Material Safety Data Sheet

Biuret reagent

ACC# 75176

Section 1 - Chemical Product and Company Identification

MSDS Name: Biuret reagent Catalog Numbers: LC11690 Synonyms: Biuret reagent for protein analysis Company Identification: Labchem Inc. 200 William Pitt Way Pittsburgh, PA 15238 For information, call: 412-826-5230 For CHEMTREC assistance, call: 800-424-9300 For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1310-73-2	Sodium hydroxide	10	215-185-5
6381-59-5	Potassium sodium tartrate	<1	unlisted
7732-18-5	Water	balance	231-791-2

Chronic: Prolonged or repeated skin contact may cause dermatitis. Individuals with Wilson's disease are unable to metabolize copper. Thus, copper accumulates in various tissues and may result in liver, kidney, and brain damage. Copper salts may also cause extensive damage to the kidneys, liver, and capillaries with CNS depression, hemolytic anemia, joint pain, gastric hemorrhage and joint pain indicating intoxication. Relatively large doses of dry sodium potassium tartrate (2-4 gm) may have a cathartic effect.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until chemical is gone. Get medical aid at once. Cover burns with loose sterile non-medicated bandages.

Skin: Get medical aid at once. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes. Cover burns with a dry sterile bandage (secure, not tight).

Ingestion: Do NOT induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once. Medical personnel may do esophagoscopy, irrigate injured area with 1% acetic acid to neutralize alkali.

Inhalation: Give artificial respiration if necessary. If breathing is difficult, give oxygen. Get medical aid. Keep victim warm, at rest. Move victim to fresh air.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Firefighting Measures

General Information: Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Use water with caution and in flooding amounts. Negligible fire and explosion hazard when exposed to heat or flame.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Material may be neutralized to pH 7 with citric acid or other suitable neutralizing agent.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from strong acids. Keep away from metals. Keep away from flammable liquids. Keep away

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. **Exposure Limits**

Chemical Name	ACGIH	NIOSH

Solubility: Completely soluble in water. **Specific Gravity/Density:**

Ecotoxicity: No data available. TLm, mosquito fish, 125 ppm/96hr. (fresh water); TLm, bluegill, 99 mg/48hr. (tap water). **Environmental:** Once liquid, sodium hydroxide leaches rapidly into the soil.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA. **SARA**

Section 302 (RQ)

CAS# 1310-73-2: final RQ = 1000 pounds (454 kg)

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 1310-73-2: acute, reactive. CAS # 6381-59-5: acute. CAS # 7758-99-8: acute, chronic. **Section 313**

This chemical is not at a high enough concentration to be reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

CAS# 1310-73-2 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA. **STATE**

CAS# 1310-73-2 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

CAS# 6381-59-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7758-99-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

S 2 Keep out of reach of children. S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 3/7/9 Keep container tightly closed in a cool, well-ventilated place. S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S 28A After contact with skin, wash immediately with plenty of water.

WGK (Water Danger/Protection)

CAS# 1310-73-2: 1 CAS# 6381-59-5: 0 CAS# 7732-18-5: No information available. CAS# 7758-99-8: 2

Canada

CAS# 1310-73-2 is listed on Canada's DSL List. CAS# 1310-73-2 is listed on Canada's DSL List. CAS# 1310-73-2 is listed on Canada's DSL List. CAS# 7732-18-5 is listed on Canada's DSL List. CAS# 7732-18-5 is listed on Canada's DSL List. CAS# 7732-18-5 is listed on Canada's DSL List.

WHMIS: Not available.

CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.

CAS# 6381-59-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7758-99-8 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 1310-73-2: OEL-AUSTRALIA: TWA 2 mg/m3 OEL-BELGIUM: STEL 2 mg/m3 OEL-DENMARK: TWA 2 mg/m3 OEL-FINLAND: TWA 2 mg/m3 OEL-FRANCE: TWA 2 mg /m3 OEL-GERMANY: TWA 2 mg/m3 OEL-JAPAN: STEL 2 mg/m3 OEL-THE NETHERLA NDS: TWA 2 mg/m3 OEL-THE PHILIPPINES: TWA 2 mg/m3 OEL-SWEDEN: TWA 2 mg/ m3 OEL-SWITZERLAND: TWA 2 mg/m3; STEL 4 mg/m3 OEL-THAILAND: TWA 2 mg/m3 OEL-TURKEY: TWA 2 mg/m3 OEL-UNITED KINGDOM: TWA 2 mg/m3; STEL 2 mg/m3 OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV