



# SAFETY DATA SHEET

## 1. Identification

|                                                        |                                                                                                                                     |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Product identifier                                     | LPS® PreSolve                                                                                                                       |
| Other means of identification                          |                                                                                                                                     |
| Part Number                                            | 01422, 01428, 01405, 01455                                                                                                          |
| Recommended use                                        | A solvent degreasing agent designed for removing tar, adhesives, grease, oil and other residues from metal and other hard surfaces. |
| Recommended restrictions                               | None known.                                                                                                                         |
| Manufacturer/Importer/Supplier/Distributor information |                                                                                                                                     |
| Manufacturer                                           |                                                                                                                                     |
| Manufacturer                                           |                                                                                                                                     |
| Company name                                           | ITW Pro Brands                                                                                                                      |
| Address                                                | 4647 Hugh Howell Rd.<br>Tucker, GA 30084                                                                                            |
| Country                                                | (U.S.A.)<br>Tel: +1 770-243-8800                                                                                                    |
| In Case of Emergency                                   | 1-800-424-9300 (inside U.S.)<br>+001 703-527-3887 (outside U.S.)                                                                    |
| Website                                                | www.lpslabs.com                                                                                                                     |
| E-mail                                                 | lpssds@itwprobrands.com                                                                                                             |

## 2. Hazard(s) identification

|                       |                                                 |                             |
|-----------------------|-------------------------------------------------|-----------------------------|
| Physical hazards      | Flammable liquids                               | Category 3                  |
| Health hazards        | Skin corrosion/irritation                       | Category 2                  |
|                       | Serious eye damage/eye irritation               | Category 2A                 |
|                       | Sensitization, skin                             | Category 1                  |
|                       | Specific target organ toxicity, single exposure | Category 3 narcotic effects |
|                       | Aspiration hazard                               | Category 1                  |
| Environmental hazards | Not classified.                                 |                             |
| OSHA defined hazards  | Not classified.                                 |                             |
| Label elements        |                                                 |                             |



|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signal word             | Danger                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Hazard statement        | Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.                                                                                                                                                                                                                                                                                                                                                        |
| Precautionary statement |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Prevention              | Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/eye protection/face protection. |

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Response</b>                                  | In case of fire: Use appropriate media to extinguish. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see this label). Take off contaminated clothing and wash it before reuse. 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 inhaled: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. |
| <b>Storage</b>                                   | Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Disposal</b>                                  | Dispose of contents/container in accordance with local/regional/national/international regulations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | None known.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Supplemental information</b>                  | Not applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name                            | Common name and synonyms | CAS number | %       |
|------------------------------------------|--------------------------|------------|---------|
| Distillates Petroleum Hydrotreated Light |                          | 64742-47-8 | 60 - 70 |
| 3-Methoxy-3-methyl-1-butanol (MMB)       |                          | 56539-66-3 | 10 - 20 |
| d-limonene                               |                          | 5989-27-5  | 10 - 20 |

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                                                             | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician if you feel unwell. |
| <b>Skin contact</b>                                                           | In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops and persists.                                                                                                                                                                                                    |
| <b>Eye contact</b>                                                            | Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists.                                                                                                                                                                                                                                      |
| <b>Ingestion</b>                                                              | Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.                                                                                                                                     |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin. Rash. Symptoms of overexposure can include shortness of breath, drowsiness, headaches, confusion, decreased coordination, visual disturbances and vomiting, and are reversible if exposure is stopped.                                                                        |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim under observation. Symptoms may be delayed.                                                                                                                                                                                                                                   |
| <b>General information</b>                                                    | In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.                                                                                                                                                                      |

### 5. Fire-fighting measures

|                                                                      |                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>                                  | Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).                                                                                                                                                                   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                                                                                                                                                                                       |
| <b>Specific hazards arising from the chemical</b>                    | By heating and fire, harmful vapors/gases may be formed. Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back.                                                                        |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.           |
| <b>Fire fighting equipment/instructions</b>                          | In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. |

|                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specific methods</b>                                                      | Use standard firefighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. In the event of fire and/or explosion do not breathe fumes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>General fire hazards</b>                                                  | Flammable liquid and vapor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>6. Accidental release measures</b>                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Personal precautions, protective equipment and emergency procedures</b>   | Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Methods and materials for containment and cleaning up</b>                 | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.<br><br>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift. Following product recovery, flush area with water.<br><br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. |
| <b>Environmental precautions</b>                                             | Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>7. Handling and storage</b>                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Precautions for safe handling</b>                                         | Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist or vapor. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.                                                                                                                                                                                                                                                                                                                                                             |
| <b>Conditions for safe storage, including any incompatibilities</b>          | Keep away from heat, sparks and open flame. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep in an area equipped with sprinklers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>8. Exposure controls/personal protection</b>                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Occupational exposure limits</b>                                          | No exposure limits noted for ingredient(s).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Biological limit values</b>                                               | No biological exposure limits noted for the ingredient(s).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Appropriate engineering controls</b>                                      | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Individual protection measures, such as personal protective equipment</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Eye/face protection</b>                                                   | Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Skin protection</b>                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Hand protection</b>                                                       | Chemical resistant gloves are recommended.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Other</b>                                                                 | Wear suitable protective clothing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Respiratory protection</b>                                                | No personal respiratory protective equipment normally required. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Thermal hazards</b>                                                       | Not applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

**General hygiene considerations**

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance**

|                       |                   |
|-----------------------|-------------------|
| <b>Physical state</b> | Liquid.           |
| <b>Form</b>           | Liquid.           |
| <b>Color</b>          | Clear, Off-white. |

**Odor** Orange

**Odor threshold** Not established

**pH** Not applicable

**Melting point/freezing point** Not established

**Initial boiling point and boiling range** > 302 °F (> 150 °C)

**Flash point** 104.0 °F (40.0 °C) Tag Closed Cup

**Evaporation rate** > 0.1 BuAc

**Flammability (solid, gas)** Not available.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** 0.7 %

**Flammability limit - upper (%)** 6 %

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** < 5 mm Hg @ 20°C

**Vapor density** > 1 (air = 1)

**Relative density** Not available.

**Solubility(ies)**

**Solubility (water)** < 15 %

**Partition coefficient (n-octanol/water)** Not established

**Auto-ignition temperature** > 392 °F (> 200 °C)

**Decomposition temperature** Not established

**Viscosity** < 3 cSt @ 25°C

**Other information**

**Heat of combustion** > 30 kJ/g

**Percent volatile** 100 %

**Specific gravity** 0.82 - 0.86 @ 20°C

**VOC (Weight %)** 100 % per U.S. State and Federal Consumer Product Regulations  
CARB

**10. Stability and reactivity**

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions. Risk of ignition.

**Possibility of hazardous reactions** Hazardous polymerization does not occur.

**Conditions to avoid** Heat, flames and sparks. Avoid temperatures exceeding the flash point.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

|                     |                                                                     |
|---------------------|---------------------------------------------------------------------|
| <b>Inhalation</b>   | May cause drowsiness and dizziness.                                 |
| <b>Skin contact</b> | Causes skin irritation. May cause sensitization by skin contact.    |
| <b>Eye contact</b>  | Causes eye irritation.                                              |
| <b>Ingestion</b>    | Harmful if swallowed. May be fatal if swallowed and enters airways. |

|                                                                                     |                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Defatting of the skin. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Information on toxicological effects

|                       |                                   |
|-----------------------|-----------------------------------|
| <b>Acute toxicity</b> | Not expected to be acutely toxic. |
|-----------------------|-----------------------------------|

| Components                                                    | Species                                                                                                          | Test Results           |
|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------|
| 3-Methoxy-3-methyl-1-butanol (MMB) (CAS 56539-66-3)           |                                                                                                                  |                        |
| <u>Acute</u>                                                  |                                                                                                                  |                        |
| <b>Dermal</b>                                                 |                                                                                                                  |                        |
| LD50                                                          | Rat                                                                                                              | > 2000 mg/kg, 24 Hours |
| <b>Oral</b>                                                   |                                                                                                                  |                        |
| LD50                                                          | Mouse                                                                                                            | 5830 mg/kg             |
|                                                               | Rat                                                                                                              | > 2000 mg/kg           |
| Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)     |                                                                                                                  |                        |
| <u>Acute</u>                                                  |                                                                                                                  |                        |
| <b>Dermal</b>                                                 |                                                                                                                  |                        |
| LD50                                                          | Rabbit                                                                                                           | > 2000 mg/kg           |
|                                                               |                                                                                                                  | > 2000 mg/kg, 24 Hours |
| <b>Inhalation</b>                                             |                                                                                                                  |                        |
| <i>Aerosol</i>                                                |                                                                                                                  |                        |
| LC50                                                          | Cat                                                                                                              | > 6.4 mg/l, 6 Hours    |
|                                                               | Rat                                                                                                              | > 7.5 mg/l, 6 Hours    |
|                                                               |                                                                                                                  | > 4.3 mg/l, 4 Hours    |
| <i>Vapor</i>                                                  |                                                                                                                  |                        |
| LC50                                                          | Rat                                                                                                              | > 0.1 mg/l, 8 Hours    |
| <b>Oral</b>                                                   |                                                                                                                  |                        |
| LD50                                                          | Rat                                                                                                              | > 5000 mg/kg           |
| d-limonene (CAS 5989-27-5)                                    |                                                                                                                  |                        |
| <u>Acute</u>                                                  |                                                                                                                  |                        |
| <b>Oral</b>                                                   |                                                                                                                  |                        |
| LD50                                                          | Mouse                                                                                                            | 5600 - 6600 mg/kg      |
|                                                               | Rat                                                                                                              | > 2000 mg/kg           |
| <b>Skin corrosion/irritation</b>                              | Causes skin irritation.                                                                                          |                        |
| <b>Serious eye damage/eye irritation</b>                      | Causes serious eye irritation.                                                                                   |                        |
| <b>Respiratory or skin sensitization</b>                      |                                                                                                                  |                        |
| <b>Respiratory sensitization</b>                              | Not a respiratory sensitizer.                                                                                    |                        |
| <b>Skin sensitization</b>                                     | May cause sensitization by skin contact.                                                                         |                        |
| <b>Germ cell mutagenicity</b>                                 | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |                        |
| <b>Carcinogenicity</b>                                        | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.                                  |                        |
| <b>IARC Monographs. Overall Evaluation of Carcinogenicity</b> |                                                                                                                  |                        |
| d-limonene (CAS 5989-27-5)                                    | 3 Not classifiable as to carcinogenicity to humans.                                                              |                        |

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

|                                                           |                                                                                                                                                                 |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reproductive toxicity</b>                              | This product is not expected to cause reproductive or developmental effects.                                                                                    |
| <b>Specific target organ toxicity - single exposure</b>   | Narcotic effects.                                                                                                                                               |
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified.                                                                                                                                                 |
| <b>Aspiration hazard</b>                                  | May be harmful if swallowed and enters airways. If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death. |
| <b>Chronic effects</b>                                    | Prolonged exposure may cause chronic effects.                                                                                                                   |

**12. Ecological information**

|                    |                                                  |
|--------------------|--------------------------------------------------|
| <b>Ecotoxicity</b> | Toxic to aquatic life with long lasting effects. |
|--------------------|--------------------------------------------------|

| Components                                                | Species                       |                                                     | Test Results                 |
|-----------------------------------------------------------|-------------------------------|-----------------------------------------------------|------------------------------|
| Distillates Petroleum Hydrotreated Light (CAS 64742-47-8) |                               |                                                     |                              |
| Aquatic                                                   |                               |                                                     |                              |
| Fish                                                      | LC50                          | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 2.9 mg/l, 96 hours           |
| d-limonene (CAS 5989-27-5)                                |                               |                                                     |                              |
| Aquatic                                                   |                               |                                                     |                              |
| Crustacea                                                 | EC50                          | Water flea (Daphnia pulex)                          | 69.6 mg/l, 48 hours          |
| Fish                                                      | LC50                          | Fathead minnow (Pimephales promelas)                | 0.619 - 0.796 mg/l, 96 hours |
| Persistence and degradability                             | Not inherently biodegradable. |                                                     |                              |
| Bioaccumulative potential                                 | No data available.            |                                                     |                              |
| Partition coefficient n-octanol / water (log Kow)         |                               |                                                     |                              |
| d-limonene                                                | 4.232                         |                                                     |                              |
| Mobility in soil                                          | Readily absorbed into soil.   |                                                     |                              |
| Other adverse effects                                     | None known.                   |                                                     |                              |

**13. Disposal considerations**

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| <b>Hazardous waste code</b>                  | D001: Waste Flammable material with a flash point <140 F                                                                                                                                                                                                                                                                                                                                                         |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).                                                                                                                                                                                                 |
| <b>Contaminated packaging</b>                | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.                                                                                                                                                                                                       |

**14. Transport information**

|                                     |                                                                                                                                                 |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DOT</b>                          |                                                                                                                                                 |
| <b>UN number</b>                    | UN1993                                                                                                                                          |
| <b>UN proper shipping name</b>      | Flammable liquids, n.o.s. (d-limonene, Naptha)                                                                                                  |
| <b>Transport hazard class(es)</b>   |                                                                                                                                                 |
| <b>Class</b>                        | 3                                                                                                                                               |
| <b>Subsidiary risk</b>              | -                                                                                                                                               |
| <b>Label(s)</b>                     | 3                                                                                                                                               |
| <b>Packing group</b>                | III                                                                                                                                             |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | B1, B52, IB3, T4, TP1, TP29                                                                                                                     |

|                      |     |
|----------------------|-----|
| Packaging exceptions | 150 |
| Packaging non bulk   | 203 |
| Packaging bulk       | 242 |

May be reclassified as combustible liquid for domestic transport.

#### IATA

|                              |                                                                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| UN number                    | UN1993                                                                                                                                          |
| UN proper shipping name      | Flammable liquid, n.o.s. (d-limonene, Naptha)                                                                                                   |
| Transport hazard class(es)   |                                                                                                                                                 |
| Class                        | 3                                                                                                                                               |
| Subsidiary risk              | -                                                                                                                                               |
| Packing group                | III                                                                                                                                             |
| Environmental hazards        | Yes                                                                                                                                             |
| ERG Code                     | 3L                                                                                                                                              |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| Other information            |                                                                                                                                                 |
| Passenger and cargo aircraft | Allowed with restrictions.                                                                                                                      |
| Cargo aircraft only          | Allowed with restrictions.                                                                                                                      |

#### IMDG

|                                                                          |                                                                                                                                                 |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| UN number                                                                | UN1993                                                                                                                                          |
| UN proper shipping name                                                  | FLAMMABLE LIQUID, N.O.S. (d-limonene, Naptha), MARINE POLLUTANT                                                                                 |
| Transport hazard class(es)                                               |                                                                                                                                                 |
| Class                                                                    | 3                                                                                                                                               |
| Subsidiary risk                                                          | -                                                                                                                                               |
| Packing group                                                            | III                                                                                                                                             |
| Environmental hazards                                                    |                                                                                                                                                 |
| Marine pollutant                                                         | Yes                                                                                                                                             |
| EmS                                                                      | F-E, S-E                                                                                                                                        |
| Special precautions for user                                             | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not available.                                                                                                                                  |

#### DOT



#### IATA; IMDG



## Marine pollutant



### General information

DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** Yes

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

#### US. Massachusetts RTK - Substance List

Not regulated.

#### US. New Jersey Worker and Community Right-to-Know Act

Not listed.

#### US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

#### US. Rhode Island RTK

Not regulated.

#### US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.



## International Inventories

| Country(s) or region        | Inventory name                                                         | On inventory (yes/no)* |
|-----------------------------|------------------------------------------------------------------------|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)                                         | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)                                          | Yes                    |
| New Zealand                 | New Zealand Inventory                                                  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 03-22-2016

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**Disclaimer** The information provided in this 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.

**Revision information** Product and Company Identification: Product and Company Identification  
Composition/information on ingredients: Component information  
Fire-fighting measures: Unsuitable extinguishing media  
Accidental release measures: Personal precautions, protective equipment and emergency procedures  
Accidental release measures: Environmental precautions  
Handling and storage: Conditions for safe storage, including any incompatibilities  
Exposure controls/personal protection: Other  
Toxicological information: Inhalation  
Transport Information: Material Transportation Information  
GHS: Classification