SAFETY DATA SHEET
CSI CYCLONE

SECTION1: PRODUCT & COMPANY INDENTIFICATION

DATE: 02/07/2015 **/ Supersedes Revision:** N/A

Manufacturer:
PDQ Manufacturing, Inc.
201 Victory Circle
Ellijay, GA USA 30540
Phone: (706) 636-1848
Website: www.pdqonline.com

Distributor:
CLEAN SOLUTIONS, INC.
232 CR 702
JONESBORO, AR 72401
870/935-5003

EMERGENCY CONTACT: Chemtrec, Reference CCN798262
Phone: (800) 424-9300 (collect calls accepted) / International: (703) 527-3887

Product Name: CSI CYCLONE
ID Code: 4286
Product Category: Alkaline Detergent

SECTION 2: HAZARD(S) IDENTIFCATION

Serious Eye Damage/Eye Irritation, Category 2A
Skin Corrosion/Irritation, Category 1A
Acute Toxicity: Oral, Category 4
Specific Target Organ Toxicity (single exposure), Category 3
Aquatic Toxicity (Acute), Category 1
Aquatic Toxicity (Chronic), Category 1

GHS Signal Word: DANGER
GHS Hazard Phrases:
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.
GHS Precaution Phrases:
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
GHS Response Phrases:
P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or physician for treatment advice. Have product container or label with you when calling poison control center or physician.
P310 - Immediately call a POISON CENTER or doctor/physician.
P330 - Rinse mouth.
P337+313 - If eye irritation persists, get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P391 - Corrosive to skin - repeated or prolonged exposure may result in dermatitis or skin sensitization.
GHS Storage and Disposal Phrases:
P405 - Store locked up.
P501 - Unused product is not a RCRA Hazardous waste. However, contaminated product and wastes may be RCRA hazardous. Users are advised to determine the appropriate disposal method based on local, state and federal regulations and comply with those regulations.

Hazard Rating System:

HMIS
Health: 2
Flammability: 0
Physical: 2
PPE: B

Potential Health Effects (Acute and Chronic): Adverse reproductive effects have been reported in animals. Hazards not otherwise classified (HNOC) or not covered by GHS. Prolonged or repeated skin contact may cause dermatitis. Chronic: Effects may be delayed.
Inhalation: Harmful if inhaled. Irritation may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Causes chemical burns to the respiratory tract.
Skin Contact: Causes skin irritation. Causes skin burns. May cause deep, penetrating ulcers of the skin. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.
Eye Contact: Causes eye irritation. Lachrymator (substance which increases the flow of tears). Causes eye burns. May cause chemical conjunctivitis and corneal damage.
Ingestion: May be harmful if swallowed. May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. May cause systemic effects.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	10.0 -50.0 %
51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt {Dichloroisocyanuric acid sodium salt dihydrate}	< 3.0 %

SECTION 4: FIRST-AID MEASURES

Emergency and First Aid Procedures: Consult a physician. Show this safety data sheet to the doctor in attendance.
In Case of Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid..
In Case of Skin Contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Consult a physician.
In Case of Eye Contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
In Case of Ingestion: Get medical aid immediately. Never give anything by mouth to an unconscious person. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Signs and Symptoms Of Exposure: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.
Note to Physician: None known.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: NP Method Used: Estimate
Explosive Limits: LEL: UEL:
Autoignition Pt: NA
Suitable Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. Do NOT get water inside containers. Use water spray, dry chemical, carbon dioxide, or appropriate foam. Dry powder.
Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. Use water with caution and in flooding amounts. Contact with moisture or water may generate sufficient heat to ignite nearby combustible materials. Contact with metals may evolve flammable hydrogen gas. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Wear self contained breathing apparatus for fire fighting if necessary. Further information.
Flammable Properties and Hazards: Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas, Sodium oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures: Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.
Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Methods and materials for containment and cleaning up: Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal.
Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section.

SECTION 7: HANDLING AND STORAGE

Precautions To Be Taken in Handling: Minimize dust generation and accumulation. Do not ingest or inhale. Wash thoroughly after handling. Do not allow water to get into the container because of violent reaction. Keep container tightly closed. Avoid ingestion and inhalation. Discard contaminated shoes. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Avoid contact with skin and eyes. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.
Precautions To Be Taken in Storing: Store in a cool, dry place. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Store protected from moisture. Containers must be tightly closed to prevent the conversion of NaOH to sodium carbonate by the CO2 in air. Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Do not store near acids. Moisture sensitive.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	PEL: 2 mg/m3	CEIL: 2 mg/m3	
51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt {Dichloroisocyanuric acid sodium salt dihydrate}			

Respiratory Equipment (Specify Type): Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls.
Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Safety glasses with side-shields conforming to EN166.
Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.
Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Environmental Exposure Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Discharge into the environment must be avoided.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [ ] Gas [ ] Liquid [X] Solid
Appearance and Odor: White granular powder
Mild chlorine odor.
Melting Point: NA
Boiling Point: NA
Autoignition Pt: NA
Flash Pt: NP
Explosive Limits: LEL: UEL:

Specific Gravity (Water = 1):
Density: ~ 60 LB/CF
Vapor Pressure (vs. Air or mm Hg):
Vapor Density (vs. Air = 1):
Evaporation Rate:
Solubility in Water: ~ 20%
pH: > 12.5 @ 1%
Percent Volatile:

SECTION 10: STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [X]
Conditions To Avoid - Instability: Incompatible materials, dust generation, Excess heat, Avoid contact with acids, reducing agents, oxidizers, nitrogen oxides, amines, ammonia or other nitrogen containing compounds. contact with water. Exposure to moist air or water.
Incompatibility – Materials To Avoid: Acids, Strong acids. Metals. fluorine, Hydrogen peroxide, phosphorus pentoxide, 6-trinitrotoluene. Sulfur oxides. Aluminum, Zinc, gelatin, nitromethane, leather, flammable liquids, organic halogens. Oxidizing agents.
Hazardous Decomposition Or Byproducts: Carbon monoxide, Carbon dioxide, Toxic fumes of sodium oxide, oxides of phosphorus, Other decomposition products: No data available. In the event of fire: see section 5.
Possibility of Hazardous Reactions: Will occur [ ] Will not occur [X]
Conditions To Avoid -Hazardous Reactions:

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological Information: Epidemiology: No information found. Teratogenicity: Teratogenic effects have occurred in experimental animals. Reproductive Effects: Neurotoxicity: Teratogenicity: No information available. See actual entry in RTECS for complete information. Germ cell mutagenicity. No data available. Reproductive toxicity. Specific target organ toxicity - single exposure: May cause respiratory irritation. Specific target organ toxicity - repeated exposure: Aspiration hazard:
Irritation or Corrosion: Skin corrosion/irritation. No data available. Serious eye damage/eye irritation:
Carcinogenicity/Other Information: CAS# 497-19-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 1310-73-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 7758-29-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	n.a.	n.a.	n.a.	n.a.
51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt {Dichloroisocyanuric acid sodium salt dihydrate}	n.a.	n.a.	n.a.	n.a.

SECTION 12: ECOLOGICAL INFORMATION

General Ecological Information: Environmental: Not regulated under U.S. Department of Transportation regulations (29 CFR) Physical: No information available. Other: Do not empty into drains.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed. Product. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packaging.

SECTION 14: TRANSPORTATION INFORMATION (DOT/UN CLASSIFICATION)

LAND TRANSPORT (US DOT):
DOT Proper Shipping Name: Corrosive solid, basic, inorganic, n.o.s. (contains sodium hydroxide)
DOT Hazard Class: 8 CORROSIVE
UN/NA Number: UN3262
LAND TRANSPORT (Canadian TDG): II
TDG Shipping Name:

SECTION 15: REGULATORY INFORMATION

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

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	No	Yes 1000 LB	No
51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt {Dichloroisocyanuric acid sodium salt dihydrate}	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt {Dichloroisocyanuric acid sodium salt dihydrate}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No

SECTION 16: OTHER INFORMATION

Revision Date: 02/07/2015
Preparer Name: Regulatory Affairs
Additional Information About This Product:

Company Policy or Disclaimer: The information contained in this Safety Data Sheet is provided pursuant to current OSHA regulations to convey information concerning the hazardous nature of the named product. The information supplied was compiled from the most reliable sources available at the time of preparation and in light of the most reasonable foreseeable exposure situations expected from the intended use of this product. The material(s) may present greater or lesser hazard exposure under other circumstances that are beyond the control of the manufacturer. Therefore it is imperative that all directions and warnings on the product label be read and closely followed.