K-BAC 7015

SAFETY DATA SHEET

Printed: 04/08/2015
Revision: 04/08/2015
Supersedes Revision: 10/23/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: 211214
Product Name: K-BAC 7015
Category: Biocide
Company Name: Water Science Technologies, LLC
5520 Parkwood Circle
Bessemer, AL 35022
Phone Number: (866)284-9244
Emergency Contact: ChemTel, Inc. (US) (800)255-3924
ChemTel, Inc. (Int'l) (813)248-0585
Information: Company EPA #: 88714

2. HAZARDS IDENTIFICATION

Skin Corrosion/Irritation, Category 1B
Skin Sensitization, Category 1

GHS Signal Word: **Danger**

GHS Hazard Phrases: H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.

GHS Precaution Phrases: P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases: P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310 - Immediately call a POISON CENTER or doctor/physician.

GHS Storage and Disposal Phrases: P501 - Dispose of contents/container to accordance with local and national regulations.

Hazard Rating System:

HMIS:

HEALTH	3
FLAMMABILITY	0
PHYSICAL	0
PPE	D

Potential Health Effects (Acute and Chronic):

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Ingredient(s)	Concentration
7631-99-4	Sodium nitrate	< 2.5 %
55965-84-9	Mixture, 5-Chloro-2-methyl-2H-isothiazol-3-one & 2-Methyl-2H-isothiazol-3-one (3:1)	1.5 %

* Additional Information: The CAS No. of the single components are: CIT: 26172-55-4; MIT: 2682-20-4.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

In Case of Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Seek medical advice/attention immediately.

In Case of Skin Contact: Wash exposed area with soap and water thoroughly. Remove contaminated clothing and wash before reuse. Seek medical advice/attention immediately.

In Case of Eye Contact: Immediately flush eyes with running water for at least 15 minutes. Remove contact lenses if present after the first 5 minutes. Seek medical advice/attention immediately.

In Case of Ingestion: Rinse mouth with water. Do NOT induce vomiting. Never give anything to and unconscious person. Seek medical advice/attention immediately.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Based on the individual reactions of the patient, the physician's judgment should be used to treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flash Pt: > 200.00 F (93.3 C) Method Used: ASTM D Closed Cup

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: NA

Suitable Extinguishing Media: Product is not flammable under normal conditions. Use extinguishing media suitable for source of the fire. Use water spray to cool the containers exposed to the fire.

Fire Fighting Instructions: Fire fighters should wear appropriate protective clothing and the appropriate self contained breathing apparatus (if necessary).

Flammable Properties and Hazards: No data available.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures: Wear appropriate PPE equipment. See section 8.

Environmental Precautions: Prevent product from entering sewers and water systems.

Steps To Be Taken In Case Material Is Released Or Spilled: Collect liquid by absorbing with an inert material (e.g. vermiculite, dry sand, earth) and place in a container for disposal according to local regulations. Surfaces can be decontaminated with a solution containing 5% sodium hydrogensulfite and 5% sodium bicarbonate In case of product reaching water source, collect contaiminated water and add 10% sodium bisulfite solution. Contact supplier for more instructions.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Avoid breathing product vapors or mists. Use with adequate ventilation. Keep containers closed when not in use.

Precautions To Be Taken in Storing: Store in a dry, cool, and well ventilated away from heat sources and incompatible materials. Keep containers securely sealed. Protect containers from physical damage and check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Components (Chemical Name)	OSHA TWA	ACGIH TWA	Other Limits
7631-99-4	Sodium nitrate	No data.	No data.	No data.
55965-84-9	Mixture, 5-Chloro-2-methyl-2H-isothiazol-3-one & 2-Methyl-2H-isothiazol-3-one (3:1)	No data.	No data.	No data.

Respiratory Equipment (Specify Type): No Specific requirements. A risk assessment should be made to determine if respiratory protection is necessary.

Eye Protection: Splash goggles and/or face shield.

Protective Gloves: Wear appropriate impermeable gloves.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): Use local and/or general exhaust ventilation to maintain airborne concentrations below irritating levels or airborne exposure limits, whichever is lower. Local exhaust is generally preferred because it can control the emission of the contaminant at its source, preventing dispersion of it into the general work area.

Work/Hygienic/Maintenance Practices: An eye wash station should be accessible in the immediate area of use. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [ ] Gas [X] Liquid [ ] Solid

Appearance and Odor: Colorless to pale yellow.
Mild Odor.

Melting Point: No data.

Boiling Point: 100.00 C (212.0 F)

Autoignition Pt: NA

Flash Pt: > 200.00 F (93.3 C) Method Used: ASTM D Closed Cup

Explosive Limits: LEL: No data. UEL: No data.

Specific Gravity (Water = 1): 1.015-1.035 at 68.0 F (20.0 C)

Vapor Pressure (vs. Air or mm Hg): 23 MBAR

Vapor Density (vs. Air = 1): No data.

Evaporation Rate: No data.

Solubility in Water: soluble

pH: 3.0-4.0

Percent Volatile: No data.

10. STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [X]

Conditions To Avoid - Instability: No specific information available.

Incompatibility - Materials To Avoid: Reactive or incompatible with the following materials: Alkali metals, Reducing agents, Strong oxidizing agents, Nucleophiles.

Hazardous Decomposition Or Byproducts: oxides of nitrogen, sulfur oxides (SOx), Carbon oxides, hydrogen chloride.

Possibility of Hazardous Reactions: Will occur [ ] Will not occur [X]

Conditions To Avoid - Hazardous Reactions: No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information: No data available.

Carcinogenicity/Other Information:

CAS# 7631-99-4:
Acute toxicity, LD50, Oral, Rat, 1267. MG/KG.
Result:
Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Lacrimation.
Behavioral: Convulsions or effect on seizure threshold.
Lungs, Thorax, or Respiration:Respiratory depression.
- Gigiena i Sanitariya, Mezhdunarodnaya Kniga, ul. B. Yakimanka, 39, 113095, Moscow 113095 Russia, Vol/p/yr: 46(12),66, 1981

CAS# 55965-84-9:
Acute toxicity, LD50, Oral, Rat, 53.00 MG/KG.
Result:
Behavioral: Somnolence (general depressed activity).
Behavioral: Ataxia.
Lungs, Thorax, or Respiration:Respiratory depression.
- Mutation Research., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam Netherlands, Vol/p/yr: 118,129, 1983

CAS# 7631-99-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS #	Ingredient(s)	NTP	IARC	ACGIH	OSHA
7631-99-4	Sodium nitrate	n.a.	n.a.	n.a.	n.a.
55965-84-9	Mixture, 5-Chloro-2-methyl-2H-isothiazol-3-one & 2-Methyl-2H-isothiazol-3-one (3:1)	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information: Environmental: Nitrates are predominantly used as fertilizer. Unfortunately, nitrates have a tendency to migrate into groundwater as they do not bind to soil and are extremely soluble. Excessive levels of nitrates in drinking water may cause serious illness and death. Infants are most susceptible to nitrate toxicity. "Blue Baby Syndrome" can occur when the infant's conversion of nitrate to nitrite interferes with the oxygen-carrying capacity of the blood. Symptoms of Blue Baby Syndrome include, but may not be limited to, shortness of breath and bluish colored skin.
Physical: No information available.

Results of PBT and vPvB assessment:

CAS# 7631-99-4:
LC50, Bluegill (Lepomis macrochirus), 12800000. UG/L, 24 H, Mortality, Water temperature: 21.00 C (69.8 F) - 25.00 C (77.0 F) C.
Result:
Age Effects.
- Toxicity of Selected Chemicals to Certain Animals, Dowden, B.F., and H.J. Bennett, 1965

LC50, Water Flea (Daphnia magna), 5980000. UG/L, 24 H, Mortality, Water temperature: 21.00 C (69.8 F) - 25.00 C (77.0 F) C.
Result:
Affected fish lost equilibrium prior to death.
- Toxicity of Selected Chemicals to Certain Animals, Dowden, B.F., and H.J. Bennett, 1965

Not reported., Green Algae (Scenedesmus acutus var. acutus), Exponential Growth Phase, 120000. UG/L, 1 H, Physiology, Water temperature: 30.00 C (86.0 F) C, pH: 7.00.
Result:
Affected fish became hypoactive.
Affected fish lost equilibrium prior to death.
- Toxicity of Ammonia to Algae in Sewage Oxidation Ponds, Abeliovich, A., and Y. Azov, 1976

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

RCRA: It is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste (40 CFR 261.20-24).

Disposal: Biocide or Pesticide wastes are acutely hazardous. Improper disposal or excess product or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Biocide/Pesticide or Environmental Control Agency, or the Hazardous Waste representative at your nearest EPA Regulation Office for guidance

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s.(2-methyl-2H-isothiazol-3-one (3:1))
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN3265 **Packing Group:** II

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Corrosive liquid, acidic, organic, n.o.s.(Mixture, 5-chloro-2-methyl-2H-isothiazol-3-one and2-methyl-2H-isothiazol-3-one (3:1))
UN Number: 3265 **Packing Group:** II
Hazard Class: 8 - CORROSIVE **TDG Classification:**

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Corrosive liquid, acidic, organic, n.o.s.(Mixture, 5-chloro-2-methyl-2H-isothiazol-3-one and2-methyl-2H-isothiazol-3-one (3:1))

UN Number: |UN3 **Packing Group:** II

Hazard Class: 8 - CORROSIVE

IMDG MFAG Number: |

IMDG EMS Page: |

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Corrosive liquid, acidic, organic, n.o.s.(Mixture, 5-chloro-2-methyl-2H-isothiazol-3-one and2-methyl-2H-isothiazol-3-one (3:1))

UN Number: 3265 **Packing Group:** II

Hazard Class: 8 - CORROSIVE

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Ingredient(s)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7631-99-4	Sodium nitrate	No	No	Yes-Cat. N511
55965-84-9	Mixture, 5-Chloro-2-methyl-2H-isothiazol-3-one & 2-Methyl-2H-isothiazol-3-one (3:1)	No	No	No

This material meets the EPA	[X] Yes [ ] No	Acute (immediate) Health Hazard
'Hazard Categories' defined	[X] Yes [ ] No	Chronic (delayed) Health Hazard
for SARA Title III Sections	[X] Yes [ ] No	Fire Hazard
311/312 as indicated:	[ ] Yes [X] No	Sudden Release of Pressure Hazard
	[ ] Yes [X] No	Reactive Hazard

CAS #	Ingredient(s)	Canadian NPRI	Canadian IDL	Canadian DSL
7631-99-4	Sodium nitrate	No	Yes	Yes
55965-84-9	Mixture, 5-Chloro-2-methyl-2H-isothiazol-3-one & 2-Methyl-2H-isothiazol-3-one (3:1)	No	No	Yes

CAS #	Ingredient(s)	Other US EPA or State Lists
7631-99-4	Sodium nitrate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8A CAIR; CA PROP.65: No
55965-84-9	Mixture, 5-Chloro-2-methyl-2H-isothiazol-3-one & 2-Methyl-2H-isothiazol-3-one (3:1)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No

CAS #	Ingredient(s)	International Regulatory Lists
7631-99-4	Sodium nitrate	
55965-84-9	Mixture, 5-Chloro-2-methyl-2H-isothiazol-3-one & 2-Methyl-2H-isothiazol-3-one (3:1)	

Canadian WHMIS Classification:

No data available.

Regulatory Information:

Primary EPA Registration # : 88714-7
This product is subject to registration under FIFRA.
All ingredients are reported in the EPA TSCA Inventory.

Canadian regulations: This product is not registered for sale or use as a pesticide in Canada.

16. OTHER INFORMATION

Revision Date: 04/08/2015

Additional Information About This Product: No data available.

Company Policy or Disclaimer: The information accumulated herein is believed to be accurate based on the information provided, although no guarantee or warranty, either expressed or implied is made as to the accuracy or completeness of this information, whether originating with this company or not. Recipients are advised to confirm in advance of need that the information is correct, applicable and suitable to their circumstances. The conditions or methods of handling, storage, use and disposal of the product and container are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage or use of this information or product. If the product is used as a component in another product, this information may not be applicable.