SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Trade Name : OCA-3
Product Code : 286050
Material Uses : Water Treatment

Supplier/Manufacturer : Dober
11230 Katherine’s Crossing
Woodridge, IL 60517

Emergency Phone : 800-255-3924 (Chem-Tel)
Information Phone : 630-410-7300

SECTION 2: HAZARDS IDENTIFICATION

Physical Appearance : Liquid

Emergency Overview
WARNING! Causes severe eye burns. Causes burns of the mouth and
throat. Causes skin irritation. May be harmful if absorbed through skin.
Aspiration hazard. Can enter lungs and cause damage. Keep upwind of
spill.

Routes of Entry
Skin, eye, ingestion and inhalation contact.

Potential Acute Health Effects
Eyes
May cause severe irritation with corneal injury which may result in
permanent impairment of vision, even blindness. Chemical burns may
occur.

Skin
Brief contact may cause slight skin irritation with local redness.
Prolonged contact may cause severe skin irritation with local redness and
discomfort. May cause drying and flaking of the skin.

Ingestion
Low toxicity if swallowed. Swallowing may result in burns of the mouth
and throat. Aspiration into the lungs may occur during ingestion or
vomiting, causing tissue damage or lung injury.

Inhalation
Low toxicity if swallowed. Swallowing may result in burns of the mouth
and throat. Aspiration into the lungs may occur during ingestion or
vomiting, causing tissue damage or lung injury.

Potential Chronic Health Effects
Carcinogenic effects:
Mutagenic effects:
Teratogenic effects:

Medical Conditions Generally
Aggravated by Exposure

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Ethyl-1-hexanoic acid</td>
<td>149-57-5</td>
<td>55 - 95</td>
</tr>
</tbody>
</table>

See Section 8 for Exposure Limits.
See Section 11 for Toxicological Data.
SECTION 4: FIRST AID MEASURES

Eye Contact: Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.

Skin Contact: Immediate continued and thorough washing in flowing water for at least 30 minutes is imperative while removing contaminated clothing. Prompt medical consultation is essential. Wash clothing before reuse. Properly dispose of leather items such as shoes, belts, and watchbands. First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Ingestion: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

Notes to Physician: Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: FIRE-FIGHTING MEASURES

Flammability of the product: Not flammable
Products of Combustion: Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

Extinguishing Media: Use media suitable for surrounding fire.

Special Firefighting Procedures: Wear SCBA and protective clothing.

Unusual Fire and Explosion Hazards: None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use appropriate personal protective equipment.

Environmental Precautions: Do not flush to sewer or allow to enter waterways.

Methods for Cleaning Up: Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust.

SECTION 7: HANDLING AND STORAGE

Handling and Storage: Keep container closed. Do not contact eyes or skin. Do not take internally.

Other Precautions: FOR INDUSTRIAL USE ONLY.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Ethyl-1-hexanoic acid</td>
<td>ACGIH (TWA) 5mg/m³</td>
</tr>
</tbody>
</table>

Engineering Controls: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.
Personal Protection

Eyes: Safety glasses with side shields or chemical splash goggles.
Skin: Other protective clothing depending on degree of exposure. Lab coat recommended to prevent skin contact.
Respiratory: Wear NIOSH N95 half face piece particulate respirator if process controls are not adequate.
Hands: Chemical resistant, nitrile gloves.

Personal Protection in Case Of a Large Spill: Use appropriate personal protective equipment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Colorless
pH (neat): 2.7
pH (dilute): 3.5 @ 1%
Specific Gravity: 0.926 (H_2O = 1)
Viscosity: Not determined

SECTION 10: STABILITY AND REACTIVITY

Stability and reactivity: Stable.
Conditions of instability: None known.
Incompatibility with various Substances: Strong oxidizers, reducing agents.
Hazardous Decomposition: Oxides of carbon, oxides of nitrogen, oxides of sulfur.
Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity for ingediant:

2-Ethyl-1-hexanoic acid

Ingestion
LD50, Rat, male 3,000 mg/kg
LD50, Rat, female 2,043 mg/kg

Skin Absorption
LD50, Rabbit 1,260 mg/kg
LD50, Guinea pig 5,720 mg/kg

Repeated Dose Toxicity
In animals, effects have been reported on the following organs: Liver.

Developmental Toxicity
Has been toxic to the fetus in lab animals at doses nontoxic to the mother. Did not cause birth defects in laboratory animals.
Reproductive Toxicity
In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Genetic Toxicology
In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

SECTION 12: ECOLOGICAL INFORMATION

Environmental Precautions
: Do not allow entry into sewers or waterways.

Toxicity of the product
: Material is slightly toxic to aquatic organisms on an acute basis (ingredient results: LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method
: Comply with all federal, state, and local regulations. Consult state and local authorities for restrictions on disposal of chemical waste. If approved, may be diluted and drained to a municipal sewer or waste treatment plant. Rinse empty container thoroughly with water before discarding.

SECTION 14: TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN Number</th>
<th>Proper Shipping Name</th>
<th>Class</th>
<th>Packing Group</th>
<th>Additional Information</th>
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<tbody>
<tr>
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<tr>
<td>IATA</td>
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<td>Non Regulated</td>
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<tr>
<td>IMDG</td>
<td>--</td>
<td>Non Regulated</td>
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SECTION 15: REGULATORY INFORMATION

U.S. Federal Regulations

OSHA
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
Immediate (Acute) Health Hazard Yes
Delayed (Chronic) Health Hazard No
Fire Hazard No
Reactive Hazard No
Sudden Release of Pressure Hazard No
Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.
State Regulations
Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)
WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Component CAS # Amount
Benzene 71-43-2 <= 0.05 PPM

International Regulations
US. Toxic Substances Control Act
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

CEPA - Domestic Substances List (DSL)
All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

SECTION 16: OTHER INFORMATION

Label Requirements
WARNING! Causes severe eye burns. Causes burns of the mouth and throat. Causes skin irritation. May be harmful if absorbed through skin. Do not inhale vapors or mist.

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire Hazard</th>
<th>Reactivity</th>
<th>Personal Protection</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>F</td>
</tr>
</tbody>
</table>

Hazard Ratings
4 = Extreme
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal

* See section 8 for more detailed information on personal protection

National Fire Protection Association (U.S.A.)

References
Available on request.

Disclaimer
All information, recommendations, and suggestions appearing herein concerning this compound are based upon data obtained from the raw material manufacturers and/or recognized technical sources;
however, Dober Chemical Corp. makes no warranty, representation, or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user’s responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of the product. Since actual use by others is beyond our control, Dober Chemical makes no warranty, express or implied, as to the effects of such use, the results to be obtained or the safety and toxicity of the product. The data in this MSDS relate only to the specific product designated herein and do not relate to use in combination with any other material or in any process.