

**SECTION 1: Product and company identification**

Product name : Coil Cleaner  
 Use of the substance/mixture : Cleaner  
 Product code : 0101  
 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)**

Skin Corr. 1C H314  
 STOT RE 2 H373  
 Full text of H-phrases: see section 16

**2.2. Label elements**

**GHS-US labeling**

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger  
 Hazard statements (GHS-US) : Causes severe skin burns and eye damage  
 May cause damage to organs through prolonged or repeated exposure  
 Precautionary statements (GHS-US) : 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  
 Immediately call a doctor, a POISON CENTER  
 Get medical advice/attention if you feel unwell  
 Specific treatment (see First aid measures on this label)  
 Wash contaminated clothing before reuse  
 Store locked up  
 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. Substance**

Not applicable  
 Full text of H-phrases: see section 16

**3.2. Mixture**

Name	Product identifier	%	Classification (GHS-US)
phosphoric acid	(CAS No) 7664-38-2	10-30	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314

Name	Product identifier	%	Classification (GHS-US)
Glycol Ether EB	(CAS No) 111-76-2	3-7	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT RE 2, H373 Asp. Tox. 1, H304
nonylphenoxypoly(ethyleneoxy)ethanol (9EO)	(CAS No) 9016-45-9	1-5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
ammonium bifluoride, ammonium hydrogen difluoride	(CAS No) 1341-49-7	0.5-1.5	Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314

## 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. Get medical advice/attention if you feel unwell.
- 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 medical advice/attention if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes severe skin burns and eye damage. May cause damage to organs through prolonged or repeated exposure.
- Symptoms/injuries after inhalation : May cause respiratory irritation. Risk of lung oedema.
- 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. Gastrointestinal complaints. Burns to the gastric/intestinal mucosa.

### 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

- Fire hazard : Upon heating, toxic fumes are formed.
- Reactivity : Thermal decomposition may produce : Phosphorous oxide. hydrofluoric acid. carbon oxides. Toxic fumes may be released. Contact with metallic substances may release flammable hydrogen gas.

### 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.

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

- For containment : Contain released substance, pump into suitable containers.
- Methods for cleaning up : Absorb spillage to prevent material damage. 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. Handle and open the container with care.
- 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 : Store in corrosive resistant container with a resistant inner liner. Keep container closed when not in use.
- Incompatible products : alkaline substances. metals and metal salts.
- Incompatible materials : chlorine-based bleaching agents. ammonia. Agent of cleaning.
- Storage area : Keep only in the original container. Store in a dry area. Store in a cool area. Store away from heat.
- Special rules on packaging : meet the legal requirements. Keep only in original container.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Glycol Ether EB (111-76-2)		
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr
phosphoric acid (7664-38-2)		
ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
ACGIH	ACGIH STEL (mg/m³)	3 mg/m³

### 8.2. Exposure controls

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



## SECTION 9: Physical and chemical properties

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

- Physical state : Liquid
- Appearance : clear. light blue. Liquid.
- Odor : characteristic acidic
- Odor threshold : No data available
- pH : < 1
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : > 200 °F
- 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

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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	: < 5 %

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Thermal decomposition may produce : Phosphorous oxide. hydrofluoric acid. carbon oxides. Toxic fumes may be released. Contact with metallic substances may release flammable hydrogen gas.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 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

alkalis. Metals.

#### 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

Acute toxicity : Not classified

<b>ammonium bifluoride, ammonium hydrogen difluoride (1341-49-7)</b>	
ATE CLP (oral)	100.000 mg/kg body weight
<b>Glycol Ether EB (111-76-2)</b>	
LD50 oral rat	1300 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE CLP (oral)	1300.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
ATE CLP (dust, mist)	1.500 mg/l/4h
<b>phosphoric acid (7664-38-2)</b>	
LD50 oral rat	1530 mg/kg (Rat)
LD50 dermal rabbit	2740 mg/kg (Rabbit)
ATE CLP (oral)	1530.000 mg/kg body weight
ATE CLP (dermal)	2740.000 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: < 1

Serious eye damage/irritation : Not classified

pH: < 1

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

<b>Glycol Ether EB (111-76-2)</b>	
IARC group	3 - Not Classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

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Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure.

<b>Glycol Ether EB (111-76-2)</b>	
LOAEL (oral,rat,90 days)	69 mg/kg bodyweight/day Target organ: liver
NOAEL (dermal,rat/rabbit,90 days)	150 mg/kg bodyweight/day

Aspiration hazard : Not classified  
 Symptoms/injuries after inhalation : May cause respiratory irritation. Risk of lung oedema.  
 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. Gastrointestinal complaints. Burns to the gastric/intestinal mucosa.

## SECTION 12: Ecological information

### 12.1. Toxicity

Glycol Ether EB (111-76-2)	
LC50 fish 1	1474 mg/l Oncorhynchus mykiss
EC50 Daphnia 1	100 mg/l Water flea
ErC50 (algae)	1840 mg/l Pseudokirchneriella subcapitata
NOEC chronic fish	> 100 mg/l
NOEC chronic crustacea	100 mg/l daphnid
nonylphenoxypoly(ethyleneoxy)ethanol (9EO) (9016-45-9)	
LC50 fish 1	5 mg/l (96 h; Gasterosteus aculeatus; Intermittent flow)
EC50 other aquatic organisms 1	500 mg/l (Selenastrum capricornutum; Chronic)
LC50 fish 2	7 mg/l (96 h; Leuciscus idus)
Threshold limit algae 1	500 mg/l (Selenastrum capricornutum; Cell numbers)
phosphoric acid (7664-38-2)	
LC50 fish 1	138 mg/l (96 h; Pisces; Lethal)
LC50 other aquatic organisms 1	240 mg/l (96 h; Protozoa; pH < 7)
LC50 fish 2	100 - 1000 mg/l (Pisces)
LC50 other aquatic organisms 2	100 - 1000 mg/l
TLM fish 1	138 ppm (24 h; Gambusia affinis)
Threshold limit other aquatic organisms 1	240 mg/l (96 h; Protozoa; pH < 7)
Threshold limit other aquatic organisms 2	100 - 1000

### 12.2. Persistence and degradability

nonylphenoxypoly(ethyleneoxy)ethanol (9EO) (9016-45-9)	
Persistence and degradability	Not readily biodegradable in water.
phosphoric acid (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

### 12.3. Bioaccumulative potential

nonylphenoxypoly(ethyleneoxy)ethanol (9EO) (9016-45-9)	
Log Pow	> 4
phosphoric acid (7664-38-2)	
Log Pow	-0.77 (Estimated value)
Bioaccumulative potential	Bioaccumulation: not applicable.

## SECTION 13: Disposal considerations

### 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)**

Transport document description : UN1805 Phosphoric acid solution, 8, III  
 UN-No.(DOT) : UN1805  
 Proper Shipping Name (DOT) : Phosphoric acid solution  
 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 Special Provisions (49 CFR 172.102) : A7,IB3,N34,T4,TP1  
 DOT Packaging Exceptions (49 CFR 173.xxx) : 154  
 DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L  
 DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L  
 DOT Vessel Stowage Location : A

**Additional information**

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.

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.

Glycol Ether EB	CAS No 111-76-2	3 – 7
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ammonium bifluoride, ammonium hydrogen difluoride (1341-49-7)	
Not listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb

phosphoric acid (7664-38-2)	
Not listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 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.

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## Safety Data Sheet

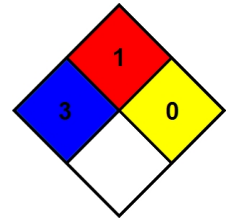
Full text of H-phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H227	Combustible liquid
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H373	May cause damage to organs through prolonged or repeated exposure

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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.*