

SAFETY DATA SHEET

CSI SOLAR POWER

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

DATE: 03/11/2015 / **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 SOLAR POWER

ID Code: 4530

Product Category: Alkaline Detergent

SECTION 2: HAZARD(S) IDENTIFICATION

Skin Corrosion/Irritation, Category 1A

Corrosive To Metals, Category 1

Skin Corrosion/Irritation, Category 1B

Serious Eye Damage/Eye Irritation, Category 1

Aquatic Toxicity (Chronic), Category 3



GHS Signal Word: DANGER

GHS Hazard Phrases:

H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.

GHS Precaution Phrases:

P234 - Keep only in original container.
P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:

P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material damage.

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: C

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Potential Health Effects (Acute and Chronic): Prolonged or repeated skin contact may cause dermatitis. Chronic: Effects may be delayed.

Inhalation: 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. May be harmful if inhaled. May cause respiratory tract irritation.

Skin Contact: Skin: May be harmful if absorbed through skin. May cause 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. Non-irritating to the skin.

Eye Contact: Causes eye burns. May cause chemical conjunctivitis and corneal damage. Non-irritating to the eyes.

Ingestion: 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. May be harmful if swallowed. Additional Information. RTECS: QJ6950000 No hazard expected in normal industrial use.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}	30.0 -50.0 %
6419-19-8	Methylene phosphonic acid {Phosphonic acid, nitrilotris(methylene)tris-}	1.0 -5.0 %

SECTION 4: FIRST-AID MEASURES

Emergency and First Aid Procedures:

In Case of Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Consult a physician.

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: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

In Case of Ingestion: Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Note to Physician: Consult a physician. Show this safety data sheet to the doctor in attendance.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point: NP

Explosive Limits: LEL: UEL:

Autoignition Pt: NP

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 alcohol-resistant foam.

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. Wear self contained breathing apparatus for fire fighting if necessary. Material will not burn.

Flammable Properties and Hazards:

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Personal precautions. Use personal protective equipment. Ensure adequate ventilation. Environmental precautions. Do not let product enter drains. Methods for cleaning up. Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

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SECTION 7: HANDLING AND STORAGE

Precautions To Be Taken in Handling: Wash thoroughly after handling. Do not allow water to get into the container because of violent reaction. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Avoid ingestion and inhalation. Discard contaminated shoes. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. No special handling procedures are required.

Precautions To Be Taken in Storing: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Keep away from acids. Store protected from moisture. Containers must be tightly closed to prevent the conversion of NaOH to sodium carbonate by the CO₂ in air. Store in a cool, dry place. Hygroscopic. No special storage requirements.

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/m ³	CEIL: 2 mg/m ³	
6419-19-8	Methylene phosphonic acid {Phosphonic acid, nitrilotris(methylene)tris-}			

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Respirator protection is not normally required.

Eye Protection: Wear chemical splash goggles.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Engineering Controls (Ventilation etc.): 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. There are no special ventilation requirements.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance and Odor: Opaque, viscous, fluorescent yellow liquid Surfactant odor.

Melting Point: 215.00 C

Boiling Point: 100.00 C

Autoignition Pt: NP

Flash Pt: NP

Explosive Limits: LEL: UEL:

Specific Gravity (Water = 1): ~ 1.4

Vapor Pressure (vs. Air or mm Hg):

Vapor Density (vs. Air = 1):

Evaporation Rate:

Solubility in Water: Complete

Viscosity: High

pH: >12.5

Percent Volatile:

SECTION 10: STABILITY AND REACTIVITY

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability: Avoid contact with acids, reducing agents, oxidizers, nitrogen oxides, amines, ammonia or other nitrogen containing compounds. contact with water.

Incompatibility – Materials To Avoid: Sulfur oxides. Metals. Acids, Aluminum, Zinc, gelatin, nitromethane, leather, flammable liquids, organic halogens. Bases.

Hazardous Decomposition Or Byproducts: Toxic fumes of sodium oxide.

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

Conditions To Avoid -Hazardous Reactions:

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SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological Information: Epidemiology: No information found. Teratogenicity: No information available. Reproductive Effects: Mutagenicity: See actual entry in RTECS for complete information. Neurotoxicity: No data available.

Carcinogenicity/Other Information: CAS# 1310-73-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

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.
6419-19-8	Methylene phosphonic acid {Phosphonic acid, nitrilotris(methylene)tris-}	n.a.	n.a.	n.a.	n.a.

SECTION 12: ECOLOGICAL INFORMATION

General Ecological Information: Environmental: No information found. Physical: No information found. Other: No information available.

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. Observe all federal, state, and local environmental regulations. 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. Dispose of as unused product.

SECTION 14: TRANSPORTATION INFORMATION (DOT/UN CLASSIFICATION)

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Corrosive liquid, basic, inorganic, n.o.s. (contains sodium hydroxide)

DOT Hazard Class: 8 CORROSIVE

UN/NA Number: UN3266

Packing Group: II

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: CORROISVE



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
6419-19-8	Methylene phosphonic acid {Phosphonic acid, nitrilotris(methylene)tris-}	No	No	No

CAS #	Hazardous Components (Chemical Name)
1310-73-2	Sodium hydroxide {Caustic soda; Lye solution}
6419-19-8	Methylene phosphonic acid {Phosphonic acid, nitrilotris(methylene)tris-}

Other US EPA or State Lists
CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

SECTION 16: OTHER INFORMATION

Revision Date: 03/11/2015

Preparer Name: Regulatory Affairs

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.