1. IDENTIFICATION

Product identifier
Product Name
NPT OPAQUE FLUOR RED M3

Other means of identification
Product Code
M36056
Synonyms
M3605601, M3605603, M3605604, M3605605, M3605607, M3605608, M3605609, M3605610, M3605612, M3605613, M3605614, M3605615, M3605616, M3605617, M3605619, M3605620, M3605621, M3605622, M3605623, M3605633, M3605635, M3605655

Recommended use of the chemical and restrictions on use.
Recommended Use
Textile ink. 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

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical state</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>viscous</td>
<td>liquid</td>
<td>Low</td>
</tr>
</tbody>
</table>

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
Not applicable

Unknown acute toxicity
67.6% of the mixture has not undergone testing for acute toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance</th>
<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>15 - 40</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>CALCIUM CARBONATE</td>
<td>1317-65-3</td>
<td>10 - 30</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>13463-67-7</td>
<td>10 - 30</td>
<td>*</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**

**Eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact**
Wash skin with soap and water.

**Inhalation**
Remove to fresh air.

**Ingestion**
Never give anything by mouth to an unconscious person. Rinse mouth. Drink 1 or 2 glasses of water. Consult a physician if necessary.

**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**
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**
Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. 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 Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities
Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place
Store at temperatures not exceeding 35 °C/ 95 °F
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>CALCIUM CARBONATE 1317-65-3</td>
<td>-</td>
<td>TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction TWA: 5 mg/m³ respirable dust</td>
<td>TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust</td>
<td>IDLH: 5000 mg/m³</td>
</tr>
</tbody>
</table>

NIOSH IDLH Immediately Dangerous to Life or Health

Chemical Name | Alberta OEL | British Columbia OEL | Manitoba OEL | New Brunswick OEL |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></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>CALCIUM CARBONATE 1317-65-3</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 3 mg/m³ STEL: 20 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 10 mg/m³</td>
</tr>
</tbody>
</table>

Chemical Name | Newfoundland OEL | Northwest Territories OEL | Nova Scotia OEL | Nunavut OEL |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></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>CALCIUM CARBONATE 1317-65-3</td>
<td>-</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 20 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 20 mg/m³</td>
<td>TWA: 10 mg/m³</td>
</tr>
</tbody>
</table>

Chemical Name | Ontario OEL | Prince Edward Island OEL | Quebec OEL | Saskatchewan OEL | Yukon OEL |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></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>CALCIUM CARBONATE 1317-65-3</td>
<td>-</td>
<td>-</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 20 mg/m³ STEL: 20 mg/m³</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 20 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
Wear safety glasses with side shields (or goggles). If a risk assessment indicates this is necessary.

Skin and body protection
Wear protective gloves and protective clothing. If a risk assessment indicates this is necessary.
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>Physical state</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>viscous</td>
</tr>
<tr>
<td>Color</td>
<td>colored</td>
</tr>
<tr>
<td>Odor</td>
<td>Low</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</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>232 °C / 450 °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>
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<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
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<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>1.4</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble in water</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>
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<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
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<tr>
<td>Softening point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
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<td></td>
</tr>
<tr>
<td>VOC Content</td>
<td>50 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>

Other Information

No information available
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

- **Inhalation**: No data available.
- **Eye contact**: No data available.
- **Skin contact**: No data available.
- **Ingestion**: No data available.

### Chemical Name

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td>-</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>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>-</td>
<td>Group 2B</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

**ACGIH**: American Conference of Governmental Industrial Hygienists

**IARC (International Agency for Research on Cancer)**

- Group 2B - Possibly Carcinogenic to Humans
- Not classifiable as a human carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

- X - Present

- **Reproductive toxicity**: No information available.
- **STOT - single exposure**: No information available.
- **STOT - repeated exposure**: No information available.
- **Target Organ Effects**: Eyes, Lungs, Respiratory system, Skin.
- **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)**: 1226810 mg/kg
- **ATEmix (dermal)**: 2418
- **ATEmix (inhalation-gas)**: No information available
- **ATEmix (inhalation-dust/mist)**: No information available
- **ATEmix (inhalation-vapor)**: No information available
12. ECOLOGICAL INFORMATION

Ecotoxicity

69.4 % 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
Not regulated

TDG
Not regulated

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>On Inventory (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>Yes</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>No</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 contains the following Proposition 65 chemicals:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

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 9002-86-2</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CALCIUM CARBONATE 1317-65-3</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
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</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 1</th>
<th>Flammability 1</th>
<th>Instability 0</th>
<th>Physical and Chemical Properties -</th>
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</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health hazards 1</td>
<td>Flammability 1</td>
<td>Physical hazards 0</td>
<td>Personal protection B</td>
</tr>
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</table>

Issue Date 27-Jul-2015
Revision Date 15-Mar-2017
Revision Note SDS sections updated 4 7 8

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