1. Identification of the preparation and company

1.1. Product identifier
Product Identity: ACT BLACK
Bulk Sales Reference No.: Y7790U

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended Use: See Technical Data Sheet.
Application Method: See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet
Company Name: Akzo Nobel Coatings
International Paint LLC
6001 Antoine Drive
Houston, TX 77095

Emergency
CHEMTREC (USA) (800) 424-9300
International Paint (713) 527-3887
Poison Control Center (800) 854-681
Customer Service (800) 589-1267
Fax No. (800) 631-7481

2. Hazard identification of the product

2.1. Classification of the substance or mixture
Flam. Liq. 3;H226 Flammable liquid and vapor.
Acute Tox. 4;H302 Harmful if swallowed.
Acute Tox. 5;H313 May be harmful in contact with skin.
Skin Irrit. 2;H315 Causes skin irritation.
Eye Irrit. 2;H319 Causes serious eye irritation.
Skin Sens. 1;H317 May cause an allergic skin reaction.
Aquatic Chronic 1;H410 Very toxic to aquatic life with long lasting effects.

2.2. Label elements
Using the Toxicity Data listed in section 11 & 12 the product is labelled as follows.

H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H313 May be harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H410 Very toxic to aquatic life with long lasting effects.

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.
P235 Keep cool.
P240 Ground / bond container and receiving equipment.
P241 Use explosion-proof electrical / ventilating / light / equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe mist / vapors / spray.
P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P262 Do not get in eyes, on skin, or on clothing.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352 IF ON SKIN: Wash with soap and water.
P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P312 Call a POISON CENTER or doctor / physician if you feel unwell.
P330 Rinse mouth.
P331 Do NOT induce vomiting.
P333+313 If skin irritation or a rash occurs: Get medical advice/attention.
P337 If eye irritation persists:
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P370 In case of fire: Use water spray, fog, or regular foam.
P391 Collect spillage.
P403+233 Store in a well ventilated place. Keep container tightly closed.
P501 Dispose of contents / container in accordance with local / national regulations.

HMIS Rating Health: 2* Flammability: 3 Reactivity: 0

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper oxide (Cu2O)</td>
<td>25 - 50</td>
<td>Acute Tox. 4; H302, Aquatic Acute 1;H400, Aquatic Chronic 1;H410</td>
<td>[1]</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>10 - 25</td>
<td>Aquatic Acute 1;H400, Aquatic Chronic 1;H410</td>
<td>[1][2]</td>
</tr>
<tr>
<td>Rosin</td>
<td>10 - 25</td>
<td>Skin Sens. 1;H317</td>
<td>[1]</td>
</tr>
<tr>
<td>Xylenes (o-, m-, p- isomers)</td>
<td>1.0 - 10</td>
<td>Flam. Liq. 3;H226, Acute Tox. 4;H332, Acute Tox. 4;H312, Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335</td>
<td>[1][2]</td>
</tr>
</tbody>
</table>
4. First aid measures

4.1. Description of first aid measures

General  Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean or destroy contaminated shoes.

Inhalation  If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Eyes  In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin  In case of contact, immediately flush skin with soap and plenty of water. Get medical attention immediately.

Ingestion  If swallowed, immediately contact Poison Control Center at 1-800-854-6813. DO NOT induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Overview  NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Avoid contact with eyes, skin and clothing.

Inhalation  Harmful if inhaled. Causes nose and throat irritation. Vapors may affect the brain or nervous system causing dizziness, headache or nausea.

Eyes  Causes severe eye irritation. Avoid contact with eyes.

Skin  Causes skin irritation. May cause allergic skin reaction. May be harmful if absorbed through the skin.

Ingestion  Harmful if swallowed. May cause abdominal pain, nausea, vomiting, diarrhea, or drowsiness.

Chronic effects  Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 2 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.
5. Fire-fighting measures

5.1. Extinguishing media
CAUTION: This product has a very low flashpoint. Use of water spray when fighting fire may be inefficient.
SMALL FIRES: Use dry chemical, CO2, water spray or alcohol-resistant foam. LARGE FIRES: Use water
spray, fog, or alcohol-resistant foam. Do not use straight streams. Move containers from fire area if you can
do so without risk. Runoff from fire control may cause pollution. Dike fire control water for later disposal. Do
not scatter the material.

5.2. Special hazards arising from the substance or mixture
May produce hazardous fumes when heated to decomposition as in welding. Fumes may produce Carbon
Dioxide and Carbon Monoxide.

5.3. Advice for fire-fighters
Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and
contaminants from fire fighting to enter drains or water courses.

ERG Guide No.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
ELIMINATE ALL IGNITION SOURCES (no smoking, flares, sparks or flames in immediate area). Use only
non-sparking equipment to handle spilled material and absorbent. Do not touch or walk through spilled
material. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined
areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand, or
other non-combustible material and transfer to containers. Use non-sparking tools to collect absorbed
material.

6.2. Environmental precautions
Do not allow spills to enter drains or watercourses.

6.3. Methods and material for containment and cleaning up
CALL CHEMTREC at (800)-424-9300 for emergency response. Isolate spill or leak area immediately for at
least 25 to 50 meters (80 to 160 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep
out of low areas. Ventilate closed spaces before entering. LARGE SPILLS: Consider initial downwind
evacuation for at least 300 meters (1000 feet).

7. Handling and storage

7.1. Precautions for safe handling
Handling
Vapors may cause flash fire or ignite explosively.

In Storage
Keep away from heat, sparks and flame.

7.2. Conditions for safe storage, including any incompatibilities
Store between 40-100F (4-38C).
Do not get in eyes, on skin or clothing.
Strong oxidizing agents.
Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other
sources of ignition during use and until all vapors are gone.

7.3. Specific end use(s)
Close container after each use.
Wash thoroughly after handling.
Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation.

8. Exposure controls and personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>00000091-20-3</td>
<td>Naphthalene</td>
<td>OSHA</td>
<td></td>
</tr>
<tr>
<td>CAS Registry Number</td>
<td>Chemical Name</td>
<td>OSHA</td>
<td>ACGIH</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>0000095-63-6</td>
<td>1,2,4-Trimethyl benzene</td>
<td>OSHA</td>
<td>ACGIH</td>
</tr>
<tr>
<td>100 ppm TWA; 435 mg/m³ TWA</td>
<td>10 ppm TWA; 50 mg/m³ TWA</td>
<td>15 ppm STEL</td>
<td>75 mg/m³ STEL</td>
</tr>
<tr>
<td>0000095-63-6</td>
<td>1,2,4-Trimethyl benzene</td>
<td>OSHA</td>
<td>ACGIH</td>
</tr>
<tr>
<td>0000100-41-4</td>
<td>Benzene, ethyl-</td>
<td>OSHA</td>
<td>ACGIH</td>
</tr>
<tr>
<td>100 ppm TWA; 435 mg/m³ TWA</td>
<td>10 ppm TWA; 50 mg/m³ TWA</td>
<td>15 ppm STEL</td>
<td>75 mg/m³ STEL</td>
</tr>
<tr>
<td>0001314-13-2</td>
<td>Zinc oxide</td>
<td>OSHA</td>
<td>ACGIH</td>
</tr>
<tr>
<td>5 mg/m³ TWA (fume); 15 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)10 mg/m³ TWA (fume)</td>
<td>2 mg/m³ TWA (respirable fraction)10 mg/m³ STEL (respirable fraction)</td>
<td>5 mg/m³ TWA (dust and fume)10 mg/m³ STEL (fume)15 mg/m³ Ceiling (dust)500 mg/m³ IDLH (fume)</td>
<td>5 mg/m³ TWA (respirable fraction)10 mg/m³ STEL (respirable)</td>
</tr>
<tr>
<td>0001317-38-0</td>
<td>Copper oxide</td>
<td>OSHA</td>
<td>ACGIH</td>
</tr>
<tr>
<td>0.1 mg/m³ TWA (fume, as Cu)</td>
<td>0.1 mg/m³ TWA (fume, as Cu)</td>
<td>0.1 mg/m³ TWA (fume, as Cu)</td>
<td>0.1 mg/m³ TWA (fume, as Cu)</td>
</tr>
<tr>
<td>0001317-39-1</td>
<td>Copper oxide (Cu2O)</td>
<td>OSHA</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>

**OSHA, CAN**

**Mexico**

**Brazil**
Mexico
Brazil

0001330-20-7 Xylenes (o-, m-, p- isomers) OSHA 100 ppm TWA; 435 mg/m3 TWA 150 ppm STEL
OSHA 100 ppm TWA 150 ppm STEL
ACGIH 100 ppm TWA 150 ppm STEL
NIOSH Supplier
OHSA, CAN 100 ppm TWA 150 ppm STEL
Mexico 100 ppm TWA LMPE-PPT; 435 mg/m3 TWA LMPE-PPT 150 ppm STEL [LMPE-CT]; 655 mg/m3 STEL [LMPE-CT]
Brazil 78 ppm TWA LT; 340 mg/m3 TWA LT

0008050-09-7 Rosin OSHA
OSHA
ACGIH
NIOSH Supplier
OHSA, CAN exposure by all routes should be carefully controlled to levels as low as possible
Mexico 0.1 mg/m3 TWA LMPE-PPT (as Formaldehyde)
Brazil

0064742-94-5 Naphtha (petroleum), heavy aromatic OSHA
OSHA
ACGIH
NIOSH Supplier
OHSA, CAN
Mexico
Brazil

0064742-95-6 Petroleum naphtha OSHA
OSHA
ACGIH
NIOSH Supplier
OHSA, CAN
Mexico
Brazil

### Health Data

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000091-20-3</td>
<td>Naphthalene</td>
<td>NIOSH</td>
<td>Hemolysis and eye irritation that causes cataracts</td>
</tr>
<tr>
<td>0000095-63-6</td>
<td>1,2,4-Trimethyl benzene</td>
<td>NIOSH</td>
<td></td>
</tr>
<tr>
<td>0000100-41-4</td>
<td>Benzene, ethyl-</td>
<td>NIOSH</td>
<td>Eye skin</td>
</tr>
<tr>
<td>0001314-13-2</td>
<td>Zinc oxide</td>
<td>NIOSH</td>
<td>Metal fume fever</td>
</tr>
<tr>
<td>0001317-38-0</td>
<td>Copper oxide</td>
<td>NIOSH</td>
<td></td>
</tr>
<tr>
<td>0001317-39-1</td>
<td>Copper oxide (Cu2O)</td>
<td>NIOSH</td>
<td></td>
</tr>
<tr>
<td>0001330-20-7</td>
<td>Xylenes (o-, m-, p- isomers)</td>
<td>NIOSH</td>
<td>Central nervous system depressant; respiratory and eye irritation</td>
</tr>
<tr>
<td>0008050-09-7</td>
<td>Rosin</td>
<td>NIOSH</td>
<td></td>
</tr>
<tr>
<td>0064742-94-5</td>
<td>Naphtha (petroleum), heavy aromatic</td>
<td>NIOSH</td>
<td></td>
</tr>
<tr>
<td>0064742-95-6</td>
<td>Petroleum naphtha</td>
<td>NIOSH</td>
<td></td>
</tr>
</tbody>
</table>

### Carcinogen Data

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000091-20-3</td>
<td>Naphthalene</td>
<td>OSHA Select Carcinogen: Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP Known: No; Suspected: Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;</td>
<td></td>
</tr>
<tr>
<td>CAS Number</td>
<td>Chemical Name</td>
<td>OSHA Select Carcinogen</td>
<td>NTP Known</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------</td>
<td>------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>0000095-63-6</td>
<td>1,2,4-Trimethyl benzene</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>000100-41-4</td>
<td>Benzene, ethyl-</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>0001321-15-2</td>
<td>Zinc oxide</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>0001317-38-0</td>
<td>Copper oxide</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>0001317-39-1</td>
<td>Copper oxide (Cu2O)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>0001330-20-7</td>
<td>Xylenes (o-, m-, p-isomers)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>0008050-09-7</td>
<td>Rosin</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>0064742-94-5</td>
<td>Naphtha (petroleum), heavy aromatic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>0064742-95-6</td>
<td>Petroleum naphtha</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### 8.2. Exposure controls

**Respiratory**
Select equipment to provide protection from the ingredients listed in Section 3 of this document. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates dust, vapor, or mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer’s directions for respirator use. FOR USERS OF 3M RESPIRATORY PROTECTION ONLY: For information and assistance on 3M occupational health and safety products, call OH&ESD Technical Service toll free in U.S.A. 1-800-243-4630, in Canada call 1-800-267-4414. Please do not contact these numbers regarding other manufacturers’ respiratory protection products. 3M does not endorse the accuracy of the information contained in this Material Safety Data Sheet.

**Eyes**
Avoid contact with eyes. Protective equipment should be selected to provide protection from exposure to the chemicals listed in Section 3 of this document. Depending on the site-specific conditions of use, safety glasses, chemical goggles, and/or head and face protection may be required to prevent contact. The equipment must be thoroughly cleaned, or discarded after each use.

**Skin**
Protective equipment should be selected to provide protection from exposure to the chemicals listed in Section 3 of this document. Depending on the site-specific conditions of use, protective gloves, apron, boots, head and face protection may be required to prevent contact. The equipment must be thoroughly cleaned, or discarded after each use.

**Engineering Controls**
Depending on the site-specific conditions of use, provide adequate ventilation.

**Other Work Practices**
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices.
Wash hands before eating, drinking, using toilet facilities, etc. Promptly remove soiled clothing and wash clothing thoroughly before reuse. Shower after work using plenty of soap and water.

## 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Coloured Liquid</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not Measured</td>
</tr>
<tr>
<td>pH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>137 °C to 279 °F</td>
</tr>
<tr>
<td>Flash Point</td>
<td>27 °C to 80 °F</td>
</tr>
<tr>
<td>Evaporation rate (Ether = 1)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Lower Explosive Limit: .5</td>
</tr>
<tr>
<td>Vapour pressure (Pa)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.19</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (Log Kow)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Viscosity (cSt)</td>
<td>No Established Limit/Not Measured</td>
</tr>
<tr>
<td>VOC %</td>
<td>Refer to the Technical Data Sheet or label where information is available.</td>
</tr>
<tr>
<td>VOHAP content (gm/litre of paint)</td>
<td>332.83 (as supplied)</td>
</tr>
<tr>
<td>VOHAP content (gm/litre of Solid Coating)</td>
<td>212.38 (as supplied)</td>
</tr>
</tbody>
</table>

## 10. Stability and reactivity

### 10.1. Reactivity
No data available

### 10.2. Chemical stability
This product is stable and hazardous polymerization will not occur. Not sensitive to mechanical impact. Excessive heat and fumes generation can occur if improperly handled.

### 10.3. Possibility of hazardous reactions
No data available

### 10.4. Conditions to avoid
No data available

### 10.5. Incompatible materials
Strong oxidizing agents.

### 10.6. Hazardous decomposition products
May produce hazardous fumes when heated to decomposition as in welding. Fumes may produce Carbon Dioxide and Carbon Monoxide.

## 11. Toxicological information

### Acute toxicity

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LD50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LD50, mg/L/4hr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Category</td>
<td>Hazard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Toxicity (mouth)</td>
<td>4</td>
<td>Harmful if swallowed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Toxicity (skin)</td>
<td>5</td>
<td>May be harmful in contact with skin.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Toxicity (inhalation)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>2</td>
<td>Causes skin irritation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye damage/irritation</td>
<td>2</td>
<td>Causes serious eye irritation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitization (respiratory)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitization (skin)</td>
<td>1</td>
<td>May cause an allergic skin reaction.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germ toxicity</td>
<td>Not Classified</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not Classified</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>Not Classified</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific target organ systemic toxicity (single exposure)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific target organ systemic Toxicity (repeated exposure)</td>
<td>Not Classified</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not Classified</td>
<td>Not Applicable</td>
<td></td>
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</tr>
</tbody>
</table>

12. Ecological information

12.1. Toxicity
No additional information provided for this product. See Section 3 for chemical specific data.

**Aquatic Ecotoxicity**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper oxide (Cu2O) - (1317-39-1)</td>
<td>0.075, Danio rerio</td>
<td>0.042, Daphnia similis</td>
<td>0.03 (96 hr), Pseudokirchneriella subcapitata</td>
</tr>
<tr>
<td>Zinc oxide - (1314-13-2)</td>
<td>1.10, Oncorhynchus mykiss</td>
<td>0.098, Daphnia magna</td>
<td>0.042 (72 hr), Pseudokirchneriella subcapitata</td>
</tr>
</tbody>
</table>
12.2. Persistence and degradability
No data available

12.3. Bioaccumulative potential
Not Measured

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects
No data available

### 13. Disposal considerations

13.1. Waste treatment methods
Do not allow spills to enter drains or watercourses.
Dispose of in accordance with local, state and federal regulations. (Also reference RCRA information in Section 15 if listed.)

### 14. Transport information

14.1. UN number
Not Regulated

14.2. UN proper shipping name
CONSUMER COMMODITY, ORM-D

14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>DOT (Domestic Surface Transportation)</th>
<th>IMO / IMDG (Ocean Transportation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Proper Shipping Name</td>
<td>IMDG Proper Shipping Name</td>
</tr>
<tr>
<td>CONSUMER COMMODITY, ORM-D</td>
<td>CONSUMER COMMODITY, ORM-D</td>
</tr>
<tr>
<td>DOT Hazard Class</td>
<td>IMDG Hazard Class Sub Class</td>
</tr>
<tr>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>UN / NA Number</td>
<td>IMDG Packing Group System Reference Code</td>
</tr>
<tr>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>DOT Packing Group</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Not Regulated</td>
<td>5</td>
</tr>
<tr>
<td>CERCLA/DOT RQ</td>
<td>76 gal. / 1375 lbs.</td>
</tr>
</tbody>
</table>

14.4. Packing group
Not Regulated

14.5. Environmental hazards

IMDG
Marine Pollutant: No ( Copper oxide (Cu2O) )
14.6. Special precautions for user
Not Applicable

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not Applicable

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. All ingredients of this product are listed on the TSCA (Toxic Substances Control Act) Inventory or are not required to be listed on the TSCA Inventory.

WHMIS Classification B2 D2B

DOT Marine Pollutants (10%): (No Product Ingredients Listed)

DOT Severe Marine Pollutants (1%): (No Product Ingredients Listed)

EPCRA 311/312 Chemicals and RQs (>1%) :
- Copper (5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diame)
- Benzene, ethyl- (1000 lb final RQ; 454 kg final RQ)
- Naphthalene (100 lb final RQ; 45.4 kg final RQ)
- Xylenes (o-, m-, p- isomers) (100 lb final RQ; 45.4 kg final RQ)

EPCRA 302 Extremely Hazardous (>1%) : (No Product Ingredients Listed)

EPCRA 313 Toxic Chemicals (>1%) :
- 1,2,4-Trimethyl benzene
- Copper
- Benzene, ethyl-
- Naphthalene
- Xylenes (o-, m-, p- isomers)

Mass RTK Substances (>1%) :
- 1,2,4-Trimethyl benzene
- Benzene, ethyl-
- Xylenes (o-, m-, p- isomers)
- Zinc oxide

Penn RTK Substances (>1%) :
- 1,2,4-Trimethyl benzene
- Benzene, ethyl-
- Xylenes (o-, m-, p- isomers)
- Zinc oxide

Penn Special Hazardous Substances (>0.01%) : (No Product Ingredients Listed)

RCRA Status: (No Product Ingredients Listed)

N.J. RTK Substances (>1%) :
- 1,2,4-Trimethyl benzene
- Benzene, ethyl-
- Xylenes (o-, m-, p- isomers)
- Zinc oxide

N.J. Special Hazardous Substances (>0.01%) :
- Aluminum
- 2-Butoxyethanol
- Cumene
- Benzene, ethyl-
- Methyl methacrylate
- Naphthalene
- Silica, cristobalite
- Silicon
Titanium
Xylenes (o-, m-, p- isomers)
Zinc

N.J. Env. Hazardous Substances (>1%):
1,2,4-Trimethyl benzene
Copper
Benzene, ethyl-
Naphthalene
Xylenes (o-, m-, p- isomers)

Proposition 65 - Carcinogens (>0%):
Cadmium
Cumene
Benzene, ethyl-
Lead
Naphthalene
Nickel
Quartz

Proposition 65 - Female Repro Toxins (>0%):
Lead
Benzene, methyl-

Proposition 65 - Male Repro Toxins (>0%):
Cadmium
Lead

Proposition 65 - Developmental Toxins (>0%):
Cadmium
Lead
Benzene, methyl-

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16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.
H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

The following sections have changed since the previous revision.
End of Document