SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Lowilite® 22, Lowilite® 22 Granular and Lowilite® 22 Beads
Supplier: Chemtura USA Corporation
Address: 199 Benson Road
City: Middlebury
State: Connecticut
Zip: 06749
Emergency Telephone Number: 1-800-949-5167
Information Telephone Number: 1-765-497-6100
Fax: 1-765-497-6123
Chemtrec Phone: 1-800-424-9300; Internationally call 703-527-3887
Effective Date: 01/13/2006
Supercede Date: 09/04/2003
MSDS Prepared By: Chemtura Product Safety Group
Synonyms: Syntase 800; Rhodialux P; 2-Hydroxy-4-(octyloxy)benzophenone; 2-Hydroxy-4-n-octoxybenzophenone; 2-Benzoyl-5-octyloxyphenol; Benzophenone 12
Product Use: Polymer Stabilizer
Chemical Name: Methanone, [2-hydroxy-4-(octyloxy)phenyl]phenyl-
Chemical Family: Substituted benzophenone
Manufacturer:
Great Lakes Chemical Corporation, A Chemtura Company
P.O. Box 2200
West Lafayette, Indiana 47996-2200

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT NAME</th>
<th>CAS NO.</th>
<th>%</th>
<th>EXPOSURE LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Hydroxy-4-(octyloxy)benzophenone</td>
<td>1843056</td>
<td>&gt;98</td>
<td>Y (Hazardous)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15 mg/m³ (PNOR) (OSHA PEL TWA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Not established (OSHA PEL STEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Not established (OSHA PEL CEIL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 mg/m³ (PNOS) (ACGIH TLV TWA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Not established (ACGIH TLV STEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Not established (ACGIH TLV CEIL)</td>
</tr>
</tbody>
</table>

*Indented chemicals are components of previous ingredient.

Additional Information

5 mg/m³ Respirable Dust Level (OSHA)
3 mg/m³ Respirable Dust Level (ACGIH)
PNOR = Particulates Not Otherwise Regulated
PNOS = Particulates Not Otherwise Specified

SECTION III - HAZARDS IDENTIFICATION

Emergency Overview: Pale yellow powder, granules, flakes or beads
Faint odor
May cause allergic skin reaction.
Dusts can form an explosive mixture with air.
Inhalation and ingestion.

Relevant Routes of Exposure: Inhalation and ingestion.

Signs and Symptoms of Overexposure: General reddening and irritation to the skin and eyes, mucous membrane irritation, upper respiratory tract irritation.
SECTION III - HAZARDS IDENTIFICATION

Medical Conditions Generally Aggravated By Exposure: 
Dermatitis

Potential Health Effects: See Section XI for additional information.

Eyes: Not expected to be a hazard in normal industrial use. As with any dust, mechanical irritation is possible to the eye.

Skin: May cause allergic skin reaction. Irritation may be possible.

Ingestion: Not expected to be a hazard in normal industrial use.

Inhalation: As with any dust, mechanical irritation is possible to mucous membranes and the respiratory tract.

Chronic Health Effects: None known

Carcinogenicity:
- NTP: No
- ACGIH: No
- IARC: No
- OTHER: No
- OSHA: No

Additional Information
No information available

SECTION IV - FIRST AID MEASURES

Eyes: Flush with large volumes of water for at least 15 minutes. Get medical attention.

Skin: Wash with large volumes of soap and water for at least 15 minutes. If irritation develops, get medical attention.

Ingestion: If conscious, give person 1 to 2 glasses of water. Get medical attention immediately.

Inhalation: Remove person to fresh air. Get medical attention.

Antidotes: No information available

Notes to Physicians and/or Protection for First-Aiders: No information available

Additional Information
No information available

SECTION V - FIRE FIGHTING MEASURES

Flammable Limits in Air (% by Volume): Not available

Flash Point: 475 degrees F (Closed cup)

Autoignition Temperature: Not available

Extinguishing Media: All conventional media are suitable.

Fire Fighting Instructions: Wear a self-contained breathing apparatus and protective clothing to prevent skin and eye contact in fire situations.

Unusual Fire and Explosion Hazards: Under fire conditions, toxic and irritating fumes may be emitted. Dusts can form an explosive mixture with air.

Flammability Classification: Combustible dust

Known or Anticipated Hazardous Products of Combustion: Carbon monoxide and carbon dioxide

Additional Information
No information available
SECTION VI - ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Shut off all sources of ignition. Wearing appropriate personal protective equipment, carefully sweep up material and place in suitable labeled containers for disposal. Avoid creating a dusting condition. Use only non-sparking tools.

Personal Precautions: See Section VIII.

Environmental Precautions: No information available

Additional Information

No information available

SECTION VII - HANDLING AND STORAGE

Handling: Use appropriate personal protection equipment. Avoid eye, skin and clothing contact. Avoid breathing dust. Avoid repeated and prolonged contact. Avoid creating a dusting situation. Keep away from heat, sparks and flame. Prevent buildup of static electricity. All equipment should be properly grounded.

Storage: Store in a cool, dry, well-ventilated area away from incompatible materials. Store away from heat, sparks, and flame. Keep container tightly closed.

Other Precautions: Avoid contact of material with open flames.

Additional Information

No information available

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Adequate general ventilation is recommended when handling to control airborne levels.

Ventilation Requirements: Use local exhaust to minimize dusting. Use mechanical ventilation for general area control.

Personal Protective Equipment: Chemical safety glasses with side shields or chemical safety goggles

Skin Protection: Rubber gloves

Respiratory Protection: Wear a NIOSH/MSHA approved dust respirator if dusting occurs, or there is potential for airborne exposures to exceed established threshold values. Consult the OSHA respiratory protection information located at 29CFR 1910.134 and the American National Standard Institute's Practices of Respiratory Protection Z88.2.

Other Protective Clothing or Equipment: No information available

Exposure Guidelines: See Section II.

Work Hygienic Practices: Wash thoroughly after handling. Wash contaminated clothing before reuse.

Additional Information

No information available
SECTION IX - PHYSICAL & CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Pale yellow powder, granules, flakes or beads</td>
</tr>
<tr>
<td>Percent Volatile:</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>&gt;400 degrees C</td>
</tr>
<tr>
<td>pH Value:</td>
<td>Not available</td>
</tr>
<tr>
<td>Color:</td>
<td>Pale yellow</td>
</tr>
<tr>
<td>Physical State:</td>
<td>Solid</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>&gt;350 degrees C</td>
</tr>
<tr>
<td>Reactivity in Water:</td>
<td>Not water reactive</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing Point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Heat Value:</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>47-50 degrees C</td>
</tr>
<tr>
<td>Molecular/Chemical Formula:</td>
<td>C21H26O3</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>326</td>
</tr>
<tr>
<td>Octanol/Water Partition Coefficient:</td>
<td>Log Pow&gt;6</td>
</tr>
<tr>
<td>Odor:</td>
<td>Faint odor</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>Not available</td>
</tr>
<tr>
<td>Particle Size:</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity or Density (Water=1):</td>
<td>1.16 at 25 degrees C</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>&lt;0.1 mm Hg at 20 degrees C</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not available</td>
</tr>
<tr>
<td>Volatile Organic Compounds:</td>
<td>Not available</td>
</tr>
<tr>
<td>Weight Per Gallon:</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Additional Information

No information available

SECTION X - STABILITY AND REACTIVITY

Stability: Stable under normal conditions of handling and use.

Conditions to Avoid: High temperatures, heat, open flames, static electricity and other sources of ignition

Incompatibility With Other Materials:

- Strong oxidizers
- Strong bases
- Strong acids

Hazardous Decomposition Products:

- Thermal decomposition may produce the following:
  - Carbon monoxide and carbon dioxide

Hazardous Polymerization: Will not occur

Conditions to Avoid: None

Additional Information

No information available

SECTION XI - TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Value (LD50 or LC50)</th>
<th>Animal</th>
<th>Routes</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 g/kg</td>
<td>Mouse</td>
<td>Acute Oral</td>
<td>2-Hydroxy-4-(octyloxy)benzophenone</td>
</tr>
<tr>
<td>&gt;10 g/kg</td>
<td>Rabbit</td>
<td>Acute Dermal</td>
<td>2-Hydroxy-4-(octyloxy)benzophenone</td>
</tr>
<tr>
<td>&gt;10 g/kg</td>
<td>Rat</td>
<td>Acute Oral</td>
<td>2-Hydroxy-4-(octyloxy)benzophenone</td>
</tr>
</tbody>
</table>

Toxicological Information:
The toxicological properties of this material have not been fully determined.
This material has been determined not to be a primary eye irritant in rabbits.
This material has been determined not to be a primary skin irritant in rabbits.
This material has been found to be a skin sensitizer in guinea pigs.
This material was not determined to be mutagenic in the Ames Test.
Other acute and chronic health hazards, as well as target organs, are unknown.
As with all dusts, inhalation of air concentration levels above the PNOR may cause irritation and adverse lung effects.

**Additional Information**

### SECTION XII - ECOLOGICAL INFORMATION

Ecological Information:
- LC50 in Zebra fish (Brachydanio rerio) >100 mg/L
- EC50 in Daphnia magna = 52 mg/L
- LC50 in Algae (Scenedesmus sp.) >100 mg/L
- IC50 in sewage sludge bacteria >100 mg/L
- This product is not biodegradable.
- Avoid releasing to the environment.

**Additional Information**

### SECTION XIII - DISPOSAL CONSIDERATIONS

Disposal Considerations: Dispose of waste at an approved chemical disposal facility in compliance with all current Local, State/Province, Federal/Canadian laws and regulations.

**Additional Information**

### SECTION XIV - TRANSPORT INFORMATION

**U.S. DOT**

<table>
<thead>
<tr>
<th>Proper Shipping Name:</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
<td>N/A</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>N/A</td>
</tr>
<tr>
<td>Special Provisions:</td>
<td>N/A</td>
</tr>
<tr>
<td>Non-Bulk Packaging:</td>
<td>N/A</td>
</tr>
<tr>
<td>Passenger Air/Rail Limit:</td>
<td>N/A</td>
</tr>
<tr>
<td>Vessel Stowage:</td>
<td>N/A</td>
</tr>
<tr>
<td>Reportable Quantity:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**AIR - ICAO OR IATA**

<table>
<thead>
<tr>
<th>Proper Shipping Name:</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
<td>N/A</td>
</tr>
<tr>
<td>Subsidiary Risk:</td>
<td>N/A</td>
</tr>
<tr>
<td>Hazard Labels:</td>
<td>N/A</td>
</tr>
<tr>
<td>Air Passenger Limit Per Package:</td>
<td>N/A</td>
</tr>
<tr>
<td>Air Cargo Limit Per Package:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**WATER - IMDG**

<table>
<thead>
<tr>
<th>Proper Shipping Name:</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
<td>N/A</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>N/A</td>
</tr>
<tr>
<td>Medical First Aid Guide Code:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Additional Information**

### SECTION XV - REGULATORY INFORMATION

U.S. Federal Regulations:
The components of this product are either on the TSCA Inventory or exempt (i.e. impurities, a polymer complying with the exemption rule at 40 CFR 723.250) from the Inventory.
SECTION XV - REGULATORY INFORMATION

State Regulations:
No information available

International Regulations:
This material (or each component) is listed on the following inventories:
Canada - DSL
EU - EINECS
Australia - AICS
Japan - ENCS
Korea - ECL
Philippines - PICCS
China - List I

Canadian WHMIS Hazard Class and Division = D.2.b

SARA Hazards:
- Acute: No
- Reactive: No
- Pressure: No
- Chronic: Yes
- Fire: No

Additional Information
The above regulatory information represents only selected regulations and is not meant to be a complete list.

SECTION XVI - OTHER INFORMATION

NFPA Codes:
- Health: NR
- Reactivity: NR

HMIS Codes:
- Health: 1*
- Reactivity: 0
- Flammability: 1
- Protection: X

Label Statements: Not available

Other Information:
Abbreviations:
(L) = Loose bulk density in g/ml
LOEC = Lowest observed effect concentration
MATC = Maximum acceptable toxicant concentration
NA = Not available
N/A = Not applicable
NL = Not limited
NOAEL = No observable adverse effect level
NOEC = No observed effect concentration
NOEL = No observable effect level
NR = Not rated
(P) = Packed bulk density in g/ml
PNOR = Particulates Not Otherwise Regulated
PNOS = Particulates Not Otherwise Specified
REL = Recommended exposure limit
TS = Trade secret

Additional Information
Information on this form is furnished solely for the purpose of compliance with OSHA's Hazard Communication Standard, 29CFR 1910.1200 and the Canadian Hazardous Products Act and associated Controlled Products Regulations and shall not be used for any other purpose.