1. IDENTIFICATION

Product identifier
Product Name: NPT HIGH DENSITY CLEAR

Other means of identification
Product Code: ES0138

Recommended use of the chemical and restrictions on use
Recommended Use: Textile ink, Screen Printing. Restricted to professional users.
Uses advised against: No information available

Details of the supplier of the safety data sheet
Manufacturer Address
Rutland Group
10021 Rodney Street
Pineville, NC 28134
Tel: 704-553-0046

E-mail address: product_safety@rutlandinc.com

Emergency telephone number
Emergency Telephone: INFOTRAC 1-352-323-3500
2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance  viscous  Physical state  liquid  Odor  Low

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
May be harmful if swallowed
Very toxic to aquatic life with long lasting effects
Very toxic to aquatic life

Unknown acute toxicity  90.5% of the mixture has not undergone testing for acute toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC HOMOPOLYMER RESIN</td>
<td>9002-86-2</td>
<td>30 - 60</td>
<td>*</td>
</tr>
<tr>
<td>PHOSPHATE</td>
<td>115-86-6</td>
<td>5 - 10</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.
4. FIRST AID MEASURES

Description of first aid measures

**General advice**
If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

**Eye contact**
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

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

**Inhalation**
Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

**Ingestion**
Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Never give anything by mouth to an unconscious person.

**Self-protection of the first aider**
Use personal protective equipment as required.

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

**Symptoms**
No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**
No information available.

**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.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions  
Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions  
Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. See section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment  
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up  
Cover liquid spill with sand, earth or other non-combustible absorbent material. Use personal protective equipment as required. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling  
Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions  
Keep container tightly closed in a dry and well-ventilated place
Keep out of the reach of children

Incompatible materials  
None known based on information supplied.
### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC HOMOPOLYMER RESIN 9002-86-2</td>
<td>TWA: 1 mg/m³ respirable particulate matter</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PHOSPHATE 115-86-6</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 3 mg/m³ (vacated) TWA: 3 mg/m³</td>
<td>IDLH: 1000 mg/m³ TWA: 3 mg/m³</td>
</tr>
</tbody>
</table>

NIOSH IDLH Immediately Dangerous to Life or Health

#### Chemical Name

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Alberta OEL</th>
<th>British Columbia OEL</th>
<th>Manitoba OEL</th>
<th>New Brunswick OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC HOMOPOLYMER RESIN 9002-86-2</td>
<td>-</td>
<td>TWA: 1 mg/m³</td>
<td>TWA: 1 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>PHOSPHATE 115-86-6</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 3 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Newfoundland OEL</th>
<th>Northwest Territories OEL</th>
<th>Nova Scotia OEL</th>
<th>Nunavut OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC HOMOPOLYMER RESIN 9002-86-2</td>
<td>TWA: 1 mg/m³</td>
<td>-</td>
<td>TWA: 1 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>PHOSPHATE 115-86-6</td>
<td>TWA: 3 mg/m³ STEL: 6 mg/m³</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 3 mg/m³ STEL: 6 mg/m³</td>
<td>TWA: 3 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Ontario OEL</th>
<th>Prince Edward Island OEL</th>
<th>Quebec OEL</th>
<th>Saskatchewan OEL</th>
<th>Yukon OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC HOMOPOLYMER RESIN 9002-86-2</td>
<td>TWA: 1 mg/m³</td>
<td>TWA: 1 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PHOSPHATE 115-86-6</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 3 mg/m³ STEL: 6 mg/m³</td>
<td>TWA: 3 mg/m³ STEL: 6 mg/m³</td>
<td>TWA: 3 mg/m³</td>
</tr>
</tbody>
</table>

#### Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### Appropriate engineering controls

**Engineering Controls**

- Showers
- Eyewash stations
- Ventilation systems.

#### Individual protection measures, such as personal protective equipment

- **Eye/face protection**
  - Tight sealing safety goggles.

- **Skin and body protection**
  - Wear protective gloves and protective clothing.

- **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.

#### General Hygiene Considerations

- Handle in accordance with good industrial hygiene and safety practice.
9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>viscous</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>White to off-white</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>204 °C / 399 °F</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>96 °C / 205 °F</td>
<td>CC (closed cup)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.15</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

Other Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softening point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>VOC Content</td>
<td>15 g/L</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Extremes of temperature and direct sunlight.

Incompatible materials
None known based on information supplied.

Hazardous Decomposition Products
None known based on information supplied.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information  No data available

Inhalation  No data available.
Eye contact  No data available.
Skin contact  No data available.
Ingestion  No data available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOSPHATE 115-86-6</td>
<td>= 3500 mg/kg (Rat)</td>
<td>&gt; 10000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms  No information available.

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

Sensitization  No information available.
Germ cell mutagenicity  No information available.
Carcinogenicity  The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC HOMOPOLYMER RESIN 9002-86-2</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

IARC (International Agency for Research on Cancer)
Not classifiable as a human carcinogen

Reproductive toxicity  No information available.
STOT - single exposure  No information available.
STOT - repeated exposure  No information available.

Chronic toxicity  May cause adverse effects on the bone marrow and blood-forming system.
Target Organ Effects  blood, Peripheral Nervous System (PNS).

Aspiration hazard  No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral)  3451 mg/kg
ATEmix (dermal)  11511 mg/kg
ATEmix (inhalation-gas)  No information available
ATEmix (inhalation-dust/mist)  No information available
ATEmix (inhalation-vapor)  No information available
12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a severe marine pollutant according to DOT.

Ecotoxicity

Very toxic to aquatic life with long lasting effects

91.8% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

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

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION

DOT

Marine pollutant

Not regulated
This product contains a chemical which is listed as a severe marine pollutant according to DOT.

TDG

Marine pollutant

Not regulated
This product contains a chemical which is listed as a severe marine pollutant according to TDG.

MEX

Not regulated

ICAO (air)

Not regulated

IATA

Not regulated

IMDG

Not regulated

RID

Not regulated

ADR

Not regulated

ADN

Not regulated
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Yes</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Yes</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Yes</td>
</tr>
<tr>
<td>ENCS</td>
<td>Yes</td>
</tr>
<tr>
<td>IECSC</td>
<td>Yes</td>
</tr>
<tr>
<td>KECL</td>
<td>Yes</td>
</tr>
<tr>
<td>PICCS</td>
<td>No</td>
</tr>
<tr>
<td>AICS</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Legend:
- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **IECSC** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- **AICS** - Australian Inventory of Chemical Substances

US 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>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td>Yes</td>
</tr>
<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>

CWA (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)

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

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC HOMOPOLYMER RESIN</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9002-86-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHOSPHATE</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>115-86-6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

U.S. EPA Label Information
EPA Pesticide Registration Number Not applicable
16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

Issue Date 01-Jun-2015
Revision Date 05-Apr-2017
Revision Note SDS sections updated 1 2 4

Disclaimer
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet