

Issue Date: 19-Jun-2015

Review Date: 03-Mar-2021

Version 1

## 1. IDENTIFICATION

### Product Identifier

 Product Name **APEX 6000 EP**

### Other means of identification

#### SDS #

 Item # A-6061-14  
 A-6062-05  
 A-6063-55  
 A-6063-275

### Recommended use of the chemical and restrictions on use

Recommended Use Machining and grinding metal.

### Details of the supplier of the safety data sheet

#### Supplier Address

 Ashburn Chemical Technologies  
 7403 Wright Rd  
 Houston, TX 77041

### Emergency Telephone Number

#### Company Phone Number

832-399-1000

#### Emergency Telephone (24 hr)

 INFOTRAC 1-352-323-3500 (International)  
 1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

Appearance Blue , transparent

Physical State Liquid

### Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Reproductive toxicity	Category 1B

### Signal Word

**Danger**

### Hazard Statements

 Causes skin irritation  
 Causes serious eye irritation  
 May cause an allergic skin reaction  
 May damage fertility or the unborn child


**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Contaminated work clothing should not be allowed out of the workplace  
Do not breathe dust/fume/gas/mist/vapors/spray  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
Take off contaminated clothing and wash it before reuse  
If skin irritation or rash occurs: Get medical advice/attention

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Unknown Acute Toxicity**

1-10% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%
Triethanolamine	102-71-6	10-20
Monoethanolamine	141-43-5	1-5
Hexahydro-1,3,5-tris(2-hydroxyethyl)-S-triazine	4719-04-4	1-5
Borax	1303-96-4	0.1-1.0

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

**4. FIRST-AID MEASURES****First Aid Measures****General Advice**

Provide this SDS to medical personnel for treatment.

**Eye Contact**

Flush with large amounts of water for 15 minutes. Lift the upper and lower eyelid to ensure complete flushing of the eye(s). Remove contact lens, if worn. If eye irritation persists: Get medical advice/attention.

**Skin Contact**

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

**Inhalation**

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

**Ingestion**

Do not induce vomiting without medical advice. Seek immediate medical attention/advice.

**Most important symptoms and effects**

<b>Symptoms</b>	May cause skin and eye irritation. The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals in contact with skin.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	May be irritating to skin in some sensitive individuals, especially after prolonged and/or repeated contact.
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**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

**Unsuitable Extinguishing Media** Do not use straight streams.

**Specific Hazards Arising from the Chemical**

Not determined.

**Hazardous Combustion Products** Carbon oxides.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** See in Section 8 for personal protective equipment.

**Environmental Precautions** See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. Absorb or cover with dry earth, sand or other non-combustible material.

**Methods for Clean-Up** Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. See section 13 for waste disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash face, hands, and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse. Use personal protection recommended in Section 8. Do not breathe vapors or spray mist. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when handling this product.

**Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store in open or unlabeled containers. Store away from heat and open flame. Storage temperature > 40 F.
<b>Incompatible Materials</b>	Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Triethanolamine 102-71-6	TWA: 5 mg/m <sup>3</sup>	-	-
Monoethanolamine 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m <sup>3</sup> (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m <sup>3</sup> (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m <sup>3</sup>	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m <sup>3</sup> STEL: 6 ppm STEL: 15 mg/m <sup>3</sup>
Borax 1303-96-4	STEL: 6 mg/m <sup>3</sup> inhalable fraction TWA: 2 mg/m <sup>3</sup> inhalable fraction	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>

### Appropriate engineering controls

<b>Engineering Controls</b>	Maintain eye wash fountain and quick-drench facilities in work area.
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### Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	If contact is likely, safety glasses with side shields are recommended.
<b>Skin and Body Protection</b>	If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.
<b>Respiratory Protection</b>	Ensure adequate ventilation, especially in confined areas.
<b>General Hygiene Considerations</b>	Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Odor</b>	Not determined
<b>Appearance</b>	Blue transparent liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Blue transparent		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
pH	10.2-10.4		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	100 °C / 212 °F	(at 760 mm Hg)	
Flash Point	Not flammable		
Evaporation Rate	< 1	(butyl acetate = 1)	
Flammability (Solid, Gas)	Not determined		
Upper Flammability Limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor Pressure	< 1.0		
Vapor Density	< 1.0		
Specific Gravity	1.05		

<b>Water Solubility</b>	Completely soluble
<b>Solubility in other solvents</b>	Not determined
<b>Partition Coefficient</b>	Not determined
<b>Auto-ignition Temperature</b>	Not determined
<b>Decomposition Temperature</b>	Not determined
<b>Kinematic Viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	Not determined
<b>Explosive Properties</b>	Not determined
<b>Oxidizing Properties</b>	Not determined

## 10. STABILITY AND REACTIVITY

**Reactivity** Not reactive under normal conditions.

**Chemical Stability** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions** None under normal processing.

**Conditions to Avoid** Incompatible Materials.

**Incompatible Materials** Strong acids. Strong bases.

**Hazardous Decomposition Products** Thermal decomposition and combustion are not expected to occur except under extreme conditions.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

**Eye Contact** Causes serious eye irritation.

**Skin Contact** Causes skin irritation. May cause an allergic skin reaction.

**Inhalation** Do not inhale.

**Ingestion** May cause gastrointestinal irritation or diarrhea.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Triethanolamine 102-71-6	= 4190 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit ) > 16 mL/kg ( Rat )	-
Monoethanolamine 141-43-5	= 1720 mg/kg ( Rat )	= 1 mL/kg ( Rabbit ) = 1025 mg/kg ( Rabbit )	-
Hexahydro-1,3,5-tris(2-hydroxyethyl)-S-triazine 4719-04-4	= 763 mg/kg ( Rat )	> 2 g/kg ( Rat )	-
Borax 1303-96-4	= 2660 mg/kg ( Rat )	-	-

### Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** May cause an allergic skin reaction.

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Triethanolamine 102-71-6		Group 3		

**IARC (International Agency for Research on Cancer)**

Group 3 IARC components are "not classifiable as human carcinogens"

**Reproductive toxicity**

May damage fertility or the unborn child.

**STOT - repeated exposure**

Causes damage to organs through prolonged or repeated exposure.

**Numerical measures of toxicity**

Not determined

**Unknown Acute Toxicity**

1-10% of the mixture consists of ingredient(s) of unknown toxicity.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Triethanolamine 102-71-6	216: 72 h Desmodesmus subspicatus mg/L EC50 169: 96 h Desmodesmus subspicatus mg/L EC50	10600 - 13000: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Pimephales promelas mg/L LC50 static 450 - 1000: 96 h Lepomis macrochirus mg/L LC50 static		1386: 24 h Daphnia magna mg/L EC50
Monoethanolamine 141-43-5	15: 72 h Desmodesmus subspicatus mg/L EC50	227: 96 h Pimephales promelas mg/L LC50 flow-through 3684: 96 h Brachydanio rerio mg/L LC50 static 300 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 114 - 196: 96 h Oncorhynchus mykiss mg/L LC50 static 200: 96 h Oncorhynchus mykiss mg/L LC50 flow-through		65: 48 h Daphnia magna mg/L EC50
Hexahydro-1,3,5-tris(2-hydroxyethyl)-S-triazine 4719-04-4			EC50 = 28.9 mg/L 15 min	

**Persistence/Degradability**

Biodegradation: Expected to be slowly biodegradable.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Triethanolamine 102-71-6	-2.53
Monoethanolamine 141-43-5	-1.91

**Other Adverse Effects**

Not determined

### 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

##### **Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

##### **Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Borax 1303-96-4	Toxic

### 14. TRANSPORT INFORMATION

#### Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

#### DOT

Not regulated

#### IATA

Not regulated

#### IMDG

Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

Not determined

##### **TSCA**

Listed

#### **Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

#### US Federal Regulations

##### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

##### SARA 311/312 Hazard Categories

This material, as supplied, does not contain any substances subject to the requirements of SARA Sections 311/312 (40 CFR 370)

##### SARA 313

Not determined

#### US State Regulations

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Triethanolamine 102-71-6	X	X	X
Monoethanolamine 141-43-5	X	X	X
Borax 1303-96-4	X	X	X

**16. OTHER INFORMATION****NFPA****Health Hazards**

1

**Flammability**

0

**Instability**

0

**Special Hazards**

Not determined

**HMIS****Health Hazards**

1

**Flammability**

0

**Physical Hazards**

0

**Personal Protection**

Not determined

**Issue Date:**

19-Jun-2015

**Revision Date:****Revision Note:**

New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**