



MATERIAL SAFETY DATA SHEET

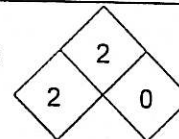
Engine Kleen

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Engine Kleen
Product Number: 175
Product Use: Solvent Cleaner
Manufacturer/Supplier: Auto Valet Detailing Products
 a div. of 597401 Ontario Limited
 1366 Sandhill Dr., Ancaster, ON
 L9G 4V5
Phone Number: (905) 648-7432
Emergency Phone: (905) 648-7832
Date of Preparation: 1 November 2011

HMIS Hazard Rating:

0 = minimal, 1 = slight
 2 = moderate, 3 = severe
 4 = extreme



Health / Flammability / Physical Hazard

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING

COMBUSTIBLE LIQUID. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

- Eye:** May cause eye irritation.
Skin: May cause skin irritation.
Ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting. Harmful: may cause lung damage if swallowed.
Inhalation: May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Medical Conditions Aggravated By Exposure: Asthma. Allergies.

Target Organs: Skin, eyes, gastrointestinal tract, respiratory system.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment See Section 12 for more information.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient | CAS # | Wt. % |
|---|------------|----------|
| Distillates (petroleum), hydrotreated light | 64742-47-8 | 60 - 100 |
| Amides, coco, N,N-bis(hydroxyethyl) | 68603-42-9 | 1 - 5 |
| Ethylene glycol monobutyl ether | 111-76-2 | 1 - 5 |



MATERIAL SAFETY DATA SHEET

Engine Kleen

Section 4: FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with plenty of water. If easy to do, remove contact lenses, if worn.
- Skin Contact:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).
- Note to Physicians:** Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

- Flammability:** Combustible by WHMIS criteria.
- Means of Extinction:**
- Suitable Extinguishing Media:** Powder, foam, carbon dioxide. DO NOT USE WATER.
 - Unsuitable Extinguishing Media:** Not available.
- Products of Combustion:** Oxides of carbon.
- Explosion Data:**
- Sensitivity to Mechanical Impact:** Not available.
 - Sensitivity to Static Discharge:** Not available.
- Protection of Firefighters:** Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.
- Environmental Precautions:** This material is a water pollutant. Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.
- Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for Clean-Up:** Vacuum or sweep material and place in a disposal container. Allow gas to dissipate harmlessly into the atmosphere.
- Other Information:** Not available.



MATERIAL SAFETY DATA SHEET

Engine Kleen

Section 7: HANDLING AND STORAGE

Handling:

Keep away from sources of ignition. - No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Keep container tightly closed. Do not store at temperatures above 49°C. Keep away from food, drink and animal foodstuffs.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Ingredient

Distillates (petroleum), hydrotreated light
Amides, coco, N,N-bis(hydroxyethyl)
Ethylene glycol monobutyl ether

Exposure Limits

ACGIH-TLV

200 mg/m³

Not available.

20 ppm

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

Eye/Face Protection: Wear eye/face protection.

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------------------------|------------------------|
| Appearance: | Clear. |
| Color: | Blue-green. |
| Odour: | Low odor. |
| Odour Threshold: | Not available. |
| Physical State: | Liquid. |
| pH: | Not available. |
| Viscosity: | Not available. |
| Freezing Point: | Not available. |
| Boiling Point: | ~ 150 °C (~ 302 °F) |
| Flash Point: | ~ 41.5 °C (~ 106.7 °F) |
| Evaporation Rate: | Not available. |
| Lower Flammability Limit: | Not available. |



DETAILING PRODUCTS

MATERIAL SAFETY DATA SHEET

Engine Kleen

| | |
|--|----------------|
| Upper Flammability Limit: | Not available. |
| Vapor Pressure: | Not available. |
| Vapor Density: | > 1 (Air = 1) |
| Specific Gravity: | 0.785 |
| Solubility in Water: | Emulsifiable. |
| Coefficient of Water/Oil Distribution: | Not available. |
| Auto-ignition Temperature: | Not available. |
| Percent Volatile, wt. %: | > 90 |
| VOC content, wt. %: | Not available. |

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions. Keep in a cool place.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Oxidizers. Reducing agents.

Hazardous Decomposition Products: Oxides of carbon.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

| Ingredient | LD ₅₀ (oral) | LC ₅₀ |
|---|-------------------------|-------------------|
| Distillates (petroleum), hydrotreated light | > 5000 mg/kg, rat | Not available. |
| Amides, coco, N,N-bis(hydroxyethyl) | 12400 uL/kg,rat | Not available. |
| Ethylene glycol monobutyl ether | 200 mg/kg,rat | 450 ppm 4 hrs,rat |

| | |
|--------------------|--|
| Eye: | May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. |
| Skin: | May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. |
| Ingestion: | Harmful if swallowed. May cause stomach distress, nausea or vomiting. Harmful: may cause lung damage if swallowed. |
| Inhalation: | May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis. |

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by WHMIS criteria.

Carcinogenicity: Not hazardous by WHMIS criteria.



DETAILING PRODUCTS

MATERIAL SAFETY DATA SHEET

Engine Kleen

Ingredient

Distillates (petroleum), hydrotreated light
Amides, coco, N,N-bis(hydroxyethyl)
Ethylene glycol monobutyl ether

Chemical Listed as Carcinogen or Potential Carcinogen *

I-2B
Not listed.
G-A3

* See Section 15 for more information.

Mutagenicity: Not hazardous by WHMIS criteria.

Reproductive Effects: Not hazardous by WHMIS criteria.

Developmental Effects:

Teratogenicity: Not hazardous by WHMIS criteria.

Embryotoxicity: Not hazardous by WHMIS criteria.

Respiratory Sensitization: Not hazardous by WHMIS criteria.

Skin Sensitization: Not hazardous by WHMIS criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: May cause long-term adverse effects in the aquatic environment

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material and its container must be disposed of in a safe way.

Section 14: TRANSPORTATION INFORMATION

TDG Classification

Not Regulated

Section 15: REGULATORY INFORMATION

Federal Regulations

Canadian: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Global Inventories

Ingredient

Distillates (petroleum), hydrotreated light
Amides, coco, N,N-bis(hydroxyethyl)
Ethylene glycol monobutyl ether

Canada DSL/NDSL

DSL
DSL
DSL



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MATERIAL SAFETY DATA SHEET

Engine Kleen

WHMIS Classification(s):

Class B3 - Combustible Liquid

Class D2B - Skin/Eye Irritant

WHMIS Hazard Symbols:



SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

- OSHA (O)** Occupational Safety and Health Administration.
- ACGIH (G)** American Conference of Governmental Industrial Hygienists.
 A1 - Confirmed human carcinogen.
 A2 - Suspected human carcinogen.
 A3 - Animal carcinogen.
 A4 - Not classifiable as a human carcinogen.
 A5 - Not suspected as a human carcinogen.
- IARC (I)** International Agency for Research on Cancer.
 1 - The agent (mixture) is carcinogenic to humans.
 2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
 2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
 3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
 4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.
- NTP (N)** National Toxicology Program.
 1 - Known to be carcinogens.
 2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Expiry Date: 1 November 2014

Version #: 1.0

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