

SAFETY DATA SHEET

1. Identification

| - | | | | |
|---------------------------------|---|----------------------|--|--|
| Product identifier | Brakleen® Brake Parts Cleaner - Non-Chlorinated | | | |
| Other means of identification | | | | |
| Product Code | No. 05084 (Item# 1003696) | | | |
| Recommended use | Brake cleaner | | | |
| Recommended restrictions | None known. | | | |
| Manufacturer/Importer/Supplier | /Distributor information | | | |
| Manufactured or sold by: | | | | |
| Company name | CRC Industries, Inc. | CRC Industries, Inc. | | |
| Address | 885 Louis Dr. | | | |
| | Warminster, PA 18974 US | | | |
| Telephone | | | | |
| General Information | 215-674-4300 | | | |
| Technical Assistance | 800-521-3168 | | | |
| Customer Service | 800-272-4620 | | | |
| 24-Hour Emergency (CHEMTREC) | 800-424-9300 (US) | | | |
| Website | www.crcindustries.com | | | |
| 2. Hazard(s) identification | n | | | |
| Physical hazards | Flammable aerosols | Category 1 | | |
| | Gases under pressure | Compressed gas | | |
| Health hazards | Acute toxicity, oral | Category 3 | | |
| | Skin corrosion/irritation | Category 2 | | |
| | Serious eye damage/eye irritation | Category 2A | | |

| | Skin corrosion/irritation | Category 2 |
|-----------------------|--|--|
| | Serious eye damage/eye irritation | Category 2A |
| | Reproductive toxicity (fertility, the unborn child) | Category 2 |
| | Specific target organ toxicity, single exposure | Category 1 (central nervous system, eyes) |
| | Specific target organ toxicity, single exposure | Category 3 narcotic effects |
| | Specific target organ toxicity, repeated exposure | Category 2 (central nervous system, kidney, peripheral nervous system) |
| | Aspiration hazard | Category 1 |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard | Category 2 |
| | Hazardous to the aquatic environment, long-term hazard | Category 2 |
| OSHA defined hazards | Not classified. | |

Label elements



Danger

Hazard statement

Signal word

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Toxic if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child. Causes damage to organs (central nervous system, eyes). May cause damage to organs (central nervous system) 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 mist or vapor. Do not apply while equipment is energized. Extinguish all flames, pilot lights, and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment. |
| Response | If swallowed: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. 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 eye irritation persists: Get medical advice/attention. If exposed: Call a poison center/doctor. Collect spillage. |
| Storage | Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Exposure to high temperature may cause can to burst. |
| Disposal | Dispose of contents/container in accordance with local/regional/national regulations. |
| Hazard(s) not otherwise classified (HNOC) | 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. |
| Supplemental information | None. |
| | |

3. Composition/information on ingredients

Mixtures

| Chemical name Common name and synonyms | CAS number | % |
|--|-------------|---------|
| acetone | 67-64-1 | 40 - 50 |
| methanol | 67-56-1 | 10 - 20 |
| carbon dioxide | 124-38-9 | 5 - 10 |
| toluene | 108-88-3 | 5 - 10 |
| heptane, branched, cyclic and linear | 426260-76-6 | 3 - 5 |
| naphtha (petroleum), hydrotreated light | 64742-49-0 | 3 - 5 |
| n-heptane | 142-82-5 | 3 - 5 |
| solvent naphtha (petroleum), light aliph. | 64742-89-8 | 3 - 5 |
| 2-methylhexane | 591-76-4 | < 1 |
| 3-methylhexane | 589-34-4 | < 1 |
| 2,3-dimethylpentane | 565-59-3 | < 0.2 |
| 3-ethylpentane | 617-78-7 | < 0.2 |

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell. |
|--|---|
| Skin contact | Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. |
| Eye contact | 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. |
| Ingestion | 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. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. |
| Most important symptoms/effects, acute and delayed | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Edema. Prolonged exposure may cause chronic effects. |

| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
|--|--|
| General information | Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. 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. Wash contaminated clothing before reuse. |
| E Eiro fighting magazuraa | |

5. Fire-fighting measures

| Suitable extinguishing media | Water fog. Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. |
|--|---|
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | Contents under pressure. Pressurized container may rupture 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. 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. During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. |
| Fire-fighting equipment/instructions | In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. |
| General fire hazards | Extremely flammable aerosol. Contents under pressure. Pressurized container may rupture when exposed to heat or flame. |

6. Accidental release measures

| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. 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. 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 | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Prevent product from entering drains. Stop the flow of material, if this is without risk. 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. 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. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, see the product label. Level 3 Aerosol.

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. These alone may be insufficient to remove static electricity. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

| Components | ontaminants (29 CFR 1910.1 Type | , Value | |
|--|---|---|--|
| - | - | | |
| acetone (CAS 67-64-1) | PEL | 2400 mg/m3 | |
| | | 1000 ppm | |
| carbon dioxide (CAS 124-38-9) | PEL | 9000 mg/m3 | |
| | | 5000 ppm | |
| methanol (CAS 67-56-1) | PEL | 260 mg/m3 | |
| | | 200 ppm | |
| naphtha (petroleum), hydrotreated light (CAS 64742-49-0) | PEL | 400 mg/m3 | |
| | | 100 ppm | |
| n-heptane (CAS 142-82-5) | PEL | 2000 mg/m3 | |
| | · | 500 ppm | |
| solvent naphtha (petroleum), light aliph. | PEL | 400 mg/m3 | |
| (CAS 64742-89-8) | | | |
| | 200 | 100 ppm | |
| US. OSHA Table Z-2 (29 CFR 1910.10 Components | Type | Value | |
| • | - | | |
| toluene (CAS 108-88-3) | Ceiling | 300 ppm | |
| | TWA | 200 ppm | |
| US. ACGIH Threshold Limit Values | | | |
| Components | Туре | Value | |
| 2,3-dimethylpentane (CAS 565-59-3) | STEL | 500 ppm | |
| | TWA | 400 ppm | |
| 2-methylhexane (CAS 591-76-4) | STEL | 500 ppm | |
| | TWA | 400 ppm | |
| | | | |
| 3-ethylpentane (CAS | STEL | 500 ppm | |
| | STEL | 500 ppm | |
| 3-ethylpentane (CAS 617-78-7) | STEL TWA | | |
| 617-78-7) 3-methylhexane (CAS | | 500 ppm 400 ppm 500 ppm | |
| 617-78-7) 3-methylhexane (CAS | TWA | 400 ppm | |
| 617-78-7) 3-methylhexane (CAS 589-34-4) | TWA STEL TWA | 400 ppm 500 ppm 400 ppm | |
| 617-78-7) 3-methylhexane (CAS | TWA STEL TWA STEL | 400 ppm 500 ppm 400 ppm 500 ppm | |
| 617-78-7) 3-methylhexane (CAS 589-34-4) acetone (CAS 67-64-1) carbon dioxide (CAS | TWA STEL TWA | 400 ppm 500 ppm 400 ppm | |
| 617-78-7) 3-methylhexane (CAS 589-34-4) | TWA STEL TWA STEL TWA | 400 ppm 500 ppm 400 ppm 500 ppm 250 ppm | |
| 617-78-7) 3-methylhexane (CAS 589-34-4) acetone (CAS 67-64-1) carbon dioxide (CAS 124-38-9) | TWA STEL TWA STEL TWA STEL TWA | 400 ppm 500 ppm 400 ppm 500 ppm 250 ppm 30000 ppm 5000 ppm | |
| 617-78-7) 3-methylhexane (CAS 589-34-4) acetone (CAS 67-64-1) carbon dioxide (CAS | TWA STEL TWA STEL TWA STEL TWA STEL | 400 ppm 500 ppm 400 ppm 500 ppm 250 ppm 30000 ppm 5000 ppm 250 ppm | |
| 617-78-7) 3-methylhexane (CAS 589-34-4) acetone (CAS 67-64-1) carbon dioxide (CAS 124-38-9) methanol (CAS 67-56-1) | TWA STEL TWA STEL TWA STEL TWA STEL TWA | 400 ppm 500 ppm 400 ppm 500 ppm 250 ppm 30000 ppm 250 ppm 250 ppm 200 ppm | |
| 617-78-7) 3-methylhexane (CAS 589-34-4) acetone (CAS 67-64-1) carbon dioxide (CAS 124-38-9) | TWA STEL TWA STEL TWA STEL TWA STEL | 400 ppm 500 ppm 400 ppm 500 ppm 250 ppm 30000 ppm 5000 ppm 250 ppm | |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Туре | Value | |
|--|---------|-------------|--|
| acetone (CAS 67-64-1) | TWA | 590 mg/m3 | |
| | | 250 ppm | |
| carbon dioxide (CAS 124-38-9) | STEL | 54000 mg/m3 | |
| | | 30000 ppm | |
| | TWA | 9000 mg/m3 | |
| | | 5000 ppm | |
| methanol (CAS 67-56-1) | STEL | 325 mg/m3 | |
| | | 250 ppm | |
| | TWA | 260 mg/m3 | |
| | | 200 ppm | |
| naphtha (petroleum), hydrotreated light (CAS 64742-49-0) | TWA | 400 mg/m3 | |
| 04742-49-0) | | 100 ppm | |
| n-heptane (CAS 142-82-5) | Ceiling | 1800 mg/m3 | |
| | e e mig | 440 ppm | |
| | TWA | 350 mg/m3 | |
| | | 85 ppm | |
| solvent naphtha (petroleum), light aliph. (CAS 64742-89-8) | TWA | 400 mg/m3 | |
| | | 100 ppm | |
| toluene (CAS 108-88-3) | STEL | 560 mg/m3 | |
| · · · | | 150 ppm | |
| | TWA | 375 mg/m3 | |
| | | 100 ppm | |

Biological limit values

ACGIH Biological Exposure Indices

| Components | Value | Determinant | Specimen | Sampling Time | |
|------------------------|-----------|------------------------------|------------------------|---------------|--|
| acetone (CAS 67-64-1) | 25 mg/l | Acetone | Urine | * | |
| methanol (CAS 67-56-1) | 15 mg/l | Methanol | 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 d | lesignation | |
|----------------------------------|-------------------------------|---|
| methanol (CAS 67-56-1) | | Can be absorbed through the skin. |
| toluene (CAS 108-88-3) | | Can be absorbed through the skin. |
| US - Minnesota Haz Subs: S | kin designation applies | |
| methanol (CAS 67-56-1) | | Skin designation applies. |
| toluene (CAS 108-88-3) | | Skin designation applies. |
| US - Tennessee OELs: Skin | designation | |
| methanol (CAS 67-56-1) | | Can be absorbed through the skin. |
| US ACGIH Threshold Limit \ | /alues: Skin designation | |
| methanol (CAS 67-56-1) | | Can be absorbed through the skin. |
| US NIOSH Pocket Guide to | Chemical Hazards: Skin desig | nation |
| methanol (CAS 67-56-1) | | Can be absorbed through the skin. |
| Appropriate engineering controls | should be matched to conditio | cally 10 air changes per hour) should be ins. If applicable, use process enclosure |

opriate engineering
rolsGood 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. Provide
eyewash station. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

| Skin protection Hand protection | Wear protective gloves such as: Nitrile. Neoprene. Polyvinyl alcohol (PVA). | |
|------------------------------------|--|--|
| Other | Wear appropriate chemical resistant clothing. | |
| Respiratory protection | If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels. | |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. | |
| General hygiene considerations | Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. 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

| Physical state | Liquid. |
|--|------------------------------------|
| Form | Aerosol. |
| Color | Clear. |
| Odor | Solvent. |
| Odor threshold | Not available. |
| рН | Not available. |
| Melting point/freezing point | -144 °F (-97.8 °C) estimated |
| Initial boiling point and boiling range | 132.9 °F (56.1 °C) estimated |
| Flash point | < 0 °F (< -17.8 °C) Tag Closed Cup |
| Evaporation rate | Fast. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or exp | losive limits |
| Flammability limit - lower (%) | 1.1 % estimated |
| Flammability limit - upper (%) | 36 % estimated |
| Vapor pressure | 5157.4 hPa estimated |
| Vapor density | > 1 (air = 1) |
| Relative density | 0.84 estimated |
| Solubility(ies) | |
| Solubility (water) | Slightly soluble. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | 539.6 °F (282 °C) estimated |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Percent volatile | 91.1 % estimated |
| 10 Stability and reactivity | |

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. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | Heat, flames and sparks. Contact with incompatible materials. |
| Incompatible materials | Acids. Alkalies. Amines. Ammonia. Halogens. Aluminum. Magnesium. Zinc. Peroxides. Strong oxidizing agents. Reducing agents. |
| Hazardous decomposition products | Carbon oxides. Formaldehyde. |

11. Toxicological information

Information on likely routes of exposure

| Inhalation | May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. |
|--|---|
| Skin contact | Causes skin irritation. |
| Eye contact | Causes serious eye irritation. |
| Ingestion | Toxic if swallowed. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. |
| Symptoms related to the physical, chemical and toxicological characteristics | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. Edema. |

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. Narcotic effects.

| | , | , |
|----------------------------|-----------------------------------|--------------------|
| Components | Species | Test Results |
| 3-methylhexane (CAS 589- | 34-4) | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | > 2000 mg/kg |
| Oral | | |
| LD50 | Rat | > 2000 mg/kg |
| acetone (CAS 67-64-1) | | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Rabbit | 20000 mg/kg |
| Oral | - / | |
| LD50 | Rat | 5800 mg/kg |
| | and linear (CAS 426260-76-6) | |
| Acute | | |
| Dermal LD50 | Rabbit | > 2000 mg/kg |
| | Rabbit | > 2000 mg/kg |
| Inhalation LC50 | Rat | > 60 mg/l, 4 hours |
| | Rai | > 60 mg/l, 4 nours |
| Oral LD50 | Rat | > 5000 mg/kg |
| | | > 3000 mg/kg |
| <u>Acute</u> | treated light (CAS 64742-49-0) | |
| Dermal | | |
| LD50 | Rabbit | > 2000 mg/kg |
| n-heptane (CAS 142-82-5) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 3000 mg/kg |
| solvent naphtha (petroleum | ı), light aliph. (CAS 64742-89-8) | |
| Acute | , | |
| Dermal | | |
| LD50 | Rabbit | > 2000 mg/kg |
| Oral | | |
| LD50 | Rat | > 3000 mg/kg |
| | | |

| Components | Species | Test Results | |
|--|--|--|--|
| toluene (CAS 108-88-3) | | | |
| <u>Acute</u> | | | |
| Inhalation | | | |
| LC50 | Rat | 12.5 mg/l, 4 hours | |
| * Estimates for product may I | be based on additional compo | nent data not shown. | |
| Skin corrosion/irritation | Causes skin irritation. | | |
| Serious eye damage/eye irritation | Causes serious eye irritatio | n. | |
| Respiratory or skin sensitizatio | n | | |
| Respiratory sensitization | Not a respiratory sensitizer. | | |
| Skin sensitization | This product is not expected | d to cause skin sensitization. | |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. | | |
| Carcinogenicity | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. | | |
| IARC Monographs. Overall | Evaluation of Carcinogenici | ty | |
| toluene (CAS 108-88-3) | 3 Not classifiable as to carcinogenicity to humans. | | |
| | ed Substances (29 CFR 1910 | .1001-1052) | |
| Not regulated. | a man (NTD) Dan art an Car | | |
| Not listed. | ogram (NTP) Report on Carc | inogens | |
| Reproductive toxicity | Suspected of damaging fer | ility. Suspected of damaging the unborn child. | |
| Specific target organ toxicity - single exposure | Causes damage to organs | (central nervous system, eyes). May cause drowsiness and dizziness. | |
| Specific target organ toxicity - repeated exposure | May cause damage to orga through prolonged or repea | ns (central nervous system, kidney, peripheral nervous system) ted exposure. | |
| Aspiration hazard | | nd enters airways. If aspirated into lungs during swallowing or vomiting nonia, pulmonary injury or death. | |
| Chronic effects | May cause damage to orga be harmful. | ns through prolonged or repeated exposure. Prolonged inhalation may | |
| | | | |

12. Ecological information

| otoxicity | Toxic to a | quatic life with long lasting effects. | |
|--------------------------|-------------------|---|------------------------------|
| Components | | Species | Test Results |
| acetone (CAS 67-64-1) | | | |
| Aquatic | | | |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 4740 - 6330 mg/l, 96 hours |
| Acute | | | |
| Crustacea | EC50 | Daphnia magna | 10294 - 17704 mg/l, 48 hours |
| heptane, branched, cycli | c and linear (CAS | S 426260-76-6) | |
| Aquatic | | | |
| Acute | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 1.5 mg/l, 48 hours |
| methanol (CAS 67-56-1) | | | |
| Aquatic | | | |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 18000 - 20000 mg/l, 96 hours |
| Acute | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | > 10000 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 18000 - 20000 mg/l, 96 hours |

| Components | | Species | Test Results |
|--------------------------------------|--|--|---|
| naphtha (petroleum), hydr | otreated light (CA | AS 64742-49-0) | |
| Aquatic | | | |
| Acute | EC50 | Dephric | 1 - 10 mg/l, 48 hours |
| Crustacea | | Daphnia | 0 |
| Fish | LC50 | Fish | 1 - 10 mg/l, 96 hours |
| n-heptane (CAS 142-82-5 Aquatic |) | | |
| <i>Acute</i> Crustacea | EC50 | Water flea (Daphnia magna) | 1.5 mg/l, 48 hours |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | 3 · |
| solvent naphtha (petroleu | | · · · · / | 2.1 - 2.30 mg/l, 30 hours |
| Aquatic | ini), light aliph. (C | A3 04742-09-0) | |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 8.8 mg/l, 96 hours |
| | | | 8.8 mg/l, 96 hours |
| Acute | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 1.5 mg/l, 48 hours |
| toluene (CAS 108-88-3) | | | |
| Acute | | | |
| Other | EC50 | Pseudokirchnerella subcapitata | 433 mg/l, 96 hours |
| | | | 12.5 mg/l, 72 hours |
| Aquatic | | | |
| Acute | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 6 mg/l, 48 hours |
| Fish | LC50 | Coho salmon,silver salmon (Oncorhynchus kisutch) | 5.5 mg/l, 96 hours |
| rsistence and degradabili | ty No data is a | available on the degradability of this product. | |
| accumulative potential | | | |
| Partition coefficient n-oo | ctanol / water (lo | • | |
| acetone methanol | | -0.24 | |
| n-heptane | | -0.77 4.66 | |
| toluene | | 2.73 | |
| Bioconcentration factor | | / | |
| naphtha (petroleum), hydr toluene | otreated light | 10 - 25000 90 | |
| bility in soil | No data av | | |
| ner adverse effects | No other ac | dverse environmental effects (e.g. ozone depl ndocrine disruption, global warming potential) | |
| 8. Disposal considera | | | |
| • | | | |
| zardous waste code | F003: Was | te Flammable material with a flash point <140 te Non-halogenated Solvent - Spent Non-halo te Non-halogenated Solvent - Spent Non-halo | ogenated Solvent |
| ntaminated packaging | | ied containers may retain product residue, fol mpty containers should be taken to an approv | |
| posal instructions | dispose in s puncture, ir contaminat | al and its container must be disposed of as has sealed containers at licensed waste disposal s ncinerate or crush. Do not allow this material t e ponds, waterways or ditches with chemical licable regulations. | site. Contents under pressure. Do not to drain into sewers/water supplies. Do |

14. Transport information

| DO | Т | |
|-----|------------------------------|---|
| | UN number | UN1950 |
| | UN proper shipping name | Aerosols, flammable, Limited Quantity |
| | Transport hazard class(es) | |
| | Class | 2.1 |
| | Subsidiary risk | 6.1(PGIII) |
| | Label(s) | 2.1 |
| | Packing group | Not applicable. |
| | Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| | Special provisions | N82 |
| | Packaging exceptions | 306 |
| | Packaging non bulk | None |
| | Packaging bulk | None |
| IAT | A | |
| | UN number | UN1950 |
| | UN proper shipping name | Aerosols, flammable, containing substances in Division 6.1, Packing Group III |
| | Transport hazard class(es) | |
| | Class | 2.1 |
| | Subsidiary risk | 6.1(PGIII) |
| | Packing group | Not applicable. |
| | ERG Code | 10P |
| | • • | Read safety instructions, SDS and emergency procedures before handling. |
| | Other information | |
| | Passenger and cargo | Allowed with restrictions. |
| | aircraft | |
| | Cargo aircraft only | Allowed with restrictions. |
| IMC | - | |
| | UN number | UN1950 |
| | UN proper shipping name | AEROSOLS |
| | Transport hazard class(es) | |
| | Class | 2 |
| | Subsidiary risk | 6.1(PGIII) |
| | Packing group | Not applicable. |
| | Environmental hazards | |
| | Marine pollutant | No. |
| | EmS | Not available. |
| | Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| | | |

15. Regulatory information

| US federal regulations | This product is a "Ha Standard, 29 CFR 1 | zardous Chemical" as defined by the OSHA Hazard Communication 910.1200. |
|------------------------|---|---|
| TSCA Section 12(b) Exp | ort Notification (40 CFR | 707, Subpt. D) |
| Not regulated. | | |
| SARA 304 Emergency re | elease notification | |
| Not regulated. | | |
| OSHA Specifically Regu | lated Substances (29 CF | R 1910.1001-1052) |
| Not regulated. | | |
| US EPCRA (SARA Title I | II) Section 313 - Toxic Cl | nemical: Listed substance |
| methanol (CAS 67-56 | 6-1) | |
| toluene (CAS 108-88 | -3) | |
| CERCLA Hazardous Sub | ostance List (40 CFR 302 | 4) |
| 2,3-dimethylpentane | (CAS 565-59-3) | Listed. |
| acetone (CAS 67-64- | / | Listed. |
| methanol (CAS 67-56 | | Listed. |
| toluene (CAS 108-88 | | Listed. |
| CERCLA Hazardous Sub | ostances: Reportable qua | antity |
| 2,3-dimethylpentane | (CAS 565-59-3) | 100 LBS |
| acetone (CAS 67-64- | 1) | 5000 LBS |

| methanol (CAS 67-56-1) |) | 5000 LBS | | |
|--|--|-----------------------------|--|----|
| toluene (CAS 108-88-3) | | 1000 LBS | | |
| Response Center (800-4 | ng in the loss of any ingre 424-8802) and to your Lo | | Q require immediate notification to the Nation g Committee. | al |
| Other federal regulations | | | | |
| Clean Air Act (CAA) Sectio | | ollutants (HAPs) List | | |
| methanol (CAS 67-56-1) toluene (CAS 108-88-3) | | | | |
| Clean Air Act (CAA) Sectio | | ease Prevention (40 C | FR 68.130) | |
| Not regulated. | | ···· (· | , | |
| Safe Drinking Water Act (SDWA) | Not regulated. | | | |
| Drug Enforcement Adr Chemical Code Numbe | | 2, Essential Chemical | s (21 CFR 1310.02(b) and 1310.04(f)(2) and | ł |
| acetone (CAS 67-64 | | 6532 | | |
| toluene (CAS 108-8 | | 6594 | | |
| | | | al Mixtures (21 CFR 1310.12(c)) | |
| acetone (CAS 67-64 toluene (CAS 108-8 | | 35 %WV 35 %WV | | |
| | Mixtures Code Numbe | | | |
| acetone (CAS 67-6 | | 6532 | | |
| toluene (CAS 108-8 | 38-3) | 594 | | |
| FEMA Priority Substar | ices Respiratory Health | and Safety in the Flav | vor Manufacturing Workplace | |
| acetone (CAS 67-64 | , | Low priority | | |
| Food and Drug Administration (FDA) | Not regulated. | | | |
| Superfund Amendments and R | | | | |
| Classified hazard | | erosols, liquids, or solids | s) | |
| categories | Gas under pressure Acute toxicity (any rou | ite of exposure) | | |
| | Skin corrosion or irrita | | | |
| | Serious eye damage | or eye irritation | | |
| | Reproductive toxicity | toxicity (single or repeat | ted exposure) | |
| | Aspiration hazard | toxicity (single of repeat | | |
| | Hazard not otherwise | classified (HNOC) | | |
| SARA 302 Extremely hazar Not listed. | dous substance | | | |
| SARA 311/312 Hazardous chemical | Yes | | | |
| SARA 313 (TRI reporting) | | | | |
| Chemical name | | CAS number | % by wt. | |
| methanol | | 67-56-1 | 10 - 20 | |
| toluene | | 108-88-3 | 5 - 10 | |
| US state regulations | | | | |
| US. New Jersey Worker an | d Community Right-to- | Know Act | | |
| 2,3-dimethylpentane (C/ | AS 565-59-3) | | | |
| 3-methylhexane (CAS 5 | | | | |
| acetone (CAS 67-64-1) | | | | |
| carbon dioxide (CAS 12 | | | | |
| | methanol (CAS 67-56-1) naphtha (petroleum), hydrotreated light (CAS 64742-49-0) | | | |
| n-heptane (CAS 142-82 | | / | | |
| | eum), light aliph. (CAS 64 | 742-89-8) | | |
| toluene (CAS 108-88-3) | | | | |
| US. Massachusetts RTK - S | | | | |
| 2,3-dimethylpentane (CA 2-methylhexane (CAS 5 | | | | |
| 3-methylhexane (CAS 5 | | | | |
| acetone (CAS 67-64-1) | | | | |
| Material name: Brakleen® Brake Pa | rts Cleaner - Non-Chlorinate | ad | | |

carbon dioxide (CAS 124-38-9) methanol (CAS 67-56-1) naphtha (petroleum), hydrotreated light (CAS 64742-49-0) n-heptane (CAS 142-82-5) solvent naphtha (petroleum), light aliph. (CAS 64742-89-8) toluene (CAS 108-88-3)

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

2.3-dimethylpentane (CAS 565-59-3) 3-methylhexane (CAS 589-34-4) acetone (CAS 67-64-1) carbon dioxide (CAS 124-38-9) methanol (CAS 67-56-1) naphtha (petroleum), hydrotreated light (CAS 64742-49-0) n-heptane (CAS 142-82-5) solvent naphtha (petroleum), light aliph. (CAS 64742-89-8) toluene (CAS 108-88-3)

US. Rhode Island RTK

acetone (CAS 67-64-1) carbon dioxide (CAS 124-38-9) methanol (CAS 67-56-1) naphtha (petroleum), hydrotreated light (CAS 64742-49-0) n-heptane (CAS 142-82-5) solvent naphtha (petroleum), light aliph. (CAS 64742-89-8) toluene (CAS 108-88-3)

California Proposition 65



WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

| California Proposition 65 - CRT: Listed date/ | roposition 65 - CRT: Listed date/Carcinogenic substance | |
|--|---|--|
| acetaldehyde (CAS 75-07-0) | Listed: April 1, 1988 | |
| benzene (CAS 71-43-2) | Listed: February 27, 1987 | |
| cumene (CAS 98-82-8) | Listed: April 6, 2010 | |
| ethylbenzene (CAS 100-41-4) | Listed: June 11, 2004 | |
| naphthalene (CAS 91-20-3) | Listed: April 19, 2002 | |
| California Proposition 65 - CRT: Listed date/Developmental toxin | | |

California Proposition 65 - CRT: Listed date/Developmental toxin

benzene (CAS 71-43-2) methanol (CAS 67-56-1) toluene (CAS 108-88-3)

Listed: December 26, 1997 Listed: March 16, 2012 Listed: January 1, 1991

California Proposition 65 - CRT: Listed date/Male reproductive toxin

benzene (CAS 71-43-2) Listed: December 26, 1997 US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

acetone (CAS 67-64-1) methanol (CAS 67-56-1) naphtha (petroleum), hydrotreated light (CAS 64742-49-0) solvent naphtha (petroleum), light aliph. (CAS 64742-89-8) toluene (CAS 108-88-3)

Volatile organic compounds (VOC) regulations

EPA

| VOC content (40 CFR 51.100(s)) | 43.8 % |
|--|---------------|
| Consumer products (40 CFR 59, Subpt. C) | Not regulated |

State

| Consumer products | This product is regulated as a Brake Cleaner. This product is not compliant to be sold for use in California, Connecticut, Delaware, Maryland, New Hampshire, and the following counties in Utah: Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber. This product is compliant in all other states. |
|-------------------|---|
| VOC content (CA) | 43.8 % |
| VOC content (OTC) | 43.8 % |

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) | No |
| Canada | Non-Domestic Substances List (NDSL) | Yes |
| 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) | Yes |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| Taiwan | Taiwan Toxic Chemical Substances (TCS) | 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 | 04-28-2015 |
|----------------------|--|
| Revision date | 04-30-2018 |
| Prepared by | Allison Yoon |
| Version # | 06 |
| Further information | CRC # 991/1002986 |
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| Revision information | Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data Regulatory information: Consumer products |