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## **SECTION 1: Product and company 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 800-743-6417

athea.com

Contact:Technical Department : Chemtrec: 1-800-424-9300

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

GHS US classification

**Emergency number** 

 Met. Corr. 1
 H290

 Skin Corr. 1C
 H314

 Eye Dam. 1
 H318

 Carc. 1A
 H350

### 2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)





GHS05 GHS08

Signal word (GHS US) : Danger

Hazard statements (GHS US) : May be corrosive to metals

Causes severe skin burns and eye damage

Causes serious eye damage

May cause cancer

Precautionary statements (GHS US) : Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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.

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.

If exposed or concerned: Get medical advice/attention. Immediately call a doctor, a POISON CENTER. Specific treatment (see First aid measures on this label).

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..

## 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. Substances

Not applicable

#### 3.2. Mixtures

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Name	Product identifier	%	GHS US classification
disodium metasilicate	(CAS-No.) 6834-92-0	5-10	Met. Corr. 1, H290
			Skin Corr. 1B, H314
			STOT SE 3, H335
potassium hydroxide, 45%≤conc<50%, aqueous solutions	(CAS-No.) 1310-58-3	3-7	Acute Tox. 3 (Oral), H301
			Skin Corr. 1, H314
			Eye Dam. 1, H318
SODIUM LAURETH SULFATE	(CAS-No.) 9004-82-4	1-5	Skin Irrit. 2, H315
			Eye Dam. 1, H318
ethanol	(CAS-No.) 64-17-5	0.1-1	Flam. Liq. 2, H225
			Eye Irrit. 2A, H319
			Carc. 1A, H350
			STOT SE 3, H336

All hazardous chemicals, as determined by 29 CFR 1910.1200 have been listed. A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

### **SECTION 4: First aid 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 effects, both acute and delayed

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : May cause respiratory irritation. Symptoms/effects after skin contact : Caustic burns/corrosion of the skin.

Symptoms/effects after eye contact : Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.

Symptoms/effects after ingestion : May be harmful if swallowed. Burns to the gastric/intestinal mucosa. Gastrointestinal complaints.

Cramps. Nausea.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : All extinguishing media allowed.

# 5.2. Special hazards arising from the substance or mixture

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.

### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

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. Prevent soil and water pollution.

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### 6.3. Methods and material for containment and cleaning up

For containment : Contain released product, collect/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

### **SECTION 7: Handling and storage**

### 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, including any incompatibilities

Technical measures : Comply with applicable regulations.
Storage conditions : Keep container closed when not in use.

Incompatible products : Acid

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

Special rules on packaging meet the legal requirements. Keep only in original container.

# **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### **SODIUM LAURETH SULFATE (9004-82-4)**

Not applicable

ethanol (64-17-5)		
ACGIH ACGIH OEL STEL [ppm] 1000 ppm		1000 ppm
ACGIH	Remark (ACGIH)	URT irr
OSHA	OSHA PEL (TWA) [1]	1900 mg/m³
OSHA	OSHA PEL (TWA) [2]	1000 ppm

potassium hydroxide, 45%≤conc<50%, aqueous solutions (1310-58-3)		
ACGIH	ACGIH OEL Ceiling	2 mg/m³
ACGIH	Remark (ACGIH)	URT, eye, & skin irr

# disodium metasilicate (6834-92-0)

Not applicable

### 8.2. Exposure controls

Personal protective equipment

Use appropriate personal protective equipment when risk assessment indicates this is necessary.
 Gloves. Safety glasses. Protective clothing.







# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear, colorless liquid
Odor : slight, detergent odor
Odor threshold : No data available
pH : 12 – 14
Melting point : No data available

Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Flash point : > 200 °F Closed Cup
Relative evaporation rate (butyl acetate=1) : No data available

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Flammability No data available **Explosion limits** No data available Explosive properties No data available No data available Oxidizing properties Vapor pressure No data available Relative density No data available No data available Relative vapor density at 20°C Density 1.11 g/ml Soluble in water. Solubility Partition coefficient n-octanol/water (Log Pow) No data available No data available Partition coefficient n-octanol/water (Log Kow) No data available Auto-ignition temperature Decomposition temperature No data available Viscosity No data available No data available Viscosity, kinematic 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

## 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.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

: Not classified Acute toxicity

ethanol (64-17-5)	
LD50 oral rat 10470 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))	
LD50 dermal rabbit	> 15800 mg/kg body weight (Rabbit, Experimental value, Dermal)
LC50 Inhalation - Rat	124.7 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value,
	Inhalation (vapours), 14 day(s))
ATE CLP (oral)	10740 mg/kg body weight

potassium hydroxide, 45%≤conc<50%, aqueous solutions (1310-58-3)	
LD50 oral rat	273 mg/kg (Rat, Oral)
ATE CLP (oral)	273 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns. pH: 12 - 14

Serious eye damage/irritation Causes serious eye damage.

pH: 12 - 14 Not classified Not classified

Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity May cause cancer.

ethanol (64-17-5)	
IARC group	1 - Carcinogenic to humans

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Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause respiratory irritation. Symptoms/effects after skin contact : Caustic burns/corrosion of the skin.

Symptoms/effects after eye contact : Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.

Symptoms/effects after ingestion : May be harmful if swallowed. Burns to the gastric/intestinal mucosa. Gastrointestinal complaints.

Cramps. Nausea.

Likely routes of exposure : Skin and eye contact

# **SECTION 12: Ecological information**

### 12.1. Toxicity

ethanol (64-17-5)	
LC50 - Fish [1]	15300 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water,
	Experimental value, Lethal)

potassium hydroxide, 45%≤conc<50%, aqueous solutions (1310-58-3)	
LC50 - Fish [1]	80 mg/l (96 h, Gambusia affinis, Pure substance)

### 12.2. Persistence and degradability

ethanol (64-17-5)		
	Persistence and degradability Biodegradable in the soil. Readily biodegradable in water.	
	Biochemical oxygen demand (BOD)	0.8 – 0.967 g O <sub>2</sub> /g substance
	Chemical oxygen demand (COD)	1.7 g O₂/g substance
	ThOD	2.1 g O <sub>2</sub> /g substance

potassium hydroxide, 45%≤conc<50%, aqueous solutions (1310-58-3)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

### 12.3. Bioaccumulative potential

ethanol (64-17-5)	
Partition coefficient n-octanol/water (Log Pow)	-0.35 (Experimental value, Equivalent or similar to OECD 107, 24 °C)
Bioaccumulative potential	Not bioaccumulative.

potassium hydroxide, 45%≤conc<50%, aqueous solutions (1310-58-3)	
Bioaccumulative potential	Not bioaccumulative.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Product/Packaging disposal : Dispose in a safe manner in accordance with local/national regulations. recommendations

# **SECTION 14: Transport information**

### **Department of Transportation (DOT)**

Transport document description (DOT) : UN1760 Corrosive liquids, n.o.s. (Potassium Hydroxide), 8, III

UN-No.(DOT) : UN1760

Proper Shipping Name (DOT) : Corrosive liquids, n.o.s.

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

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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 G - Identifies PSN requiring a technical name

: 154

DOT Special Provisions (49 CFR 172.102) : IB3,T7,TP1,TP28

DOT Packaging Exceptions (49 CFR : 154

173.xxx)

**DOT Quantity Limitations Passenger** : 5 L aircraft/rail (49 CFR 173.27) DOT Quantity Limitations Cargo aircraft : 60 L only (49 CFR 175.75)

**DOT Vessel Stowage Location** : A **DOT Vessel Stowage Other** : 40 - Stow "clear of living quarters"

**Additional information** 

Emergency Response Guide (ERG)

Number

Other information : When transported by ground, this product may be eligible to be shipped as a Limited Quantity utilizing

the exception found at 49 CFR 173.154. If any alteration of packaging, product, or mode of

transportation is further intended, different shipping names and labeling may be required.

**ADR** 

No additional information available

Transport by sea

UN-No. (IMDG) 1760

Proper Shipping Name (IMDG) CORROSIVE LIQUID, N.O.S. Class (IMDG) 8 - Corrosive substances

Packing group (IMDG) : III - substances presenting low danger

Air transport

1760 UN-No. (IATA)

Proper Shipping Name (IATA) Corrosive liquid, n.o.s. Class (IATA) : 8 - Corrosives : III - Low danger Packing group (IATA)

# **SECTION 15: Regulatory information**

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

potassium hydroxide, 45%≤conc<50%, aqueous	(1310-58-3)	CERCLA RQ1000 lb
solutions		

WARNING

This product can expose you to Ethylene oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

# **SECTION 16: Other information**

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

NFPA health hazard: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual

injury.

NFPA fire hazard 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible

materials such as concrete, stone, and sand.

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NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.

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