# Safety Data Sheet

## Section 1 – Identification

**Product Identifier: Barbicide Concentrate**

**Other means of Identification: Disinfecting solution**

***Name and Address of Responsible Parties:***

**King Research, Inc**
**7025 W. Marcia Rd.**
**Milwaukee, WI 53223**

**Information Telephone #: 1-800-222-8160**
**24 Hr. Emergency Telephone Number: INFOTRAC- 1-800-535-5053**
**International 24 Hr. Emergency Telephone Number: INFOTRAC – 1-352-323-3500**
**Contract # - 106253**

## Section 2 – Hazards Identification

**Classification of the Chemical:** Clear dark blue liquid. Alcohol and disinfectant odor.

This material is classified as hazardous under OSHA regulations (29 CFR 1910.1200) (Hazcom 2012).

**Hazardous classification:** Flammable liquid – Category 3
Skin irritation – Category 2
Eye irritation – Category 2A

**Label elements:**

**Signal Word:** Warning

**Hazard Statements:** Flammable liquid and vapor.
Causes Skin irritation.
Causes Serious Eye irritation.

**Precautionary Statements:** Keep away from heat, sparks, open flames and hot surfaces.
No smoking.
In case of fire: Use water fog, Carbon dioxide, Dry chemical or Foam to extinguish.
Ground/Bond container and receiving equipment.
Take precautionary measures against static discharge.

## Section 2 – Hazards Identification (continued)

Keep container tightly closed.
Store in a well ventilated place. Keep cool.
Wash hands thoroughly after handling.
If on Skin: Wash with plenty of soap and water.
If skin irritation occurs get medical advice/attention.
Take off contaminated clothing and wash before reuse.
Wear protective gloves.
Wear eye protection such as goggles or safety glasses with side shields.
If in eyes: Rinse cautiously with water for 15 minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists get medical advice/attention.
Do not eat, drink or smoke when using this product.
If swallowed: Immediately call a poison center/physician, Rinse mouth.
Dispose of contents/container in accordance with local, state, federal or international regulations.

**Hazard Pictogram(s):**

**Other Hazards not otherwise classified:**
This product contains 1.05% ingredients of an unknown acute toxicity. See section 11 for more information.

## Section 3 – Composition/Information on Ingredients

| Chemical Name, Common Name | CAS # | Concentration wt/wt(*) |
|---|---|---|
| Isopropyl alcohol | 67-63-0 | 5-25 |
| Dimethyl benzyl ammonium chloride | 68424-85-1 | 0.5-10 |
| Sodium Nitrite | 7632-00-0 | 0.5-10 |

*** Note: The exact concentrations of the chemical(s) above are being withheld as a trade secret.**

## Section 4 – First-Aid Measures

**Description of first aid measures:**

*Inhalation:* If inhaled remove victim to fresh air and keep at rest. Call a poison center or physician if you feel unwell.

*Skin contact*: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs get medical advice/attention.

*Eye contact:* If in eyes rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and continue rinsing. If eye irritation persists seek medical advice/attention.

*Ingestion:* Do NOT induce vomiting unless instructed by medical personal. Never give anything by mouth to an unconscious person. Get medical attention.

**Most important symptoms and effects, both acute and delayed:**
Causes skin irritation.
Causes eye irritation.
Ingestion may cause gastrointestinal irritation, nausea, vomiting, diarrhea.

**Indication of any immediate medical attention and special treatment needed:**
Treat symptomatically

## Section 5 – Fire-Fighting Measures

**Extinguishing media:**
***Suitable extinguishing media:*** Water fog, Carbon dioxide, Dry chemical, Foam
***Unsuitable extinguishing media:*** Not available

**Special hazards arising from the substance or mixture:** None Known

**Flammability classification:** (OSHA 29 CFR 1910.106) (Hazcom 2012): Flammable liquid – Category 3
**Hazardous combustion products:** Carbon oxides, other unidentified organic compounds.

**Special protective equipment and precautions for firefighters:**
***Protective equipment for fire-fighters:*** Firefighters should wear proper protective equipment (Bunker gear) and self-contained breathing apparatus with full face operated in positive pressure mode.

## Section 6 – Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:**
All persons dealing with the clean-up should the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in section 7 and 8.

**Methods and materials for containment and clean up:**
Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent run-off into drains, sewers, or any natural waterway or drinking supply. Ventilate the area. Remove all sources of ignition. Soak up with inert absorbent material. Scoop up material and place into suitable container(s). Dispose of according to local, state and federal regulations.

## Section 7 – Handling and Storage

**Precautions for safe handling:**
Obtain special instructions before use. Do not handle until all safety precautions have been read and understand. Wear protective gloves and eye/face protection. Adequate ventilation should be supplied. Avoid contact with skin, eyes and clothing. Keep away from heat and ignition sources. Ground/Bond container and receiving equipment. Take precautionary measures against static discharge. Keep container tightly closed.

**Conditions for safe storage:**
Store in cool, dry and well ventilated place. Containers should be clearly identified, clear of obstructions and accessible only to authorized personnel. Protect from sunlight. Have appropriate fire extinguishers/sprinkler system in place. Spill clean-up equipment should be in or near storage area.

**Incompatible materials:**
Strong oxidizers, Strong acids.

## Section 8 – Exposure Controls/Personal Protection

**Exposure limits:**

| Chemical Name | ACGIH-TLV | OSHA-PEL |
|---|---|---|
| Isopropyl alcohol | 200ppm | 400ppm |
| Dimethyl benzyl ammonium chloride | Not available | Not available |
| Sodium Nitrite | Not available | Not available |

**Exposure controls:**

**Ventilation and engineering measures:** Use in well ventilated area. Apply technical measures to comply with occupational exposure limits if needed.

## Section 8 – Exposure Controls/Personal Protection (Continued)

**Respiratory measures:** If airborne concentrations are above the permissible exposure limit use NIOSH approved respirators.

**Skin Protection:** Wear protective gloves. Where extensive exposure to the product is possible, use resistant apron/suit and boots.

**Eye/face Protection:** Goggles or safety glasses with side shields.

**Other Protective equipment:** Ensure that eyewash stations and a safety shower are close to the workstation(s).

**General hygiene considerations:** Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when using this product. Wash hands after handling. Remove and wash all contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

## Section 9 – Physical and Chemical Properties

**Appearance:** Clear dark blue liquid.
**Odor:** Alcohol/disinfectant odor.
**Odor threshold:** Not available
**PH:** 10.0-12.0
**Melting/Freezing pointing:** Not available
**Boiling point and boiling range:** >100C (212F)
**Flash point:** >33.3$^{o}$C (92$^{o}$F)
**Evaporation point (Butyl Acetate=1):** Not available
**Flammability (method determination):** Small Scale closed cup, ASTM D3278/D3828
**Lower flammability limit (% by vol.):** Not available
**Upper flammability limit (% by vol.):** Not available
**Vapor pressure:** Not available
**Vapor density:** Not available
**Relative density:** 0.99-1.02
**Solubility in water:** Complete
**Partition Coefficient (n-octanol/water):** Not available
**Auto ignition temperature:** Not available
**Decomposition temperature:** Not available
**Viscosity:** Not available
**Volatiles (% by wt) =** 14%
**Volatile organic compounds:** Isopropyl alcohol, Dimethyl benzyl ammonium chloride
**Other physical/chemical comments:** No addition information.

## Section 10 – Stability and Reactivity

**Reactivity:** Not normally reactive.
**Chemical stability:** Stable under normal conditions.
**Possibility of hazardous reactions:** Hazardous polymerization does not occur.
**Conditions to avoid:** Heat. Contact with incompatible materials.
**Incompatible materials:** Strong oxidizers, Strong acids.
**Hazardous decomposition products:** Carbon oxides.

## Section 11 – Toxicological Information

**Information on routes of exposure:**
**Routes of entry-inhalation:** YES
**Routes of entry-skin & eye:** YES
**Routes of entry-Ingestion:** YES
**Routes of entry-skin absorption:** YES

**Potential Health Effects:**

**Signs and symptoms of short term exposure:**
*Signs and symptoms*: Inhalation – May cause respiratory irritation. May cause headache, nausea, dizziness and other symptoms of central nervous system depression.

*Signs and symptoms*: Ingestion – Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

*Signs and symptoms*: Skin – May cause irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

*Signs and symptoms*: Eyes – May cause severe irritation.

**Potential Chronic Health Effects:** None known

**Mutagenicity:** Not hazardous by OSHA/WHMIS criteria.

**Carcinogenicity:** No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

**Reproductive effects:** Not hazardous by OSHA/WHMIS criteria.

**Sensitization to material:** No data available to indicate product may be a sensitizer.

**Specific target organ effects:** Not Available.

**Medical conditions aggravated by overexposure:** Pre-existing skin and eye conditions.

## Section 11 – Toxicological Information (Continued)

**Toxicological data:** The calculated ATE value for this mixture is above classification parameters.

ATE (oral) = 2,912mg/kg

| Chemical Name | LD50-Oral | Dermal |
|---|---|---|
| Isopropyl alcohol | 5000mg/kg (rat) | 12,800mg/kg (rabbit) |
| Dimethyl benzyl ammonium chloride | >2000mg/kg (rabbit) | >2000mg/kg (rabbit) |
| Sodium Nitrite | 85mg/kg (rat) | Not available |

## Section 12 – Ecological Information

**Ecotoxicity:** May be dangerous to the environment. No data is available on the product itself. Should not be released directly into the environment.

**Mobility in Soil:** This product itself has not been tested.

**Persistence and degradability:** This product itself has not been tested.

**Bioaccumulation potential:** This product itself has not been tested.

**Other adverse Environmental effects:** None Known.

## Section 13 – Disposal Information

**Handling for disposal:** Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8.

**Methods of disposal:** Dispose in accordance with all applicable federal, state, provincial and local regulation. Contact your federal, state, provincial and local authorities for specific rules.

## Section 14 – Transportation Information

**US 49 CFR/DOT Hazard Classification:**

| | |
|---|---|
| UN No.: | UN1993 |
| UN Proper shipping name: | Flammable liquid, N.O.S., (Isopropyl alcohol) |
| Transport hazard class: | 3 |
| Packing group: | III |
| ERG: | 154 |

***Special Transportation Notes:*** Not regulated per alcohol exemption (CFR 49 173.150(e)) or Limited Quantity exemption (CFR 49 173.150(b)).

DOT Marine Pollutants: This product does not contain Marine Pollutants as defined in CFR 49 171.8.

## Section 14 – Transportation Information (Continued)

**IMDG/IMO Code Shipping Classification:**

| | |
|---|---|
| UN No.: | UN1993 |
| UN Proper shipping name: | Flammable liquid, N.O.S., (Isopropyl alcohol) |
| Transport hazard class: | 3 |
| Packing group: | III |
| ERG: | 154 |

Not classified as a marine pollutant.

**ICAO/IATA Air Transport Classification**

| | |
|---|---|
| UN No.: | UN1993 |
| UN Proper shipping name: | Flammable liquid, N.O.S., (Isopropyl alcohol) |
| Transport hazard class: | 3 |
| Packing group: | III |
| ERG: | 154 |

## Section 15 – Regulatory Information

**US Federal Information:**
**TSCA:** All listed ingredients appear on the Toxic Substances Control Act.

**US CERCLA Reportable quantity (RQ):** Sodium Nitrite (100lbs.)

**SARA Title III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355:**
No extremely hazardous substances are present in this material.

**SARA Title III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes:**
Reactive Hazard, Acute Health Hazard, Chronic Health Hazard. Under SARA Section 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

**SARA Title III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372:**
This product contains Isopropyl alcohol and sodium nitrite.

**State Regulations:**
**California Proposition 65:** This product does not contain a chemical known to the State of California to cause, birth defects or other reproductive harm.

**International Information:**
**Canadian Environmental Protection Act (CEPA) information:** All ingredients listed appear on the Domestic Substances List (DSL).

## Section 16 – Other Information

**HMIS – Hazardous Materials Identification System**
Health -2 Flammability -2 Physical Hazard -1 PPE –B

**NFPA – National Fire Protection Association**
Health -2 Flammability -2 Reactivity -1

**Abbreviations legend:**
**ACGIH: American Conference of Governmental Industrial Hygienist**
**CAS: Chemical abstract Services**
**CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980**
**CFR: Code of Federal Regulations**
**CSA: Canadian Standards Association**
**DOT: Department of Transportation**
**ECOTOX: U.S. EPA Ecotoxicology Database**
**EINECS: European Inventory of Existing Commercial chemical Substances**
**EPA: Environmental Protection agency**
**HSDB: Hazardous Substances database**
**IARC: International Agency for Research on Cancer**
**IBC: Intermediate Bulk Container**
**IUCLID: International Uniform Chemical Information Database**
**LC: Lethal Concentration**
**LD: Lethal Dose**
**NIOSH: National Institute of Occupational Safety and Health**
**NTP: National Toxicology Program**
**OECD: Organization for Economic Cooperation and Development**
**PEL: Permissible exposure limit**
**RCRA: Resource Conservation and Recovery Act**
**RTECS: Registry of Toxic Effects of Chemical Substances**
**SARA: Superfund Amendments and Reauthorization Act**
**SDS: Safety Data Sheet**
**STEL: Short Term Exposure Limit**
**TDG: Canadian Transportation of Dangerous Goods Act & Regulations**
**TLV: Threshold Limit Values**
**TWA: Time Weighted Average**
**WHMIS: Workplace Hazardous Materials Identification System**

## Disclaimer

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