MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communications Standard 29 CFR 1910.1200

Product Desc: N.C.C.E. Heavy Duty Cleaner and Degreaser
Product Code 55-2251-00 HMIS codes: H F PH P
55-2252-00 2 0 0 X (See Section VIII)
55-2255-00

Section I: Manufacturer Information

Name: N.C. Dept. of Correction, Janitorial Products Plant
Mailing Address: 231 Soul City Boulevard
City/State/ Zip: Norlina, North Carolina 27563
Telephone: **For Information-** (252) 456-1168
For Emergency - CHEMTREC - 1-800-424-9300
Date Prepared: September 17, 2009 **Date Revised:** March 8, 2012
Contact For Technical Information: Plant Manager
Telephone: (252) 456-1168 **Fax:** (252) 456-2907

Section II: Composition/Information on ingredients and exposure guidelines

COMPONENTS (Chemical Name and Synonyms)	CAS NO	TYPICAL % BY WEIGHT	OSHA PEL	ACGIH TLV
*Chelating agent	Proprietary	<7.0	NE	NE
Dye	Proprietary	<0.05	NE	NE
*Sodium Gluconate	527-07-1	<7.0	NE	NE
Surfactant	Proprietary	<8.0	NE	NE
Tomadol 1-7	34398-01-1	<3.0	NE	NE
Sodium Metasilicate	6834-72-0	<5.0	NE	NE
Water	7732-18-5	<78.0	NE	NE

*These substances are hazardous chemicals as defined by the hazard communication standard (29 CFR 1910.1200) NE: Not Established

Section III: Hazards Identifications

EMERGENCY OVERVIEW

The product is a green liquid with a lemon fragrance. It may cause eye, skin, and respiratory tract irritation. Harmful if swallowed. This product can react with strong acids

and other substances. For large spills, emergency responders should wear impervious coveralls, boots, gloves, and respiratory protection in poorly ventilated areas. Absorb spill with inert material or transfer to a suitable container for reuse or disposal. See Sections III, V, VI, and XIII.

Potential Health Effects and Primary Routes of Entry:

Eyes: A moderate eye irritant. Eye contact may cause irritation, pain, redness, and swelling.
Inhalation: No adverse effects expected under normal use conditions.
Skin: Skin contact may cause severe irritation. Skin contact may cause an allergic skin reaction to sensitized individuals.
Ingestion: Harmful if swallowed. Ingestion may cause diarrhea, nausea, vomiting, cramps, and gastrointestinal irritation.
Chronic Effects/ Carcinogenicity: None of the components in this product at concentrations of 0.1% or greater are listed by the NTP, IARC or OSHA as carcinogens.

For complete discussion of the toxicology data from which this evaluation was made, please refer to Section XI.

Section IV: First Aid

Eyes: Immediately flush eyes with water for at least 20 minutes and seek immediate medical attention. Eyelids should be held away from the eyeballs to ensure thorough rinsing.
Skin: Immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Seek medical attention if irritation develops and persists. Launder clothing before reuse.
Inhalation: Move victim to fresh air; administer artificial respiration if not breathing. Give oxygen if breathing is difficult. Trained person should give oxygen if breathing is difficult. Get medical attention.
Ingestion: Do not induce vomiting. Get medical attention immediately. If victim is conscious, give plenty of water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, Keep airway clear and give more water. Contact: National Poison Control Center at 1-800-222-1222 (24 hr.) for advice.
Medical Conditions Generally Aggravated By Exposure: Individuals with pre-existing lung diseases, asthma, and abrasions of the skin may be more susceptible to the effects of excessive exposure to this product.

Section V: Fire and Explosion Data

Flash Point: NE
Flammable Limits: NE
Extinguishing Media: If this product is involved in a fire, use an extinguishing agent that is appropriate for combustibles in the area.

Fire and Explosion Hazards: When heated to decomposition, the product can emit toxic gases and fumes including chlorides, nitrogen oxides, and carbon oxides. Surfactant can thermally decompose at temperatures above 250° C.
Fire-Fighting Equipment: Exposed firefighters should wear NIOSH approved self-contained breathing apparatuses under positive pressure and chemical-resistant protective equipment. Refer to section 8 for further information.

Section VI: Accidental Release Measures

Cleanup personnel should wear appropriate equipment (See Section VIII). Floor may be slippery; use care to avoid falling. Stop and control leak. Small spills can be diluted with plenty of water and mopped up or absorbed with an inert absorbent material. Mop spill area several times with water. Respiratory protection could be required for controlling large spills in confined or poorly ventilated areas. Stop and control leak and keep material out of sewers and watercourses by diking or impounding with sand or absorbent materials. Flush spill area with plenty of water. All cleanup residues should be collected in a non-metallic labeled container for disposal (See Section XIII).

Contact CHEMTREC (800-424-9300) for technical advice and assistance relating to chemical emergencies involving this product.

Section VII: Handling and Storage

Handling: Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapor. Use with adequate ventilation. Do not taste or swallow. Wash thoroughly after handling. Remove contaminated clothing and launder before reuse. Do not mix with any other chemical or cleaning agent. Empty containers may contain residue, which is hazardous.
Storage: Keep containers in well ventilated area and closed when not in use. Keep away from heat and flame. Keep from contact with oxidizing materials. Keep product in original container. This product is for institutional use only. Keep this and all chemicals out of reach of children.

Section VIII: Exposure Control/Personal Protection

Respiratory Protection: Not normally required in well-ventilated area**.** A NIOSH approved Dust respirator may be permissible under certain circumstances where airborne concentrations of dust are expected to exceed exposure limits. Protection by air purifying respirators is limited. Use NIOSH approved self-contained apparatus made for emergencies or entry into unknown concentrations or immediately dangerous to life or health conditions. All personal respiratory protection equipment should be used in accordance with OSHA 29 CFR 1910.134.
V**entilation:** Provide sufficient mechanical (general and/or local exhaust ventilation) to maintain vapor mist concentrations below exposure limits.
Protective Gloves: Use chemical-resistant rubber gloves to prevent skin contact.

Eye Protection: Avoid eye contact. Chemical splash goggles are recommended whenever eye or face contact may occur. Provide an ANSI-approved eye wash station in the work area.
Other Protective Clothing or Equipment: Wear arm protectors and aprons, if necessary, to avoid contaminating regular clothing and shoes and to prevent skin contact.

Section IX: Physical/Chemical Properties

APPEARANCE: Purple
ODOR: NA
BOILING RANGE: >212° F
VAPOR PRESSURE: NE
SPECIFIC GRAVITY: 1.04
VAPOR DENSITY (Air = 1): NE
pH: ≈11
PERCENT VOLATILE BY VOLUME: NE
MELTING POINT: NE
EVAPORATION RATE: NE
(N-BUTYL ACETATE =1)
VISCOSITY: ≈2 cps
SOLUBILITY IN WATER: complete

Symbols: > Greater, ≈ approximately

Section X: Reactivity Information

Stability: Product is stable.
Incompatibility: Avoid contact with oxidizers and aluminum. This product may be corrosive to some metals.
Hazardous Reaction/Decomposition or by Product: When heated to decomposition, emits toxic fumes of chloride compounds, carbon monoxide, carbon dioxide, and nitrogen oxides. This product will form an alkaline solution when mixed with water.
Hazardous Polymerization: Will not occur.

Section XI: Toxicological Information

Ingredients used in this product have the following toxicological data:

Chelating agent (Tetrasodium EDTA)
Contact: A skin and eye irritant
Eye effects-Rabbit, adult 1900 µg
Eye effects-Rabbit, adult 100 mg/24H Moderate irritation effects
Skin-Rabbit, adult 500 mg/24H Moderate irritation effects
Ingestion: Not defined as toxic under the HAZCOM standard
A food additive
EDTA Tetrasodium is not mutagenic, teratogenic, or carcinogenic.

Sodium gluconate
Contact:
No data available
Eye: Can cause eye damage
Skin: May cause irritation for susceptible individuals
Ingestion:
No data available
This product may cause toxic effects if large amounts are swallowed. No effects are known for rare accidental swallowing.
A food additive
Inhalation:
No data available
Long-term effects of excessive dust may cause delayed lung injury
Sodium gluconate is dissolved in solution; therefore, such effects are not expected from proper handling and use of this product.

Section XII: Ecological Information

Chelating agent
Ecotoxicity: Tetrasodium EDTA is expected to have low toxicity to fish and daphnia magna.
LC50 (96H-Lepomis machrochirus) = 157 mg/L, 1030 mg/L and 2070 mg/L for a product containing 39% tetrasodium EDTA in very soft water, medium hard water, and very hard water respectively.
LC50 (96H-Lepomis machrochirus) = 486 mg/L for solid tetrasodium EDTA tested in very hard water
EC50 (24H-Daphnia magna) = greater than 500 mg/l.
Chemical fate: Tetrasodium EDTA is not expected to undergo hydrolysis. The substance is not expected to enter the atmosphere due to its high water solubility
Biodegradation: Tetrasodium EDTA (39% in water) was not biodegraded over 28 days in the Sturm CO_2 evolution test.
Tetrasodium EDTA was not biodegradable in the Closed Bottle Test conducted with natural seawater.

Surfactant
Environmental fate: Readily biodegradable as per OECD 301D. Fish, Acute Toxicity Test, OECD 203: 96 hour, LC50: 70.7 mg/l (rainbow trout)

Section XIII: Disposal Consideration

Waste Disposal: Any disposal must be in accordance with federal, state, and local regulations. Do not discharge product to storm sewers or waterways. Diluted (used) cleaning solutions may typically be discharged to local wastewater treatment facilities. As with any wastewater, consultation with local treatment plant staff is recommended before disposal. Concentrated product should be recovered for reuse. The unused product is not expected to be a RCRA hazardous waste.

Section XIV: Transport Information

DOT Proper Shipping Description: None
Dot Hazard Class / Division Label: None
Shipping Containers: Quart Bottles, 12 per case, 1-Gallon Containers, 4 Bottles per Case, 55 gallon poly drums

Section XV: Regulatory Information

OSHA Hazard Communication Standard: OSHA hazardous chemicals as defined by 29 CFR 1910.1200 are listed in Section II.
Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed:
EDTA tetrasodium (5.0%)
SARA Title III:
Section 302 Extremely Hazardous Substances: None
Section 311 /312 Hazard Categories: Immediate health hazard
Section 313 toxic chemicals: None present at or above the minimum reportable concentrations.
Note: reporting is only applicable to manufacturers in SIC codes 20 - 39
C**ERLA Hazardous Substances:** None
North Carolina Water and Air Resources Act: This product complies with 143-214.4 of the North Carolina Water and Air Resources Act.

Section XVI: Other Information

This product is for institutional use only and is not for resale.