Material Safety Data Sheet

OPTIPHEN™ ND

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Responsible Party: International Specialty Products
1361 Alps Rd.
Wayne, N.J. 07470
U.S.A.
Telephone: (973) 628-4000

Emergency Telephone Number: CHEMTREC: 1-800-424-9300 (Spill Related Emergencies)
PROSAR: 1-800-241-7439 (Health Related Emergencies)

Prepared By: Product Stewardship

Product Id: 2A528D

Product Name: OPTIPHEN™ ND

CAS Registry Number: 122-99-6; 65-85-0; 520-45-6

CAS Name: Ethanol, 2-Phenoxyethanol; Benzoic Acid; 3-Acetyl-6-methyl-2H-pyran-2,4(3H)-dione

Synonyms: Phenoxyethanol; Benzoic Acid; Dehydroacetic Acid (INCI NAMES)

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Components:</th>
<th>Weight %</th>
<th>ACGIH Threshold Limit Values Data - Time Weighted Average (TWA):</th>
<th>OSHA Specifically Regulated Substances Data - Time Weighted Average (TWA):</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-PHENOXYETHANOL 122-99-6</td>
<td>80</td>
<td>No TLV/TWA Established</td>
<td>No TLV/TWA Established</td>
</tr>
<tr>
<td>Benzoic Acid 65-85-0</td>
<td>12</td>
<td>No TLV/TWA Established</td>
<td>No TLV/TWA Established</td>
</tr>
<tr>
<td>3-ACETYL-6-METHYL-2H-PYRAN-2,4(3H)-DIONE 520-45-6</td>
<td>8</td>
<td>No TLV/TWA Established</td>
<td>No TLV/TWA Established</td>
</tr>
</tbody>
</table>

Statement of Hazardous Nature: Harmful if swallowed. Causes eye irritation.

3. HAZARDS IDENTIFICATION

Emergency Overview
WARNING! HARMFUL IF SWALLOWED. CAUSES SEVERE EYE IRRITATION AND MAY CAUSE TISSUE DAMAGE.

Hazard Overview
Target Organs: Eyes
Primary Entry Routes: Eyes.
Acute Health Hazards: Causes severe eye irritation.
Chronic Health Hazards: None known.

Signs and Symptoms of Overexposure

Page 1 of 5
Eye Contact: Causes severe eye irritation may cause tissue damage.
Skin Contact: Causes mild skin irritation.
Ingestion: Harmful if swallowed.
Inhalation: Not a hazard under normal use conditions.

### 4. FIRST AID MEASURES

**Eye Contact:** Flush eyes with copious amounts of water.
**Skin Contact:** Wash with soap and water.
**Ingestion:** Slowly dilute with 1-2 glasses of water and seek medical attention. Never give anything by mouth to an unconscious person.
**Inhalation:** No specific treatment is necessary since material is not likely to be hazardous by inhalation. If exposed to excessive levels of dust or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

### 5. FIRE FIGHTING MEASURES

**NFPA Rating:** HEALTH 1, FLAMMABILITY 1, REACTIVITY 0
**Flash Point (°F):** >266
**Extinguishing Media:** All standard firefighting media
**Unusual Fire/Explosion Hazards:** Fire will produce oxides of carbon.
**Special Protective Equipment:** Fire fighters should wear full protective clothing, including self-contained breathing equipment.

**HMIS RATING:**
- HEALTH 1
- FLAMMABILITY 1
- PHYSICAL HAZARD 0

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures:** Use appropriate protective equipment. Wear self-contained breathing apparatus in enclosed areas.
**Procedure for Cleaning/Absorption:** Contain spill with sand or other inert materials.

### 7. HANDLING AND STORAGE

**Handling:** Wash thoroughly with soap and water after handling.
**Storage:** Store in sealed containers in a protected area.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Use in a well ventilated area.
**Respiratory Protection:** Use in a well ventilated area.
**Hand Protection:** Use gloves as a standard industrial handling procedure.
**Eye Protection:** Safety glasses.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid
**Color:** Yellow
Odor: Characteristic
Odor Threshold: Not available
pH: approx. 4.0 @ 100 g/L
Specific Gravity: Not determined
Boiling Point (°F): >302
Melting Point/Freezing Point(°F): Not determined
Vapor Pressure: <0.75 mmHg
Solubility: 5g/L @ 68 °F

10. STABILITY AND REACTIVITY
Chemical Stability: Stable under normal conditions of handling, use and transportation.
Hazardous Polymerization: Will not occur
Conditions to Avoid: None anticipated
Materials to Avoid: Strong acids or alkalies. Strong oxidizing agents.
Hazardous Decomposition Products: Oxides of carbon.

11. TOXICOLOGICAL INFORMATION
Toxicity Test:
Acute Oral LD50 (mg/kg): >2000 (Rat) (Phenoxyethanol)
1480 (Rat) (Dehydroacetic Acid)
Acute Dermal LD50 (mg/kg): >2000 (Rabbit) (Phenoxyethanol)
Sensitization: Non-Sensitizing (Guinea Pig) (Phenoxyethanol)
Skin Irritation: Non-irritant (Rabbit) (Dehydroacetic Acid)

12. ECOLOGICAL INFORMATION
Biodegradability: Readily Biodegradable, >80% (Phenoxyethanol)
Aquatic Toxicity:
Fish, LC50 (96h) >100 mg/L (Phenoxyethanol)
Aquatic invertebrates, EC50 (48h) >500 mg/L (Phenoxyethanol)
Aquatic Plants, EC50 (72h) >500 mg/L (Phenoxyethanol)
Microorganism/Effect on Activated Sludge, EC10 (17h) 320 mg/L (Phenoxyethanol)
Activated Industrial Sludge, EC20 >100 mg/L (Phenoxyethanol)
LC50 0.23 mg/L (96h) (Bluegill) (IPBC)
EC50 0.696 mg/L (48h) (Daphnia magna) (IPBC)

13. DISPOSAL CONSIDERATIONS
Disposal of Waste Method: Federal, state and local disposal laws and regulations will determine the proper waste disposal/recycling/reclamation procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected.

14. TRANSPORT INFORMATION
Land Transportation:
**DOT (Non-Bulk):**
DOT Shipping Name: NOT REGULATED
UN/NA Number: NONE
Hazard Class: NONE

**DOT (Bulk):**
DOT Shipping Name: NOT REGULATED
UN/NA Number: NONE

**Air Transportation (IATA):**
Proper Shipping Name: NOT REGULATED
UN Number: NONE
Hazard Classification: NONE

**Sea Transportation (IMO):**
Proper Shipping Name: NOT REGULATED
UN/ID Number: NONE
Hazard Classification: NONE

**TDG (Canada):**
Proper Shipping Name: NOT REGULATED
Hazard Class: NONE

---

### 15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Regulatory List</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA Inventory List</td>
<td>This product and/or its components is listed on TSCA.</td>
</tr>
<tr>
<td>California Proposition 65 Carcinogens &amp; Reproductive Toxicity (CRT) List</td>
<td>None of the components of this product is listed on CALPROP.</td>
</tr>
<tr>
<td>WHMIS Ingredient Disclosure List</td>
<td>One or more components of this product is listed on the WHMIS Ingredient Disclosure list.</td>
</tr>
<tr>
<td>Canada DSL Inventory List</td>
<td>This product and/or its components is listed on DSL.</td>
</tr>
<tr>
<td>Canada NDSL Inventory List</td>
<td>This product and/or its components is not listed on NDSL.</td>
</tr>
<tr>
<td>Japan Inventory of Existing &amp; New Chemical Substances (ENCS):</td>
<td>This product and/or its components is listed on ENCS.</td>
</tr>
<tr>
<td>Australia Inventory of Chemical Substances (AICS) List</td>
<td>This product and/or its components is listed on AICS.</td>
</tr>
<tr>
<td>EU EINECS List</td>
<td>This product and/or its components is listed on EINECS.</td>
</tr>
<tr>
<td>ELINCS</td>
<td>This product and/or its components is not listed on ELINCS.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components:</th>
<th>2-PHENOXYETHANOL 122-99-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPCRA (SARA Title III) Section 313 Toxic Chemical - Listed.</td>
<td></td>
</tr>
</tbody>
</table>

### 16. OTHER INFORMATION

Prepared By: Product Stewardship
Important Note:
For purposes of this MSDS, International Specialty Products, as responsible party, provides the information herein which is intended for use by persons who have or should obtain professional knowledge and experience in the subjects discussed. ISP’s industrial products are used as materials in the production of products by industrial customers. ISP usually has only limited information about the products of its customers and their composition, methods of manufacture and use. Accordingly, ISP MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS OR RELIABILITY OF INFORMATION HEREIN EXCEPT THAT SUCH INFORMATION IS, TO THE BEST OF ISP’S KNOWLEDGE AND BELIEF, ACCURATE AS OF THE DATE INDICATED. ISP recommends that customers independently test and evaluate its products and their products and processes in which ISP products are used in order to decide their safety and effectiveness.

***END OF MSDS***