

# SAFETY DATA SHEET

## 1. Identification

**Product number** 1000024840  
**Product identifier** **14 OZ ROYAL BD-L45 BRAKE CLEANER LB 12PK**  
**Company information** Royal Manufacturing Company LP  
P.O. Box 693  
Tulsa , OK 74101-0693 United States  
**Company phone** General Assistance 1-918-584-2671  
**Emergency telephone US** 1-866-836-8855  
**Emergency telephone outside US** 1-952-852-4646  
**Version #** 01  
**Recommended use** Cleaner  
**Recommended restrictions** None known.

## 2. Hazard(s) identification

|                              |  |                             |
|------------------------------|--|-----------------------------|
| <b>Physical hazards</b>      | Flammable aerosols                                     | Category 1                  |
| <b>Health hazards</b>        | Skin corrosion/irritation                              | Category 2                  |
|                              | Serious eye damage/eye irritation                      | Category 2A                 |
|                              | Reproductive toxicity (the unborn child)               | Category 2                  |
|                              | Specific target organ toxicity, single exposure        | Category 3 narcotic effects |
|                              | Specific target organ toxicity, repeated exposure      | Category 2                  |
|                              | Aspiration hazard                                      | Category 1                  |
| <b>Environmental hazards</b> | Hazardous to the aquatic environment, acute hazard     | Category 2                  |
|                              | Hazardous to the aquatic environment, long-term hazard | Category 2                  |
| <b>OSHA defined hazards</b>  | Not classified.  |                             |

### Label elements



**Signal word** Danger

**Hazard statement** Extremely flammable aerosol. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

**Precautionary statement**

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Do not breathe the mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** If swallowed: Immediately call a poison center/doctor. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Specific treatment (see this label). Do NOT induce vomiting. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

|  |   |
|--|---|
| <b>Storage</b>                                   | Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  |
| <b>Disposal</b>                                  | Dispose of contents/container in accordance with local/regional/national/international regulations.   |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.                     |
| <b>Supplemental information</b>                  | 30.84% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 30.84% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name                        | Common name and synonyms | CAS number  | %        |
|--------------------------------------|--------------------------|-------------|----------|
| Acetone                              |                          | 67-64-1     | 40 - 60  |
| Heptane, branched, cyclic and linear |                          | 426260-76-6 | 20 - 40  |
| n-Heptane                            |                          | 142-82-5    | 10 - 20  |
| Carbon Dioxide                       |                          | 124-38-9    | 2.5 - 10 |
| Toluene                              |                          | 108-88-3    | 1 - 2.5  |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

|   |   |
|---|---|
| <b>Inhalation</b>   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.   |
| <b>Skin contact</b>   | Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.   |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.   |
| <b>Ingestion</b>  | Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. 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>                     | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.  |
| <b>General information</b>  | IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.   |

### 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Alcohol resistant foam. Water fog. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.  |
| <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>                    | Contents under pressure. Pressurized container may explode when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. |
| <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.  |
| <b>Fire-fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.  |

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

**General fire hazards** Extremely flammable aerosol.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Remove all possible sources of ignition in the surrounding area. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up** Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

**Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

**Precautions for safe handling** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Should be handled in closed systems, if possible. Pregnant or breastfeeding women must not handle this product. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

**Conditions for safe storage, including any incompatibilities** Level 2 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS). Level 3 Aerosol.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components                    | Type | Value                  |
|-------------------------------|------|------------------------|
| Acetone (CAS 67-64-1)         | PEL  | 2400 mg/m3<br>1000 ppm |
| Carbon Dioxide (CAS 124-38-9) | PEL  | 9000 mg/m3<br>5000 ppm |
| n-Heptane (CAS 142-82-5)      | PEL  | 2000 mg/m3<br>500 ppm  |

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

| Components             | Type           | Value              |
|------------------------|----------------|--------------------|
| Toluene (CAS 108-88-3) | Ceiling<br>TWA | 300 ppm<br>200 ppm |

#### US. ACGIH Threshold Limit Values

| Components                    | Type        | Value                 |
|-------------------------------|-------------|-----------------------|
| Acetone (CAS 67-64-1)         | STEL<br>TWA | 750 ppm<br>500 ppm    |
| Carbon Dioxide (CAS 124-38-9) | STEL<br>TWA | 30000 ppm<br>5000 ppm |
| n-Heptane (CAS 142-82-5)      | STEL<br>TWA | 500 ppm<br>400 ppm    |
| Toluene (CAS 108-88-3)        | TWA         | 20 ppm                |

#### US. NIOSH: Pocket Guide to Chemical Hazards

| Components                    | Type           | Value  |
|-------------------------------|----------------|--|
| Acetone (CAS 67-64-1)         | TWA            | 590 mg/m3<br>250 ppm                               |
| Carbon Dioxide (CAS 124-38-9) | STEL<br>TWA    | 54000 mg/m3<br>30000 ppm<br>9000 mg/m3<br>5000 ppm |
| n-Heptane (CAS 142-82-5)      | Ceiling<br>TWA | 1800 mg/m3<br>440 ppm<br>350 mg/m3<br>85 ppm       |
| Toluene (CAS 108-88-3)        | STEL<br>TWA    | 560 mg/m3<br>150 ppm<br>375 mg/m3<br>100 ppm       |

### Biological limit values

#### ACGIH Biological Exposure Indices

| Components             | Value     | Determinant               | Specimen            | Sampling Time |
|------------------------|-----------|---------------------------|---------------------|---------------|
| Acetone (CAS 67-64-1)  | 50 mg/l   | Acetone                   | Urine               | *             |
| Toluene (CAS 108-88-3) | 0.3 mg/g  | o-Cresol, with hydrolysis | Creatinine in urine | *             |
|                        | 0.03 mg/l | Toluene                   | Urine               | *             |
|                        | 0.02 mg/l | Toluene                   | Blood               | *             |

\* - For sampling details, please see the source document.

### Exposure guidelines

#### US - California OELs: Skin designation

Toluene (CAS 108-88-3)

Can be absorbed through the skin.

#### US - Minnesota Haz Subs: Skin designation applies

Toluene (CAS 108-88-3)

Skin designation applies.

|  |  |
|--|--|
| <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. Eye wash facilities and emergency shower must be available when handling this product. |
| <b>Individual protection measures, such as personal protective equipment</b> |  |
| <b>Eye/face protection</b>   | Chemical respirator with organic vapor cartridge and full facepiece.   |
| <b>Hand protection</b>   | Wear appropriate chemical resistant gloves.  |
| <b>Skin protection</b>   |  |
| <b>Other</b>   | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.   |
| <b>Skin protection</b>   |  |
| <b>Respiratory protection</b>  | Chemical respirator with organic vapor cartridge and full facepiece.   |
| <b>Thermal hazards</b>   | Wear appropriate thermal protective clothing, when necessary.  |
| <b>General hygiene considerations</b>  | 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>   | Aerosol.                       |
| <b>Color</b>  | Not available.                 |
| <b>Odor</b>   | Not available.                 |
| <b>Odor threshold</b>                               | Not available.                 |
| <b>pH</b>   | Not available.                 |
| <b>Melting point/freezing point</b>                 | Not available.                 |
| <b>Initial boiling point and boiling range</b>      | 145.77 °F (63.21 °C) estimated |
| <b>Flash point</b>                                  | 15.8 °F (-9.0 °C) estimated    |
| <b>Evaporation rate</b>                             | Not available.                 |
| <b>Flammability (solid, gas)</b>                    | Not available.                 |
| <b>Upper/lower flammability or explosive limits</b> |                                |
| <b>Flammability limit - lower (%)</b>               | Not available.                 |
| <b>Flammability limit - upper (%)</b>               | Not available.                 |
| <b>Explosive limit - lower (%)</b>                  | Not available.                 |
| <b>Explosive limit - upper (%)</b>                  | Not available.                 |
| <b>Vapor pressure</b>                               | 38 - 68 psig @20C estimated    |
| <b>Vapor density</b>                                | Not available.                 |
| <b>Relative density</b>                             | 0.655 g/cm3 estimated          |
| <b>Solubility(ies)</b>                              |                                |
| <b>Solubility (water)</b>                           | Not available.                 |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.                 |
| <b>Auto-ignition temperature</b>                    | Not available.                 |
| <b>Decomposition temperature</b>                    | Not available.                 |
| <b>Viscosity</b>                                    | Not available.                 |
| <b>Other information</b>                            |                                |
| <b>Density</b>                                      | 0.66 g/cm3 estimated           |
| <b>Flammability class</b>                           | Flammable IB estimated         |
| <b>Heat of combustion (NFPA 30B)</b>                | 21.79 kJ/g estimated           |

|                  |                   |
|------------------|-------------------|
| Percent volatile | 49.45 % estimated |
| Specific gravity | 0.655 estimated   |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.  |
| <b>Conditions to avoid</b>                | Avoid temperatures exceeding the flash point. Contact with incompatible materials.            |
| <b>Incompatible materials</b>             | Acids. Strong oxidizing agents. Aluminum.   |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |   |
|---------------------|---|
| <b>Ingestion</b>    | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.  |
| <b>Inhalation</b>   | May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Narcotic effects. Prolonged inhalation may be harmful. |
| <b>Skin contact</b> | Causes skin irritation.   |
| <b>Eye contact</b>  | Causes serious eye irritation.  |

|   |   |
|---|---|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
|---|---|

### Information on toxicological effects

|                       |   |
|-----------------------|---|
| <b>Acute toxicity</b> | May be fatal if swallowed and enters airways. Narcotic effects. |
|-----------------------|---|

| Product  | Species    | Test Results  |
|--|------------|---|
| 14 OZ ROYAL BD-L45 BRAKE CLEANER LB 12PK (CAS Mixture) |            |   |
| <b>Acute</b>   |            |   |
| <i>Dermal</i>  |            |   |
| LD50   | Guinea pig | 15568.1338 mg/kg, 24 Hours estimated<br>19.7065 ml/kg, 24 Hours estimated |
|  | Rabbit     | 6013.6714 mg/kg, 24 Hours estimated<br>19.7065 ml/kg, 24 Hours estimated  |
| <i>Inhalation</i>                                      |            |   |
| LC50   | Rat        | 122.9882 mg/l, 4 Hours estimated<br>112.9622 mg/l, 3 Hours estimated      |
|  |            |   |
| <i>Oral</i>  |            |   |
| LD50   | Rat        | 12159.3291 mg/kg estimated<br>4.6122 ml/kg estimated                      |

| Components            | Species    | Test Results                                    |
|-----------------------|------------|---|
| Acetone (CAS 67-64-1) |            |   |
| <b>Acute</b>          |            |   |
| <i>Dermal</i>         |            |   |
| LD50                  | Guinea pig | > 7426 mg/kg, 24 Hours<br>> 9.4 ml/kg, 24 Hours |
|                       | Rabbit     | > 7426 mg/kg, 24 Hours<br>> 9.4 ml/kg, 24 Hours |
| <i>Inhalation</i>     |            |   |
| LC50                  | Rat        | 55700 ppm, 3 Hours<br>132 mg/l, 3 Hours         |
|                       |            |   |

| Components                | Species | Test Results  |
|---------------------------|---------|---|
|                           |         | 50.1 mg/l   |
| <i>Oral</i><br>LD50       | Rat     | 5800 mg/kg<br>2.2 ml/kg                               |
| n-Heptane (CAS 142-82-5)  |         |   |
| <b>Acute</b>              |         |   |
| <i>Dermal</i><br>LD50     | Rabbit  | > 2000 mg/kg, 24 Hours                                |
| <i>Inhalation</i><br>LC50 | Rat     | > 29.29 mg/l, 4 Hours                                 |
| Toluene (CAS 108-88-3)    |         |   |
| <b>Acute</b>              |         |   |
| <i>Dermal</i><br>LD50     | Rabbit  | > 5000 mg/kg, 24 Hours                                |
| <i>Inhalation</i><br>LC50 | Mouse   | 6405 - 7436 ppm, 6 Hours<br>5320 ppm, 8 Hours         |
|                           | Rat     | 5879 - 6281 ppm, 6 Hours<br>12.5 - 28.8 mg/l, 4 Hours |
| <i>Oral</i><br>LD50       | Rat     | 5000 mg/kg  |

\* Estimates for product may be based on additional component data not shown.

|   |  |
|---|--|
| <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 available.   |
| <b>Skin sensitization</b>   | This product is not expected to cause skin sensitization.  |
| <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>         |  |
| Toluene (CAS 108-88-3)  | 3 Not classifiable as to carcinogenicity to humans.  |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> |  |
| Not listed.   |  |
| <b>Reproductive toxicity</b>  | Suspected of damaging the unborn child.  |
| <b>Specific target organ toxicity - single exposure</b>               | May cause drowsiness and dizziness.  |
| <b>Specific target organ toxicity - repeated exposure</b>             | May cause damage to organs through prolonged or repeated exposure.   |
| <b>Aspiration hazard</b>  | May be fatal if swallowed and enters airways.  |
| <b>Chronic effects</b>  | Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure.          |

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

| Product  | Species    | Test Results                        |
|--|------------|-------------------------------------|
| 14 OZ ROYAL BD-L45 BRAKE CLEANER LB 12PK (CAS Mixture) |            |                                     |
| <b>Aquatic</b>   |            |                                     |
| Algae  | IC50 Algae | 24714.6191 mg/L, 72 Hours estimated |

| Product                  |      | Species   | Test Results                       |
|--------------------------|------|---|------------------------------------|
| Crustacea                | EC50 | Daphnia   | 527.0469 mg/l, 48 hours estimated  |
| Fish                     | LC50 | Fish  | 3035.2224 mg/l, 96 hours estimated |
| Components               |      | Species   | Test Results                       |
| Acetone (CAS 67-64-1)    |      |   |                                    |
| <b>Aquatic</b>           |      |   |                                    |
| Crustacea                | EC50 | Water flea (Daphnia magna)                          | 21.6 - 23.9 mg/l, 48 hours         |
| Fish                     | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 4740 - 6330 mg/l, 96 hours         |
| n-Heptane (CAS 142-82-5) |      |   |                                    |
| <b>Aquatic</b>           |      |   |                                    |
| Fish                     | LC50 | Mozambique tilapia (Tilapia mossambica)             | 375 mg/l, 96 hours                 |
| Toluene (CAS 108-88-3)   |      |   |                                    |
| <b>Aquatic</b>           |      |   |                                    |
| Algae                    | IC50 | Algae   | 433.0001 mg/L, 72 Hours            |
| Crustacea                | EC50 | Daphnia   | 7.645 mg/L, 48 Hours               |
|                          |      | Water flea (Daphnia magna)                          | 5.46 - 9.83 mg/l, 48 hours         |
| Fish                     | LC50 | Coho salmon,silver salmon (Oncorhynchus kisutch)    | 8.11 mg/l, 96 hours                |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Partition coefficient n-octanol / water (log Kow)**

|           |       |
|-----------|-------|
| Acetone   | -0.24 |
| n-Heptane | 4.66  |
| Toluene   | 2.73  |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. 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.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**US RCRA Hazardous Waste U List: Reference**

|                        |      |
|------------------------|------|
| Acetone (CAS 67-64-1)  | U002 |
| Toluene (CAS 108-88-3) | U220 |

**Waste from residues / unused products** 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).

**Contaminated packaging** 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. Do not re-use empty containers.

### 14. Transport information

**DOT**

|                                   |                     |
|-----------------------------------|---------------------|
| <b>UN number</b>                  | UN1950              |
| <b>UN proper shipping name</b>    | Aerosols, flammable |
| <b>Transport hazard class(es)</b> |                     |
| <b>Class</b>                      | 2.1                 |



|                                     |   |
|-------------------------------------|---|
| <b>Subsidiary risk</b>              | -   |
| <b>Label(s)</b>                     | None  |
| <b>Packing group</b>                | Not applicable.   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | N82   |
| <b>Packaging exceptions</b>         | 306   |
| <b>Packaging non bulk</b>           | None  |
| <b>Packaging bulk</b>               | None  |

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

#### IATA

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, flammable   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Label(s)</b>                     | 2.1   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Environmental hazards</b>        | Yes   |
| <b>ERG Code</b>                     | 10L   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Other information</b>            |   |
| <b>Passenger and cargo aircraft</b> | Allowed.  |
| <b>Cargo aircraft only</b>          | Allowed.  |
| <b>Packaging Exceptions</b>         | LTD QTY   |

#### IMDG

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | AEROSOLS  |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Label(s)</b>                     | None  |
| <b>Packing group</b>                | Not applicable.   |
| <b>Environmental hazards</b>        |   |
| <b>Marine pollutant</b>             | Yes   |
| <b>EmS</b>                          | F-D, S-U  |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Packaging Exceptions</b>         | LTD QTY   |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

#### DOT



IATA; IMDG



Marine pollutant



General information

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.

All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

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

Acetone (CAS 67-64-1)

Listed.

Toluene (CAS 108-88-3)

Listed.

### SARA 304 Emergency release notification

Not regulated.

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

Not listed.

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

Hazard categories

Immediate Hazard - Yes

Delayed Hazard - Yes

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

### SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|---------------|------------|----------|
| Toluene       | 108-88-3   | 1 - 2.5  |

### Other federal regulations

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

Toluene (CAS 108-88-3)

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

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Acetone (CAS 67-64-1) 6532  
Toluene (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Acetone (CAS 67-64-1) 35 %WV  
Toluene (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

Acetone (CAS 67-64-1) 6532  
Toluene (CAS 108-88-3) 594

**US state regulations**

**US. Massachusetts RTK - Substance List**

Acetone (CAS 67-64-1)  
Carbon Dioxide (CAS 124-38-9)  
n-Heptane (CAS 142-82-5)  
Toluene (CAS 108-88-3)

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

Acetone (CAS 67-64-1)  
Carbon Dioxide (CAS 124-38-9)  
n-Heptane (CAS 142-82-5)  
Toluene (CAS 108-88-3)

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

Acetone (CAS 67-64-1)  
Carbon Dioxide (CAS 124-38-9)  
n-Heptane (CAS 142-82-5)  
Toluene (CAS 108-88-3)

**US. Rhode Island RTK**

Acetone (CAS 67-64-1)  
Toluene (CAS 108-88-3)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Toluene (CAS 108-88-3) Listed: January 1, 1991

**US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**

Toluene (CAS 108-88-3) Listed: August 7, 2009

**International Inventories**

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada                      | Domestic Substances List (DSL)   | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | No                     |
| New Zealand                 | New Zealand Inventory  | No                     |
| 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 09-11-2014  
Version # 01

**Disclaimer**

Sprayway cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. 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: Alternate Trade Names