1. Product and company identification

Product name: PX 3843
Material uses: Demulsifier
Supplier/Manufacturer: Dorf Ketal Chemicals LLC
3727 Greenbriar, Suite 114
Stafford, TX 77477
U.S.A.
Phone 281-491-3700
Fax: 281-491-3733

Code: 6036288-00
Validation date: 03/30/2008
Responsible name: Atrion Regulatory Services, Inc.
In case of emergency: CHEMTREC, U.S.: (800) 424-9300 International: (703) 527-3887

2. Hazards identification

Physical state: Liquid.
Odor: Mild.
OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview: WARNING!
MAY CAUSE ALLERGIC SKIN REACTION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.
May cause sensitization by skin contact. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not get on skin or clothing. Contains material that can cause target organ damage. Wash thoroughly after handling.

Potential acute health effects
Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion: No known significant effects or critical hazards.
Skin: May cause sensitization by skin contact.
Eyes: No known significant effects or critical hazards.

Potential chronic health effects
Target organs: Contains material which causes damage to the following organs: digestive system, central nervous system (CNS), eye, lens or cornea.

Medical conditions aggravated by over-exposure: Pre-existing skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Tricresylphosphate</td>
</tr>
</tbody>
</table>

Date of issue: 03/30/2008
3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Eye contact: Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.

Skin contact: Wash with soap and water. Get medical attention if symptoms occur.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

5. Fire-fighting measures

Flammability of the product: May be combustible at high temperature.

Extinguishing media

Suitable: Use an extinguishing agent suitable for the surrounding fire.

Not suitable: None known.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods for cleaning up

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
7. Handling and storage

Handling: Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Engineering measures: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Eyes: Safety glasses.
Skin: Lab coat.
Respiratory: A respirator is not needed under normal and intended conditions of use.
Hands: Natural rubber (latex).

Personal protective equipment (Pictograms):

HMIS Code/Personal protective equipment: B

9. Physical and chemical properties

Physical state: Liquid.
Flash point: Closed cup: 249°C (480.2°F) [Pensky-Martens.]
Color: Colorless.
Odor: Mild.
Relative density: 1.15
Vapor pressure: 0.13 kPa (1 mm Hg)
Vapor density: >2 [Air = 1]
Viscosity: Kinematic: 0.062 cm²/s (6.2 cSt)
          Kinematic (40°C): 0.34 cm²/s (34 cSt)
Solubility: Partially soluble in the following materials: cold water and hot water.
10. Stability and reactivity

Hazardous polymerization: Will not occur.
Materials to avoid: Reactive or incompatible with the following materials: oxidizing materials.

11. Toxicological information

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Species</th>
<th>Dose</th>
<th>Result</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tricresylphosphate</td>
<td>Rat</td>
<td>3 g/kg</td>
<td>LD50 Oral</td>
<td>-</td>
</tr>
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</table>

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion: No known significant effects or critical hazards.

Skin: May cause sensitization by skin contact.

Eyes: No known significant effects or critical hazards.

12. Ecological information

Environmental effects: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aquatic ecotoxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Species</th>
<th>Exposure</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tricresylphosphate</td>
<td>Intoxication</td>
<td>Daphnia</td>
<td>48 hours</td>
<td>Acute EC50 3.6 mg/L</td>
</tr>
<tr>
<td></td>
<td>Intoxication</td>
<td>Daphnia</td>
<td>48 hours</td>
<td>Acute EC50 3.2 mg/L</td>
</tr>
<tr>
<td></td>
<td>Mortality</td>
<td>Fish</td>
<td>96 hours</td>
<td>Acute LC50 0.4 mg/L</td>
</tr>
<tr>
<td></td>
<td>Mortality</td>
<td>Fish</td>
<td>96 hours</td>
<td>Acute LC50 0.26 mg/L</td>
</tr>
<tr>
<td></td>
<td>Mortality</td>
<td>Fish</td>
<td>96 hours</td>
<td>Acute LC50 0.15 mg/L</td>
</tr>
<tr>
<td></td>
<td>Mortality</td>
<td>Fish</td>
<td>96 hours</td>
<td>Acute LC50 0.082 mg/L</td>
</tr>
</tbody>
</table>

Other adverse effects: No known significant effects or critical hazards.

13. Disposal considerations

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

AERG: 171

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
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</thead>
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<tr>
<td>DOT Classification</td>
<td>UN3082</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tricresylphosphate). Marine pollutant (Tricresylphosphate)</td>
</tr>
</tbody>
</table>

PG*: III

Label: Marine pollutant

Additional information: Severe marine pollutant (PP)
14. Transport information

<table>
<thead>
<tr>
<th>IMDG Class</th>
<th>UN382</th>
<th>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tricresylphosphate). Marine pollutant (Tricresylphosphate)</th>
<th>9</th>
<th>III</th>
<th>Marine pollutant</th>
<th>Severe marine pollutant (PP)</th>
</tr>
</thead>
</table>

| IATA-DGR Class | UN382 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tricresylphosphate) | 9 | III | - |

PG*: Packing group

15. Regulatory information

United States

HCS Classification: Sensitizing material

Target organ effects

U.S. Federal regulations: United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Tricresylphosphate

SARA 311/312 MSDS distribution - chemical inventory - hazard identification

Tricresylphosphate: Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations: Connecticut Carcinogen Reporting: None of the components are listed.

Connecticut Hazardous Material Survey: None of the components are listed.

Florida substances: None of the components are listed.

Illinois Chemical Safety Act: None of the components are listed.

Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.

Louisiana Reporting: None of the components are listed.

Louisiana Spill: None of the components are listed.

Massachusetts Spill: None of the components are listed.

Massachusetts Substances: None of the components are listed.

Michigan Critical Material: None of the components are listed.

Minnesota Hazardous Substances: None of the components are listed.

New Jersey Hazardous Substances: The following components are listed:

- Tricresylphosphate

New Jersey Spill: None of the components are listed.

New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.

New York Acutely Hazardous Substances: None of the components are listed.

New York Toxic Chemical Release Reporting: None of the components are listed.

Pennsylvania RTK Hazardous Substances: None of the components are listed.

Rhode Island Hazardous Substances: None of the components are listed.

California Prop. 65

No products were found.

Date of issue: 03/30/2008
15. Regulatory information

International regulations

International lists: This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16. Other information

Label requirements: MAY CAUSE ALLERGIC SKIN REACTION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

HAZARD RATINGS

Health: 1
Fire hazard: 1
Physical Hazard: 0
Personal protection: B

HAZARD RATINGS

4- Extreme
3- Serious
2- Moderate
1- Slight
0- Minimal

See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.

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


Date of issue: 03/30/2008
Date of previous issue: 09/15/2007
Version: 2

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.