SAFETY DATA SHEET

EQUIVIS XLT 15

SDS # : 083887

Date of the previous version: 2016-02-22
Revision Date: 2016-02-22
Version 4

1. IDENTIFICATION

Product identifier
Product name
EQUIVIS XLT 15

Other means of identification
Product Code(s)
083887
Number
PEN
Substance/mixture
Mixture

Recommended use of the chemical and restrictions on use
Identified uses
Hydraulic Fluid.
Uses advised against
Do not use for any purpose other than the one for which it is intended

Details of the supplier of the safety data sheet
Supplier Address
TOTAL Specialties USA Inc
1201 Louisiana Street, Suite 1800
Houston, TX 77002
Phone: +1 800 323 3198

Contact Point
Technical/ HSEQ

E-mail Address
USRMLIN-info@total.com

Emergency telephone number
Company Phone Number
+1 (908) 862-9300
Emergency telephone
+1 866 928 0789 (24h/24, 7d/7)
+1 215 207 0061 (24h/24, 7d/7)

2. HAZARDS IDENTIFICATION

Classification
Skin sensitization - Category 1
Aspiration toxicity - Category 1

Label elements
DANGER

May cause an allergic skin reaction
May be fatal if swallowed and enters airways

Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapours/ spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response
Specific treatment (see Section 4 on this label)
Skin
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Ingestion
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up

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

Unknown Acute Toxicity
No information available

Hazards not otherwise classified (HNOC)
None known

Other information
Physical-Chemical Properties
Contaminated surfaces will be extremely slippery.

Properties Affecting Health
No information available.

Environmental properties
Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS
**EQUIVIS XLT 15**

**Mixture**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydro treated light naphthenic</td>
<td>64742-53-6</td>
<td>75-100</td>
</tr>
<tr>
<td>Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts</td>
<td>84605-29-8</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Triphenyl phosphite</td>
<td>101-02-0</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Calcium sulfonate</td>
<td>61789-86-4</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Butylated phenol</td>
<td>128-39-2</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>O,O,O-triphenyl phosphorothioate</td>
<td>597-82-0</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Alkylphenol</td>
<td>121158-58-5</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>2-ethylhexanol</td>
<td>104-76-7</td>
<td>&lt; 0.1</td>
</tr>
</tbody>
</table>

* The exact percentage (concentration) of composition has been withheld as a trade secret

**4. FIRST AID MEASURES**

**First aid measures for different exposure routes**

**General advice**
If symptoms persist, call a physician. Show this material safety data sheet to the doctor in attendance. Do not breathe dust/fume/gas/mist/vapors/spray. IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

**Eye contact**
Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.

**Skin contact**
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary. Remove contaminated clothing and shoes. Wash off with soap and water. Wash contaminated clothing before reuse.

**Inhalation**
Move to fresh air. Consult a physician. If not breathing, give artificial respiration. Move to fresh air in case of accidental inhalation of vapors. Inhalation of high concentrations of vapor or aerosols may cause irritation of the upper respiratory tract.

**Ingestion**
Do NOT induce vomiting. Rinse mouth. If symptoms persist, call a physician. If swallowed, call a poison control center or doctor immediately. Risk of product entering the lungs on vomiting after ingestion. Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung edema or pneumonia. Never give anything by mouth to an unconscious person.

**Protection of First-aiders**
Use personal protective equipment.

**Most important symptoms/effects, acute and delayed**

**Skin contact**
May cause an allergic skin reaction. Causes mild skin irritation.

**Eye contact**
Avoid contact with eyes.
Inhalation
Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be fatal if swallowed and enters airways.

Symptoms
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Redness. Coughing and/or wheezing. Difficulty breathing. Itching. Rashes.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Unsuitable Extinguishing Media
Do not use a solid water stream as it may scatter and spread fire.

Special Hazard
Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Flash back possible over considerable distance. Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

Explosion Data

Sensitivity to Mechanical Impact
None.

Sensitivity to Static Discharge
None.

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. Evacuate non-essential personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information
Vapor protective clothing with SCBA should be worn for large spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material. Ensure adequate ventilation. Remove all sources of ignition. Heat, flames and sparks. Contaminated surfaces will be extremely slippery.

Other information
See Section 12 for additional information.

Environmental precautions
General Information

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevention of fire and explosion. A vapor suppressing foam may be used to reduce vapors. Try to prevent the material from entering drains or water courses. Do not allow material to contaminate ground water system. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for cleaning up

Dam up. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use mechanical means such as pumps, skimmers and absorbent materials. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Prevent the formation of vapors, mists and aerosols. Do not eat, drink or smoke when using this product. There is a hazard associated with rags, paper or any other material used to remove spills which become soaked with product. Avoid accumulation of these: they are to be disposed of safely after use. Avoid static electricity build up with connection to earth. When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist.

Prevention of fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Design installations (machinery and equipment) to prevent burning product from spreading (tanks, retention systems, interceptors (traps) in drainage systems). OPERATE ONLY ON COLD AND DEGASSED TANKS IN VENTILATED PREMISES (TO AVOID RISK OF EXPLOSION). Do not use compressed air for filling, discharging or handling. Empty containers may contain flammable or explosive vapors.

Hygiene measures

Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Avoid breathing vapors, mist or gas. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.
Technical measures/Storage conditions

Materials to Avoid
Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits
Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined).

Exposure controls

Engineering Measures
Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

General Information
Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

Eye/Face Protection
If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and body protection
Wear suitable protective clothing. Protective shoes or boots.

Hand Protection
Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene measures

Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Avoid breathing vapors, mist or gas. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>red</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical State @20°C</td>
<td>liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Petroleum distillates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td></td>
<td>Not applicable</td>
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</tr>
<tr>
<td>Melting point/range</td>
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</tr>
<tr>
<td>Boiling point/boiling range</td>
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<tr>
<td>Flash point</td>
<td>96 °C</td>
<td></td>
<td>ASTM D 92</td>
</tr>
<tr>
<td></td>
<td>205 °F</td>
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<td>ASTM D 92.</td>
</tr>
<tr>
<td>Evaporation rate</td>
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<tr>
<td>Flammability Limits in Air</td>
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<td></td>
</tr>
<tr>
<td>upper</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>lower</td>
<td></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>0.860</td>
<td>@ 15 °C</td>
<td>ASTM D 1298</td>
</tr>
<tr>
<td>Density</td>
<td>860 kg/m³</td>
<td>@ 15 °C</td>
<td>ASTM D 1298</td>
</tr>
<tr>
<td>Water solubility</td>
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<td>Not applicable</td>
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</tr>
<tr>
<td>Solubility in other solvents</td>
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<tr>
<td>logPow</td>
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<td>No information available</td>
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</tr>
<tr>
<td>Autoignition temperature</td>
<td></td>
<td>No information available</td>
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<tr>
<td>Decomposition temperature</td>
<td></td>
<td>No information available</td>
<td></td>
</tr>
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<td>Viscosity, kinematic</td>
<td>~15 mm2/s</td>
<td>@ 40 °C</td>
<td>ASTM D 445</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive</td>
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<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.860</td>
<td>@ 15 °C</td>
<td>ASTM D 1298</td>
</tr>
<tr>
<td>Freezing Point</td>
<td></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Pour point</td>
<td>&lt; -50 °C</td>
<td></td>
<td>ASTM D 97</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity
No information available.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Heat, flames and sparks. Take precautionary measures against static discharges. Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Strong oxidizing agents.

Incompatible Materials
Strong oxidizing agents.

Hazardous Decomposition Products
Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principle Routes of Exposure
Inhalation, Ingestion, Eye contact, Skin contact.

Symptoms
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Redness. Coughing and/or wheezing. Difficulty breathing. Itching. Rashes.

Skin contact
May cause an allergic skin reaction. Causes mild skin irritation.

Eye contact
Avoid contact with eyes.

Inhalation
Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be fatal if swallowed and enters airways.

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

Acute toxicity - Product Information

Product Information
Product does not present an acute toxicity hazard based on known or supplied information.

Oral
Not classified.

Dermal
No information available

Inhalation
Not classified

Acute toxicity - Component Information
SDS # : 083887

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<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light naphthenic 64742-53-6</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Phosphorodithioic acid, mixed O.O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8</td>
<td>LD50 3200 mg/kg (Rat - OECD 401)</td>
<td>LD50 &gt; 2002 mg/kg (Rat - OECD 402)</td>
<td></td>
</tr>
<tr>
<td>Triphenyl phosphate 101-02-0</td>
<td>LD50 1590 mg/kg (Rat - OECD 401)</td>
<td>&gt; 2000 mg/kg (Rabbit) = 1180 mg/kg (Rat)</td>
<td>LC50 (1h) &gt; 6.7 mg/l (Rat - aerosol - OECD 403)</td>
</tr>
<tr>
<td>Calcium sulfonate 61789-88-4</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 4000 mg/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Butylated phenol 128-39-2</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>= 10000 mg/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>O.O.O-triphenyl phosphorothioate 597-82-0</td>
<td>LD50 &gt; 2000 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkylphenol 121158-58-5</td>
<td>LD50 2100 mg/kg (Rat)</td>
<td>LD50 15000 mg/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>2-ethylhexanol 104-76-7</td>
<td>LD50 &gt; 2000 mg/kg (Rat)</td>
<td>LD50 &gt; 3000 mg/kg (Rat - OECD 402)</td>
<td>LC50 (4h) &gt; 20 mg/l (Rat)</td>
</tr>
</tbody>
</table>

Sensitization
May cause an allergic skin reaction. Contains sensitizer(s). May cause sensitization by inhalation and skin contact.

Carcinogenicity
This product is not classified carcinogenic.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light naphthenic 64742-53-6</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

Mutagenicity
This product is not classified as mutagenic.

Reproductive toxicity
This product does not present any known or suspected reproductive hazards.

Aspiration Hazard
May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Harmful to aquatic life with long lasting effects

Acute aquatic toxicity - Product Information
No experimental data available

Acute aquatic toxicity - Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>Toxicity to microorganisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light naphthenic 64742-53-6</td>
<td>LC50 (96h) &gt; 5000 mg/L</td>
<td>Oncorhynchus mykiss ()</td>
<td>EC50 (48h) &gt; 1000 mg/L Daphnia magna</td>
<td></td>
</tr>
</tbody>
</table>
Chronic aquatic toxicity - Product Information

No experimental data available.

Chronic aquatic toxicity - Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>Toxicity to fish</th>
<th>Toxicity to microorganisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkylphenol 121158-58-5</td>
<td></td>
<td>NOEC(21d) 0.0037 mg/l (Daphnia magna - semi static - OECD211)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Effects on terrestrial organisms

No experimental data available.

Persistence and degradability

General Information

No information available.

Bioaccumulative potential

Product Information

No information available.

logPow

No information available

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8 0.56
Triphenyl phosphite 101-02-0 6.62
O,O,O-triphenyl phosphorothioate 597-82-0 5.1
2-ethylhexanol 104-76-7 2.9

Mobility
Soil No information available
Other adverse effects
General Information No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment
Waste Disposal Methods Dispose of in accordance with local regulations.
Contaminated packaging Empty containers may contain flammable or explosive vapors. Do not burn, or use a cutting torch on, the empty drum. Empty containers should be taken to an approved waste handling site for recycling or disposal.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

DOT Not regulated
TDG Not regulated
MEX Not regulated
ICAO/IATA Not regulated
IMDG/IMO Not regulated
ADR/RID Not regulated
ADN Not regulated

Version GNAM
15. REGULATORY INFORMATION

International Inventories
All the substances contained in this product are listed or exempted from listing in the following inventories:
U.S.A. (TSCA)

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
<table>
<thead>
<tr>
<th>Acute Health Hazard</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic Health Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>no</td>
</tr>
</tbody>
</table>

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product contains the following HAPs:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>HAPS data</th>
<th>VOC Chemicals</th>
<th>Class 1 Ozone Depletors</th>
<th>Class 2 Ozone Depletors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkylphenol</td>
<td>121158-58-5</td>
<td>&lt;0.1</td>
<td></td>
<td>Group V</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65
Unknown

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
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</thead>
</table>
16. OTHER INFORMATION

NFPA

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical hazards</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
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<td>x</td>
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</tbody>
</table>

HMIS

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>x</td>
</tr>
</tbody>
</table>

NFPA (National Fire Protection Association)
HMIS (Hazardous Material Information System)
Hazard ratings are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard.

Revision Date: 2016-02-22
Revision Note
*** Indicates updated section

Abbreviations, acronyms
ACGIH = American Conference of Governmental Industrial Hygienists
bw = body weight
bw/day = body weight/day
EC x = Effect Concentration associated with x% response
GLP = Good Laboratory Practice
IARC = International Agency for Research of Cancer
LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals
LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals
LL = Lethal Loading
NIOSH = National Institute of Occupational Safety and Health
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOEL = No Observed Effect Level
OECD = Organization for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
UVCB = Substance of unknown or variable composition, complex reaction products or biological material

Legend
Section 8
ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
NIOSH - National Institute for Occupational Safety and Health
TLV - Threshold Limit Values
PEL - Permissible Exposure Limits
IDHL - Immediately Dangerous to Life or Health concentrations
TWA - Time Weight Average
STEL - Short Term Exposure Limits
S* - Skin notation
TSCA - Toxic Substance Control Act
This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfill his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the Safety Data Sheet