1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product name**
HIGH PERFORMANCE PENETRANT SPRAY 31P11

**Recommended use of the chemical and restrictions on use**

**Product code**
31P11

**Product Type**
Extremely flammable aerosol

**Synonyms**
None

**Supplier's details**

**Recommended Use**
Penetrant.

**Uses advised against**
No information available

**Manufacturer:**
Plastic Process Equipment, Inc.
8303 Corporate Park Dr.
Macedonia, Ohio 44056
phone 800-321-0562

**Emergency telephone number**

**Chemical Emergency Phone Number**
Chemtrec 1-800-535-5053

**Company Emergency Phone Number**
800-535-5053
### 2. HAZARDS IDENTIFICATION

#### Classification

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Aspiration toxicity</td>
<td>Category 1</td>
</tr>
<tr>
<td>Flammable aerosols</td>
<td>Category 1</td>
</tr>
<tr>
<td>Gases under pressure</td>
<td>Compressed Gas</td>
</tr>
</tbody>
</table>

#### GHS Label elements, including precautionary statements

**Emergency Overview**

**DANGER**

**Hazard Statements**

Causes skin irritation  
Causes serious eye irritation  
May cause drowsiness or dizziness  
May be fatal if swallowed and enters airways  
Extremely flammable aerosol  
Contains gas under pressure; may explode if heated

**Precautionary Statements - Prevention**

Wash hands and face thoroughly after handling  
Wear protective gloves  
Wear eye/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Do not spray on an open flame or other ignition source  
Pressurized container: Do not pierce or burn, even after use

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER or doctor/physician if you feel unwell  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do NOT induce vomiting

---

**Appearance** Clear  
**Physical state** Aerosol  
**Odor** Solvent
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %*</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAPHTHENIC OIL, SEVERELY HYDROT</td>
<td>64742-52-5</td>
<td>35-45</td>
</tr>
<tr>
<td>HYDROCARBON SOLVENT</td>
<td>64742-96-7</td>
<td>15-25</td>
</tr>
<tr>
<td>PROPANE/ISOBUTANE/N-BUTANE</td>
<td>68476-86-8</td>
<td>10-20</td>
</tr>
<tr>
<td>PETROLEUM OIL</td>
<td>64742-52-5</td>
<td>10-20</td>
</tr>
<tr>
<td>KEROSENE</td>
<td>8008-20-6</td>
<td>1-10</td>
</tr>
<tr>
<td>HYDROTREATED LIGHT DISTILLATES</td>
<td>64742-47-8</td>
<td>1-10</td>
</tr>
</tbody>
</table>

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

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice: Avoid contact with skin, eyes, and clothing. Avoid breathing, vapors, mist, or gas.

Eye contact: In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice.

Skin contact: Wash off immediately with plenty of water. If skin irritation persists, call a physician.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.

Ingestion: Do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.

Most important symptoms/effects, acute and delayed: May cause skin irritation. Drowsiness. Dizziness. Difficulty breathing.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES
Suitable Extinguishing Media

Unsuitable Extinguishing Media  Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
Flammable or extremely flammable aerosol. Container may burst in fire.

Explosion Data
Sensitivity to Mechanical Impact  none.
Sensitivity to Static Discharge  Yes.

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. Use shielding to protect fire-fighters from bursting containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions  Ensure adequate ventilation.

Environmental precautions

Environmental precautions  Report spills as required by local and federal regulations.

Methods and materials for containment and cleaning up

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

Methods for cleaning up  Contain liquid and collect with an inter,non-combustible material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling  Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Avoid skin contact. Use with adequate ventilation. Keep container away from heat, flames, and all other sources of ignition. Keep can away from all sources of electricity such as electric motors and batteries. Do not spray on hot surfaces.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions  Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products  Store away from strong oxidizers and acids.

Aerosol Level 3

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></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PROPAINE/ISOButane/N-BUTANE 68476-86-8

<table>
<thead>
<tr>
<th>Component</th>
<th>TWA: 1000 ppm</th>
<th>STEL: 1000 ppm</th>
<th>TWA: 1800 mg/m³ (vacated)</th>
<th>TWA: 1000 ppm (vacated)</th>
<th>TWA: 800 ppm (vacated)</th>
<th>TWA: 1900 mg/m³</th>
</tr>
</thead>
</table>

KEROSENE 8008-20-6

<table>
<thead>
<tr>
<th>Component</th>
<th>TWA: 200 mg/m³</th>
<th>TWA: 2000 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEROSENE 8008-20-6</td>
<td>74-98-6</td>
<td>106-97-8</td>
</tr>
</tbody>
</table>

HYDROTREATED LIGHT DISTILLATES 64742-47-8

<table>
<thead>
<tr>
<th>Component</th>
<th>TWA: 200 PPM 8 hours</th>
<th>TWA: 200 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROTREATED LIGHT DISTILLATES 64742-47-8</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

ACGIH: (American Conference of Governmental Industrial Hygienists)
OSHA: (Occupational Safety & Health Administration)
NIOSH IDLH: Immediately Dangerous to Life or Health

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

Exposure controls

Engineering Measures
Ventilation systems. Use adequate ventilation to keep the exposure levels below the OELs.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Safety glasses with side-shields.

Skin and body protection
Chemical resistant apron. Protective gloves.

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.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point/boling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>-96.4 °C / -141 °F</td>
<td>Based on propellant</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 Limits in Air</td>
<td></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>
</tbody>
</table>
Vapor density No information available
Specific Gravity 0.815
Water solubility Practically insoluble
Partition coefficient: n-octanol/water No information available
Autoignition temperature No information available
Decomposition temperature No information available
Viscosity No information available
Explosive properties No information available

Other information

VOC Content(%) 22.68

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
Store away from strong oxidizers and acids.

Hazardous Decomposition Products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Product does not present an acute toxicity hazard based on known information

Inhalation
Exposure to high vapour concentrations may cause nervous systems effects such as headache, nausea, and dizziness.

Eye contact
May cause slight irritation.

Skin contact
Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.

Ingestion
Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAPHTHENIC OIL, SEVERELY HYDROT 64742-52-5</td>
<td>&gt;5000 mg/kg (Rat)</td>
<td>&gt;5000 mg/kg (Rabbit)</td>
<td>&gt;5 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>HYDROCARBON SOLVENT 64742-96-7</td>
<td>&gt;2000 mg/kg (Rat)</td>
<td>&gt;2000 mg/kg (Rabbit)</td>
<td>&gt;5.28 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>KEROSENE 8008-20-6</td>
<td>&gt;5000 mg/kg (Rat)</td>
<td>&gt;2000 mg/kg (Rabbit)</td>
<td>&gt;5.28 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>HYDROTREATED LIGHT DISTILLATES 64742-47-8</td>
<td>&gt;5000 mg/kg (Rat)</td>
<td>&gt;2000 mg/kg (Rabbit)</td>
<td>&gt;5.2 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>
Information on toxicological effects

Symptoms
Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting. May cause mild irritation. Irritating to skin. Prolonged or repeated exposure may cause dermatitis. Not acutely toxic. Aspiration into the lungs during swallowing may cause serious lung damage which may be fatal.

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

Skin corrosion/irritation
Irritating to skin.

Eye damage/irritation
Irritating to eyes.

Sensitization
No information available.

Germ Cell Mutagenicity
No information available.

Carcinogenicity
The table below indicates whether each agency has evaluated a listed 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>NAPHTHENIC OIL, SEVERELY HYDROT</td>
<td>A2</td>
<td>Group 1</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>64742-52-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PETROLEUM OIL</td>
<td>A2</td>
<td>Group 1</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>64742-52-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KEROSENE</td>
<td>A3</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
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<tr>
<td>8008-20-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACGIH: (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans

OSHA: (Occupational Safety & Health Administration)
X - Present

Reproductive toxicity
The ingredients are not reproductive hazards.

Specific target organ systemic toxicity (single exposure)
May cause drowsiness and dizziness.

Specific target organ systemic toxicity (repeated exposure)
No information available.

Chronic toxicity
Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest. Prolonged skin contact may defat the skin and produce dermatitis.

Target Organ Effects
Central nervous system, Eyes, Respiratory system, Skin.

Aspiration hazard
May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral) 17485 mg/kg
ATEmix (dermal) 6994 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to microorganisms</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAPHTHENIC OIL, SEVERELY HYDROT</td>
<td>-</td>
<td>5000 mg/L LC50</td>
<td>-</td>
<td>1000 mg/L EC50 Daphnia magna 48h</td>
</tr>
<tr>
<td>64742-52-5</td>
<td></td>
<td>Oncorhynchus mykiss 96h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROPANE/ISOBUTANE/N-BUTANE</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>68476-86-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Persisted and degradability
No information available.

Bioaccumulation
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPANE/ISOBUTANE/N-BUTANE 68476-86-8</td>
<td>&lt;=2.8</td>
</tr>
</tbody>
</table>

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods
Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging
Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Ground
CONSUMER COMMODITY ORM-D
or
LIMITED QUANTITY

IATA
UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

IMDG
UN1950, AEROSOLS, 2.1, LTD. QTY.

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAPHTHENIC OIL, SEVERELY HYDROTIZED</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>HYDROCARBON SOLVENT</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Not listed</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PROPANE/ISOBUTANE/N-BUTANE</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Not listed</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PETROLEUM OIL</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</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 Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
CHINA - 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

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or 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
- Acute Health Hazard: Yes
- Chronic Health Hazard: Yes
- Fire Hazard: Yes
- Sudden Release of Pressure Hazard: Yes
- Reactive Hazard: No

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.

U.S. State Regulations

California Proposition 65
No warning required.

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>KEROSENE 8008-20-6</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard 2</th>
<th>Flammability 4</th>
<th>Instability 0</th>
<th>Physical and chemical hazards -</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health Hazard 2</td>
<td>Flammability 4</td>
<td>Physical Hazard 1</td>
<td>Personal protection B</td>
</tr>
</tbody>
</table>

Issuing date 04-Nov-2014  
Revision Date 04-Nov-2014  
Revision Note No information available  

**Disclaimer**

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of Safety Data Sheet**