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<b>SECTION 1: Product and</b>	CO	mpany identification
Product name	:	Steam and Pressure Wash Concentrate
Use of the substance/mixture	:	Cleaner
Product code	:	0405
Company	:	Total Solutions P.O. Box 240014 Milwaukee, WI 53224 - USA T (414) 354-6417
Emergency number	:	Chemtec: (800) 424-9300

#### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

#### **Classification (GHS-US)**

Met. Corr. 1 H290 Skin Corr. 1A H314 Full text of H-phrases: see section 16

2.2. Label elements	
GHS-US labeling	
Hazard pictograms (GHS-US)	: GHS05
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: May be corrosive to metals Causes severe skin burns and eye damage
Precautionary statements (GHS-US)	<ul> <li>Keep only in original container Do not breathe mist, spray Wash thoroughly after handling Wear eye protection, protective clothing, protective gloves If swallowed: rinse mouth. Do NOT induce vomiting If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower</li> <li>If inhaled: Remove person to fresh air and keep comfortable for breathing If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a doctor, a POISON CENTER Wash contaminated clothing before reuse Absorb spillage to prevent material damage Store locked up Store in corrosive resistant container with a resistant inner liner Dispose of contents/container to comply with local/regional/national/international regulations.</li> </ul>

### 2.3. Other hazards No additional information available

#### **2.4. Unknown acute toxicity (GHS US)** Not applicable

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

Not applicable

Full text of H-phrases: see section 16

Name	Product identifier	%	Classification (GHS-US)
disodium metasilicate	(CAS No) 6834-92-0	3-7	Skin Corr. 1B, H314 STOT SE 3, H335
potassium hydroxide, 45%= <conc<50%, aqueous="" solutions<="" td=""><td>(CAS No) 1310-58-3</td><td>1-5</td><td>Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Skin Corr. 1A, H314</td></conc<50%,>	(CAS No) 1310-58-3	1-5	Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Skin Corr. 1A, H314

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SECTION 4: First and measures		
4.1. Description of first aid measures		
First-aid measures general	:	If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	:	Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
First-aid measures after ingestion	:	Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.
4.2. Most important symptoms and ef	fects,	both acute and delayed
Symptoms/injuries	:	Causes severe skin burns and eye damage.
Symptoms/injuries after inhalation	:	May cause respiratory irritation.
Symptoms/injuries after skin contact	:	Caustic burns/corrosion of the skin.
Symptoms/injuries after eye contact	:	Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.
Symptoms/injuries after ingestion	:	May be harmful if swallowed. Burns to the gastric/intestinal mucosa. Gastrointestinal complaints. Cramps. Nausea.
4.3. Indication of any immediate med	ical a	ttention and special treatment needed
Treat symptomatically.		
<b>SECTION 5: Firefighting measur</b>	es	
5.1. Extinguishing media		
Suitable extinguishing media	:	All extinguishing media allowed.
5.2. Special hazards arising from the s		
Reactivity	•	Lipon compustion: CO and CO2 are formed

Reactivity	: Upon combustion: CO and CO2 are formed.
5.3. Advice for firefighters	
Firefighting instructions	: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

<b>SECTION 6: Accidental releas</b>	e measures
6.1. Personal precautions, protect	tive equipment and emergency procedures
General measures	: Isolate from fire, if possible, without unnecessary risk.
6.1.1. For non-emergency personr	nel
Protective equipment	: Protective goggles. Gloves. Protective clothing.
Emergency procedures	: Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Stop leak if safe to do so. Stop release. Ventilate area.
6.2. Environmental precautions	
Avoid release to the environment. Pre	event soil and water pollution.
6.3. Methods and material for con	
For containment	: Contain released substance, pump into suitable containers.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.
6.4. Reference to other sections	
No additional information available	
<b>SECTION 7: Handling and sto</b>	rage
7.1. Precautions for safe handling	
Precautions for safe handling	: Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing.
Hygiene measures	: Wash thoroughly after handling. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, in	
Technical measures	: Comply with applicable regulations.
Storage conditions	: Keep container closed when not in use.
Incompatible products	: acids.

: Meet the legal requirements. Store in a dry area. Store in a cool area.

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Special rules on packaging

: meet the legal requirements. Keep only in original container.

SECTION 8: Exposure cor	ntrols/personal protection	
8.1. Control parameters		
potassium hydroxide, 45%=-	<conc<50%, (1310-58-3)<="" aqueous="" solutions="" th=""><th></th></conc<50%,>	
ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
8.2. Exposure controls	л	
Personal protective equipment	<ul> <li>Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Safety glasses. Protective clothing.</li> </ul>	



SECTION 9: Physical and chemical p	roperties
9.1. Information on basic physical and che	
Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Odor	: slight detergent odor
Odor threshold	: No data available
рН	: 13 - 14
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 200 °F Closed Cup
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1.11 g/ml
Solubility	: Soluble in water.
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
VOC content	: < 0.5 %

SECTION 10: Stability and reactivity
10.1. Reactivity
Upon combustion: CO and CO2 are formed.
10.2. Chemical stability
No additional information available
10.3. Possibility of hazardous reactions
Refer to section 10.1 on Reactivity.
10.4. Conditions to avoid
No additional information available

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**10.5. Incompatible materials** No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11.1. Information on toxicological effects		
Acute toxicity	: Not classified	
potassium hydroxide, 45%= <conc<50%, ad<="" td=""><td>ueous solutions (1310-58-3)</td></conc<50%,>	ueous solutions (1310-58-3)	
LD50 oral rat	273 mg/kg (Rat)	
ATE CLP (oral)	273.000 mg/kg body weight	
Skin corrosion/irritation	: Causes severe skin burns and eye damage.	
	pH: 13 - 14	
Serious eye damage/irritation	: Not classified	
	pH: 13 - 14	
Respiratory or skin sensitization	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
Specific target organ toxicity (single exposure)	: Not classified	
Specific target organ toxicity (repeated exposure)	: Not classified	
Aspiration hazard	: Not classified	
Symptoms/injuries after inhalation	: May cause respiratory irritation.	
Symptoms/injuries after skin contact	: Caustic burns/corrosion of the skin.	
Symptoms/injuries after eye contact	: Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.	
Symptoms/injuries after ingestion	<ul> <li>May be harmful if swallowed. Burns to the gastric/intestinal mucosa. Gastrointestinal complaints. Cramps. Nausea.</li> </ul>	

12.1. Toxicity	
potassium hydroxide, 45%= <conc<50%, aqu<="" td=""><td>eous solutions (1310-58-3)</td></conc<50%,>	eous solutions (1310-58-3)
LC50 fish 1	28.6 mg/l (24 h; Pisces; Pure substance)
LC50 other aquatic organisms 1	100 - 1000 mg/l (96 h)
LC50 fish 2	80 mg/l (96 h; Gambusia affinis; Pure substance)
Threshold limit other aquatic organisms 1	100 - 1000,96 h
12.2. Persistence and degradability	
potassium hydroxide, 45%= <conc<50%, aqu<="" td=""><td>eous solutions (1310-58-3)</td></conc<50%,>	eous solutions (1310-58-3)
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
12.3. Bioaccumulative potential	
<b>12.3. Bioaccumulative potential</b> potassium hydroxide, 45%= <conc<50%, aqu<="" td=""><td>eous solutions (1310-58-3)</td></conc<50%,>	eous solutions (1310-58-3)

### 13.1. Waste treatment methods

Waste disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations.

### **SECTION 14: Transport information**

**Department of Transportation (DOT)** 

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<b>,</b>	
Transport document description	: NA1760 Compounds, cleaning liquid (Potassium Hydroxide), 8, III
UN-No.(DOT)	: NA1760
Proper Shipping Name (DOT)	: Compounds, cleaning liquid
Transport hazard class(es) (DOT)	: 8 - Class 8 - Corrosive material 49 CFR 173.136
Hazard labels (DOT)	: 8 - Corrosive
Packing group (DOT)	: III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Symbols	: D - Proper shipping name for domestic use only, or to and from Canada,G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102)	: IB3,N37,T7,TP1,TP28
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: A
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters"
Additional information	. This product may be allockle to be ablened as a limited Questity of Questing 20 years of the QDM D
Other information	: This product may be eligible to be shipped as a Limited Quantity or Consumer Commodity ORM-D utilizing the exception found at 49 CFR 173.154.

ADR No additional information available Transport by sea No additional information available Air transport

### No additional information available

#### **SECTION 15: Regulatory information**

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372

potassium hydroxide, 45%= <conc<50%, (1310-58-3)<="" aqueous="" solutions="" th=""></conc<50%,>						
Not listed on SARA Section 313 (Specific toxic chemical listings)						
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb					

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

SECTION 16: Other information					
Training advice	: Normal use of this product shall imply use in accordance with the instructions on the packaging.				
Full text of H-phrases:					

STOT SE 3	Specific target organ toxicity (single exposure) Category 3
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Met. Corr. 1	Corrosive to metals Category 1
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3

TOTA

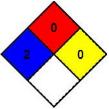
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H290	May be corrosive to metals
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation

NFPA health hazard	:	2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.	
NFPA fire hazard	:	0 - Materials that will not burn.	1
NFPA reactivity	:	0 - Normally stable, even under fire exposure conditions, and are not reactive with water.	



Prepared by: Technical Department

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