air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are unknown, or if any other circumstances exist where air-purifying respirators may not provide adequate protection.

Specific Requirements for Personal Protective Equipment: Ensure that glove material is compatible with this product. This information is available from glove manufacturers. If respiratory protection is required, use full face protection as well.

9. PHYSICAL AND CHEMICAL PROPERTIES

Unless otherwise indicated, all properties are given at 25 °C and standard pressure.

Appearance: Colorless, transparent liquid.

Odor: Odorless.

Odor Threshold: No information found.

Formula Weight: 56.10 (as KOH)

pH: 14 at 20 °C

Melting/Freezing Point: -3 °C

Boiling Point/Range: 101 °C

Decomposition Temperature: No information found.

Flash Point: Not applicable.

Auto-ignition Temperature: Not applicable.

Flammability: Not flammable.

Flammability/Explosive Limits: Not applicable.

Solubility: Miscible with water.

Vapor Pressure: 1 mmHg at 714 °C (as KOH)

Vapor Density: No information found.

Specific Gravity: 1.11 (Water = 1)

Evaporation Rate: No information found.

Viscosity: No information found.

Partition Coefficient (n-octanol/water): No information found.

10. STABILITY AND REACTIVITY

Reactivity Data: Corrosive. See Section 11.

Chemical Stability: Stable under normal conditions. Sensitive to air.

Conditions to Avoid: Excessive heat or cold, excessive ambient moisture, exposure to air, incompatible materials.

Incompatible Materials: Acids, oxidizers, metals, anhydrides, halogens, nitromethane, chlorinated solvents, organic materials, phosphorous.

Hazardous Decomposition Products: Potassium oxides, hydrogen.

Possibility of Hazardous Reactions: May react vigorously or violently with the incompatible materials listed above. Excessive thermal conditions may cause decomposition and yield potassium oxides. Contact with metals may yield hazardous hydrogen gas.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Inhalation, ingestion, skin contact, eye contact.

Acute Effects: Causes burns to the eyes, skin, respiratory tract, and gastrointestinal tract. May enter lungs if swallowed or vomited. Liquid and vapors are corrosive. May cause tissue damage.

Chronic Effects: Prolonged or repeated exposure has a destructive effect on tissue. May affect genetic material.

Toxicological Data:

Water: No information found.

Potassium Hydroxide: LD_{50} Oral, Rat: 273 mg/kg
Corrosive to eyes and skin based on human and animal data.

Symptoms of Exposure: Irritation, burning, coughing, sneezing, choking sensation, hoarseness, difficulty breathing, shock, nausea, vomiting, diarrhea.

Carcinogenic Effects: No component of this product is considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicological Data:

Water: No information found.

Potassium Hydroxide: LC_{50}, Western Mosquitofish (Gambusia affinis): 80 mg/L 96 h

Persistence and Degradability: Expected to be readily biodegradable.

Environmental Effects: Harmful to aquatic life. May adversely affect pH of aquatic ecosystems. Avoid exposure to the environment.

13. DISPOSAL INFORMATION

Disposal Instructions: All wastes must be handled in accordance with local, state, and federal regulations. Minimize exposure to product waste (see Section 8).

Contaminated Packaging: Because emptied containers may retain product residue, follow label warnings even after container is emptied. Offer rinsed packaging material to local recycling facilities.

Waste Codes: D002: Waste Corrosive Material (pH ≤ 2 or pH ≥12.5 or corrosive to steel)

14. TRANSPORT INFORMATION

DOT:

UN Number: UN1814

Proper Shipping Name: Potassium Hydroxide Solution

Hazard Class: 8

Packing Group: III

ERG Number: 154

Environmental Hazard Regulations: No information found.

Other Transport Precautions: No information found.

15. REGULATORY INFORMATION

U.S. Federal Regulations:

OSHA: This product is considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Inventory: All components of this product are on the U.S. TSCA Inventory.

U.S. EPCRA (SARA Title III):

Section 302: No information found.

Sections 311/312:

Hazard Category	List (Yes/No)
Section 311 – Hazardous Chemical	Yes
Immediate Hazard	Yes
Delayed Hazard	No
Fire Hazard	No
Pressure Hazard	No
Reactivity Hazard	No

Section 313: No information found.

CERCLA Reportable Quantities: Potassium Hydroxide: 1000 lb

Canada WHMIS: This SDS is prepared in compliance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Therefore, it complies with the 2015 Workplace Hazardous Materials Information System (WHMIS) as well.

International Inventories:

Country or Region	Inventory Name	On Inventory (Yes/No)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*A "Yes" indicates that the listed component(s) of this product comply with the inventory requirements administered by the governing country(s)

16. OTHER INFORMATION

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