

Safety Data Sheet

| Issue Date: 24-Mar-2015 | Review Date: 28-Nov2018 Vers | sion 1 | |
|--|--|--------|--|
| | 1. IDENTIFICATION | | |
| Product Name | APEX 6590 SYNTHETIC COOLANT | | |
| Other means of identification Item# | A-6590-05 A-6590-55 A-6500-275 (with Blue Dye) A-6591-275 (no dye) | | |
| Recommended Use | Machining and grinding metal. | | |
| Supplier Address | Ashburn Chemical Technologies 7403 Wright Rd Houston, TX 77041 | | |
| 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 | | |
| Classification | Classified according to the US OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (WHMIS 2015) | | |
| | Skin IrritantCategory 2Eye CorrosionCategory 2Reproductive ToxictyCategory 1B | | |
| Signal Word | Danger | | |
| Hazard Statements | H315 Causes skin irritation H319 Causes serious eye irritation H360 May damage fertility or the unborn child | | |
| | | | |
| Precautionary Statements - Prev | | | |
| | P201 Obtain special instructions before use P202 Do not handle until all safety precautions have been read and understood P264 Wash face, hands and any exposed skin thoroughly after handling P280 Wear protective gloves protective clothing/eve protection/face protection | | |

P280 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

P308+P313 If exposed or concerned: Get medical advice/attention P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337+P313 If eye irritation persists: Get medical advice/attention P302+P352 IF ON SKIN: Wash with plenty of soap and water P362+P364 Take off contaminated clothing and wash it before reuse P332+P313 If skin irritation occurs: Get medical advice/attention

Precautionary Statements – Storage P405 Store locked up

Precautionary Statements - Disposal P501 Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name CAS No | | Weight-% | Other Identifiers |
|----------------------|------------|----------|--------------------------------|
| Neodecanoic Acid | 26896-20-8 | 5-10 | Versatic 10 Acid |
| Monoethanolamine | 141-43-5 | 1-5 | 2-aminoethanol |
| Borax | 1303-96-4 | 1-5 | Sodium tetraborate decahydrate |

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 effe | ects | | | | |
| Symptoms | May cause skin and eye irritation. | | | | |
| Notes to Physician | Treat symptomatically. | | | | |
| | 5. FIRE-FIGHTING MEASURES | | | | |
| Suitable / Unsuitable Extinguishing Media | Use water fog, foam, dry chemical, alcohol resistant foam or carbon dioxide (CO2) DO NOT use straight streams of water (could cause fire to spread). | | | | |
| Specific Hazards Arising from the Chemical | Not determined. | | | | |
| Hazardous Combustion Products | Carbon oxides. | | | | |
| Protective equipment / 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 Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental Precautions Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

| Methods for Containment | Prevent further leakage or spillage if safe to do so. 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. Contain large spills and pump into a suitable tank for disposal. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. For waste disposal, see section 13 of the SDS. |

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. Do not eat, drink or smoke when handling this product.

Conditions for safe storage, including any incompatibilities

Storage ConditionsKeep 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 5-40°C (41-104°F). Store locked up

Incompatible Materials Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component Information

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

Appropriate engineering controls

Engineering Controls

Maintain eye wash fountain and quick-drench facilities in work area.

Individual protection measures, such as personal protective equipment

| Eye/Face Protection | If contact is likely, safety glasses with side shields are recommended. | | |
|--------------------------------|--|--|--|
| Skin and Body Protection | If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended. | | |
| Respiratory Protection | Ensure adequate ventilation, especially in confined areas. | | |
| General Hygiene Considerations | 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

| Physical State Appearance Color | Liquid Transparent Amber (no dye) Blue (dyed) | Odor Odor Threshold | Not determined Not determined | |
|---|--|---|----------------------------------|--|
| Property pH Melting Point/Freezing Point Boiling Point/Boiling Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper Flammability Limits Lower Flammability Limits Lower Flammability Limit Vapor Pressure Vapor Density Specific Gravity Water Solubility Solubility in other solvents Partition Coefficient Auto-ignition Temperature Decomposition Temperature Kinematic Viscosity Dynamic Viscosity | Values 9.3 - 9.7 Not determined 100 °C / 212 °F Not flammable < 1 Not determined Not determined Not determined Not determined Not determined < 1.0 < 1.0 < 1.0 < 1.0 Not determined Not determined | Remarks • Method (at 760 mm Hg) (butyl acetate = 1) | | |
| | - | - | | |
| | 10. STABILITY AND REA | CTIVITY | | |
| Reactivity | Not reactive under normal conditions. | | | |
| Chemical Stability | ty 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. |
| Inhalation | Do not inhale. |
| Ingestion | May cause gastrointestinal irritation or diarrhea. |

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|--------------------|--|-----------------|
| Neodecanoic Acid 26896-20-8 | = 2700 mg/kg (Rat) | > 3640 mg/kg (Rat) | - |
| Borax 1303-96-4 | = 2660 mg/kg (Rat) | - | - |
| Monoethanolamine 141-43-5 | = 1720 mg/kg (Rat) | = 1 mL/kg (Rabbit)= 1025 mg/kg (Rabbit) | - |

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

| Carcinogenicity | Not determined | | |
|--------------------------------|---|--|--|
| Reproductive toxicity | May damage fertility or the unborn child. | | |
| Numerical measures of toxicity | Not determined | | |
| | 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 |
| Neodecanoic Acid 26896-20-8 | | 32: 96 h Lepomis macrochirus mg/L LC50 static | | 47.11: 48 h Daphnia magna mg/L EC50 |

Apex 6590 SYN

| Monoethanolamine | 15: 72 h Desmodesmus | 227: 96 h Pimephales | 65: 48 h Daphnia magna |
|------------------|-----------------------|------------------------------|------------------------|
| 141-43-5 | subspicatus mg/L EC50 | promelas mg/L LC50 | mg/L EC50 |
| | | flow-through 3684: 96 h | 5 |
| | | 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 | |

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

| <u>Note</u> | Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances. |
|-------------|---|
| TDG | Not regulated |
| DOT | Not regulated. |
| ΙΑΤΑ | Not regulated |
| IMDG | Not regulated |
| | |

15. REGULATORY INFORMATION

International Inventories

The component(s) of this product are reported in the following inventories

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|--------------------|------|-----|------|--------|--------|------|-------|------|-------|------|
| Borax 1303-96-4 | Y | Y | | | | Y | Y | Y | Y | Y |
| Legend: | | | | | | | | | | |

| | TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - 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 |
|--------------------------------|--|
| Canada's WHMIS Classifications | AICS - Australian Inventory of Chemical Substances D-1B: Material Causing immediate and serious Toxic Effects (Very Toxic) D-2B: Toxic Material Causing Other Toxic Effects (Toxic) |
| 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 |
| 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 | Х | Х | Х |
| Borax 1303-96-4 | Х | Х | Х |
| Monoethanolamine 141-43-5 | Х | Х | Х |

| 16. OTHER INFORMATION | | | | | | |
|---|---------------------|--------------------------|------------------------------|---------------------------------------|--|--|
| <u>NFPA</u> | Health Hazards | Flammability 0 | Instability 0 | Special Hazards Not determined | | |
| <u>HMIS</u> | Health Hazards 1 | Flammability 0 | Physical Hazards 0 | Personal Protection Not determined | | |
| Issue Date: Revision Date/Notes Reviewed and updated: | 24-Mar-2 | 2015 | | | | |
| | : 11-Nov-2 | 2018 | | | | |

<u>Disclaimer:</u> 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