Safety Data Sheet

1) PRODUCT AND COMPANY IDENTIFICATION: 5177

Product Name: Power Clean
Synonyms/Generic Names: None
Product Use: Cleaning liquid

Manufacturer:

1stAYD Corporation

1325 Gateway Drive
Elgin, IL 60124

24 Hour Emergencies:

Call: 800 255 3924

2) HAZARDS IDENTIFICATION:

This material has been defined as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Signal Word: Danger

GHS RATINGS:

Oral Toxicity	4	Oral >300 ≤2000 mg/kg
Dermal Toxicity	4	Dermal >1000 ≤ 2000 mg/kg
Skin corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation < 1-hour, visible necrosis in at least one animal
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity ≥ 3, Iritis > 1.5
Respiratory sensitizer	1	Respiratory sensitizer

GHS HAZARDS:

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H335 May cause respiratory irritation.

GHS PRECAUTIONS:

P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P260 Do not breathe dust/fume/gas/mist/vapors/spray
P262 Do not get in eyes, on skin, or on clothing
P264 Wash thoroughly after handling
P270 Do not eat, drink, or smoke when using this product
P280 Wear protective gloves/protective clothing/eye protection/face protection
P281 Use personal protective equipment as required
P310 Immediately call a POISON CENTER or doctor/physician
P361 Remove/Take off immediately all contaminated clothing
P363 Wash contaminated clothing before reuse
P301+P330 +P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P350 IF ON SKIN: Gently wash with soap and water
P303+P361 +P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351 +P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+P313 IF exposed or concerned: Seek immediate medical advice/attention
P405 Store locked up
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container according to local, state, and Federal regulations.

3) COMPOSITION / INFORMATION ON INGREDIENTS:

Chemical Name	CAS number	Weight Concentration %
Water	7732-18-5	50.00% to 65.00%
Sodium hydroxide	1310-73-2	10.00% to 20.00%
Sodium Xylene Sulfonate	1300-72-7	10.00% to 20.00%
monoehtanolamine	141-43-5	5.00% - 10.00%
2-Butoxyethanol	111-76-2	1.00% - 5.00%
Nonylphenol, ethoxylated	127087-87-0	1.00% - 5.00%
Tetrasodium Ethylenediamine Tetracetic Acid	64-02-8	1.00% - 5.00%
Sodium metasilicate	10213-79-3	1.00% - 5.00%

All concentrations are in percent by weight.

4) FIRST-AID MEASURES:

INHALATION:
Move to fresh air and keep at rest. If breathing is difficult, oxygen may be provided by trained personnel. If not breathing, give artificial respiration Seek medical attention immediately.

EYE CONTACT:
Any material that contacts the eye should be flushed out immediately with generous amounts of water for at least 15-20 minutes. If easy to do, remove contact lenses if present. Seek immediate medical attention.

SKIN CONTACT:
Immediately flush with plenty of water for at least 20 minutes while removing contaminated clothing. Get medical attention immediately.

INGESTION:
Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5) FIRE-FIGHTING MEASURES:

Flash Point: None
LEL: UEL:

FLAMMABLE LIMITS:
Product is not flammable. However, contact with metal may release flammable hydrogen gas

EXTINGUISHING MEDIA:
Use an extinguishing agent suitable for the surrounding fire and materials present.

HAZARDOUS COMBUSTION PRODUCTS:
Under fire conditions toxic fumes should be anticipated.

FIRE FIGHTING
Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

FIRE EQUIPMENT:
Wear self-contained breathing apparatus and full turn out gear. Approach fire from upwind direction, If possible, move containers away from fire. Cool fire exposed containers with water spray. If containers rupture or leak, product may evolve irritating or toxic gas under extreme heat. Prevent runoff from fire control or dilution from entering streams, sewers, or water supply.

6) ACCIDENTAL RELEASE MEASURES:

SPILL/LEAK:
Keep unauthorized personnel away. Stay upwind. Do not get water inside container. Do not walk through
spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas. Prevent entry into waterways, sewers, basements, or confined areas

(See section 8 for recommendations on the use of personal protective equipment.)

SMALL SPILL:
Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal. Transfer the spilled material to caustic resistant containers labeled: CORROSIVE. Flush the cleaned area with water.

LARGE SPILL:
No action shall be taken involving any personal risk or without suitable training and issuance of appropriate personal protective equipment. Stop leak if without risk. Prevent spillage from entering drains and/or waterways. Any release to the environment may be subject to Federal, state, and local reporting requirements.
Absorb with earth, sand, or other non-combustible material. Transfer the spilled material to caustic resistant containers labeled: CORROSIVE With careful handling, dilute acid, preferable acetic acid, may be used to neutralize final traces of caustic.

7. HANDLING AND STORAGE:

HANDLING PRECAUTIONS:
Handle and open container with care. Use only with adequate ventilation. Use caution when combining with water, DO NOT add water to corrosive liquid, ALWAYS add corrosive liquid to water while stirring to prevent release of heat, steam, and fumes. Wear appropriate personal protective equipment, avoid direct contact with material. Do not breathe mist, vapors and/or spray. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

(See section 8 for recommendations on the use of personal protective equipment.)

STORAGE:
Keep container closed when not in use. Store in cool, dry well-ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities). Protect from excessive heat and/or freezing.

8) EXPOSURE CONTROLS / PERSONAL PROTECTION:

CAS Number	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure
1310-73-2	TWA: 2 mg/m^3	2 mg/m^3 Ceiling	NIOSH: 2 mg/m^3 Ceiling
141-43-5	TWA: 3 ppm; 6 mg/m^3	STEL: 6ppm; TWA 3 ppm	NIOSH STEL: 6ppm; TWA 3 ppm
1300-72-7	Not established	Not established	Not established
111-76-2	TWA: 50 ppm; 240 mg/m^3	20 ppm TWA	NIOSH: TWA 5 ppm; 24 mg/m^3
127087-87-0	Not established	Not established	Not established
64-02-8	Not established	Not established	Not established
10213-79-3	Not established	Not established	Not established

ENGINEERING CONTROLS:

Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

VENTILATION:

Use only with adequate ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

GENERAL HYGIENE CONSIDERATIONS:

When using do not eat, drink, or smoke. Wash contaminated clothing before reuse. Keep away from food, drink, and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes, or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

PROTECTIVE EQUIPMENT:

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration, and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

RESPIRATORY PROTECTION:

If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134). If ventilation is adequate, a full-face respiratory with acid gas cartridges is recommended.

EYE/FACE PROTECTION:

Wear appropriate safety glasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 Full face respirator or chemical splash googles with a face shield. is suggested.

SKIN PROTECTION:

Wear chemical resistant clothing and gloves.

9) PHYSICAL AND CHEMICAL PROPERTIES:

Appearance	
Physical state	Liquid
Color	Clear Orange
Odor	sweet
pH	12-13 (1% solution)
Melting point/freezing point	No data available.
Boiling point range	No data available
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability	Not flammable
Upper/lower flammability or explosive limits	
Flammability limit – lower	No data available.
Flammability limit – upper	No data available
Melting Point	No data available.
Vapor pressure	No data available
Vapor density	No data available
Specific Gravity	approximately 1.115
Solubility	complete
Auto-ignition temperature	No data available

10) STABILITY AND REACTIVITY:

STABILITY:
Product is STABLE under normal conditions of storage and handling.

INCOMPATIBLE MATERIALS:
Strong oxidizing agents and acids

HAZARDOUS POLYMERIZATION:
Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION:

Mixture Toxicity
Oral Toxicity LD50: 1,457mg/kg
Dermal Toxicity LD50: 1,597mg/kg
Inhalation Toxicity LC50: 145mg/L
Component Toxicity
1310-73-2 Sodium Hydroxide
Oral LD50: 340 mg/kg (Rat)
Dermal LD50: 1,350 mg/kg (Rabbit)

1300-72-7 Sodium Xylene Sulfonate
Oral LD50: 1,000 mg/kg (Rat)

141-43-5 Monoethanolamide
Oral LD50: 1,720 mg/kg (Rat)
Dermal LD50: 1,000 mg/kg (Rabbit)

111-76-2 2 Butoxyethanol
Oral LD50: 470 mg/kg (Rat)
Dermal LD50: 99 mg/kg (Rabbit)
Inhalation LC50: 450 ppm (Rat)

127087-87-0 Nonylphenol, ethoxylated
Oral LD50: 1,310 mg/kg (Rat)

64-02-8 Tetrasodium Ethylenediamine Tetracetic Acid
Oral LD50: 1,658 mg/kg (Rat)
Dermal LD50: 5,000 mg/kg (Rat)

10213-79-3 Sodium metasilicate
Oral LD50: 847 mg/kg (Rat)
Dermal LD50: 5,000 mg/kg (Rat)
Inhalation LC50: 2 mg/kg (Rat)

12) ECOLOGICAL INFORMATION:

The information given is based on data available for the material, the components of the material, and similar materials (if any).

Component Ecotoxicity

Sodium hydroxide	96 Hr. LC50 Oncorhynchus mykiss: 45.4 mg/L [static]
Monoethanolamine	96 Hr. LC50 Pimephales promelas: 227 mg/L [flow-through]; 96 Hr. LC50 Brachydanio rerio: 3684 mg/L [static]; 96 Hr. LC50 Lepomis macrochirus: 300 - 1000 mg/L [static]; 96 Hr. LC50 Oncorhynchus mykiss: 114 - 196 mg/L [static]; 96 Hr. LC50 Oncorhynchus mykiss: >200 mg/L [flow-through] 48 Hr. EC50 Daphnia magna: 65 mg/L 72 Hr. EC50 Desmodesmus subspicatus: 15 mg/L
2-Butoxyethanol	96 Hr. LC50 Lepomis macrochirus: 1490 mg/L [static]; 96 Hr. LC50 Lepomis macrochirus: 2950 mg/L 48 Hr. EC50 Daphnia magna: >1000 mg/L
Tetrasodium Ethylenediamine Tetracetic Acid	96 Hr. LC50 Lepomis macrochirus: 41 mg/L [static]; 96 Hr. LC50 Pimephales promelas: 59.8 mg/L [static] 72 Hr. EC50 Desmodesmus subspicatus: 1.01 mg/L

13) DISPOSAL CONSIDERATIONS:

If this product becomes a waste, it may meet the criteria of a hazardous waste as defined in 40 CFR 261 as a D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]. Other waste codes may apply.

Dispose of according to local, state, and Federal regulations.

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

14) TRANSPORTATION INFORMATION:

Important Note: The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation. As shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin / destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

For small quantities packed in combination packaging, exceptions may apply.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300

AGENCY	US DOT
UN NUMBER:	UN3266
PROPER SHIPPING NAME:	Corrosive liquid, basic, inorganic, N.O.S. (Sodium Hydroxide, Monoethanolamine)
HAZARD CLASS:	8
PACKING GROUP:	II
ERG	154

15) REGULATORY INFORMATION:

US federal regulations This product is a "Hazardous Material" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Inventory - United States - Section 8(b) Inventory (TSCA)
All materials are listed.

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
none

U.S. - CWA (Clean Water Act) - Hazardous Substances

CAS #	302 (EHS) TPQ	304 EHS RQ	CERCLA RQ	SECTION 313	RCRA CODE	CAA 112 (r) TQ
1310-73-2			1000			

none

U.S. - CWA (Clean Water Act) - Reportable Quantities of Designated Hazardous Substances
none

U.S. - California - Proposition 65 - Developmental Toxicity
none

The following chemicals are reportable under Pennsylvania Right to Know:
1310-73-2 Sodium hydroxide
141-43-5 Monoethanolamine
111-76-2 2-Butoxyethanol

The following chemicals are reportable under Massachusetts - Right to know:
1310-73-2 Sodium hydroxide
141-43-5 Monoethanolamine
111-76-2 2-Butoxyethanol

The following chemicals are reportable under New Jersey - Right to Know
1310-73-2 Sodium hydroxide
141-43-5 Monoethanolamine
111-76-2 2-Butoxyethanol

16) OTHER INFORMATION:

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