

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 : Chemtrec: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corr. 1C H314

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
 Hazard statements (GHS-US) : Causes severe skin burns and eye damage
 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
 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	%	GHS-US classification
phosphoric acid	(CAS No) 7664-38-2	15-25	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
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 Asp. Tox. 1, H304
UNDECETH-5	(CAS No) 34398-01-1	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

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. 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.
- 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.

Coil Cleaner

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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
OSHA	OSHA PEL (TWA) (mg/m³)	240 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm
phosphoric acid (7664-38-2)		
ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (Phosphoric acid; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (mg/m³)	3 mg/m³ (Phosphoric acid; USA; Short time value; TLV - Adopted Value)

8.2. Exposure controls

Appropriate engineering controls	: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
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	: Soapy
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
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

Coil Cleaner

Safety Data Sheet

Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
VOC content	: < 5.5 %

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

ammonium bifluoride, ammonium hydrogen difluoride (1341-49-7)	
ATE CLP (oral)	100.000 mg/kg body weight
Glycol Ether EB (111-76-2)	
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
phosphoric acid (7664-38-2)	
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
UNDECETH-5 (34398-01-1)	
LD50 oral rat	> 1400 mg/kg

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

Glycol Ether EB (111-76-2)	
IARC group	3 - Not Classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Glycol Ether EB (111-76-2)	
NOAEL (oral,rat,90 days)	see comments
NOAEL (dermal,rat/rabbit,90 days)	see comments

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.

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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.
Likely routes of exposure	: Skin and eyes contact

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
phosphoric acid (7664-38-2)	
LC50 fish 1	138 mg/l (LC50)
UNDECETH-5 (34398-01-1)	
LC50 fish 1	< 10 mg/l
EC50 Daphnia 1	< 10 mg/l
ErC50 (algae)	< 10 mg/l

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

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.
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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
Class (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

Coil Cleaner

Safety Data Sheet

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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.

2-butoxyethanol	CAS No 111-76-2	3-7
ammonium bifluoride, ammonium hydrogen difluoride (1341-49-7)		
Not listed on SARA Section 313 (Specific toxic chemical listings)		
CERCLA RQ	100 lb	
phosphoric acid (7664-38-2)		
Not listed on SARA Section 313 (Specific toxic chemical listings)		
CERCLA RQ	5000 lb	
UNDECETH-5 (34398-01-1)		
SARA Section 311/312 Hazard Classes		
Immediate (acute) health hazard		

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

SECTION 16: Other information

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

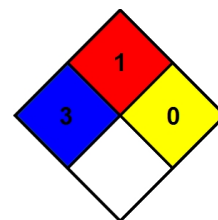
Full text of H-phrases:

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

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

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