# SAFETY DATA SHEET

ECOLAB

RADIANCE

## Section 1. Chemical product and company identification

**Product name** : RADIANCE

**Recommended use and restrictions** : Furniture Polish

Use only for the purpose on the product label.

**Product dilution information** : Not applicable

**Supplier's information** : Ecolab Inc. Institutional Division
370 N. Wabasha Street
St. Paul, MN 55102
1-800-352-5326

**Code** : 918649

**Date of issue** : **09 Oct 2013**

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

## Section 2. Hazards identification

**Product AS SOLD**

**GHS Classification** : FLAMMABLE AEROSOLS. - Category 2
GASES UNDER PRESSURE - Compressed gas
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3

**GHS label elements**

**Signal word** : Warning

**Symbol** :

**Hazard statements** : Flammable aerosol.
Contains gas under pressure; may explode if heated.
May cause drowsiness and dizziness.

**Precautionary statements**

**Prevention** : Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Pressurized container: Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing gas. Intentional misuse by deliberate inhalation may be harmful or fatal.

**Response** : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

**Storage** :

**Product AT USE DILUTION**

Product is sold ready to use.

## Section 2. Hazards identification

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

**Disposal** : See section 13 for waste disposal information.

**Other hazards** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Product AS SOLD**

| Hazardous ingredients | Concentration Range (%) | CAS number |
|---|---|---|
| distillates (petroleum), hydrotreated light | 5 - 20 | 64742-47-8 |
| BUTANE | 5 - 20 | 106-97-8 |
| PROPANE | 1 - 5 | 74-98-6 |

**Product AT USE DILUTION**

| Hazardous ingredients | Concentration Range (%) | CAS number |
|---|---|---|
| Product is sold ready to use. | | |

## Section 4. First aid measures

**Product AS SOLD**

**Eye contact** : No known effect after eye contact. Rinse with water for a few minutes.

**Skin contact** : No known effect after skin contact. Rinse with water for a few minutes.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.

**Ingestion** : Get medical attention if symptoms occur.

**Product AT USE DILUTION**
Product is sold ready to use.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**See toxicological information (section 11)**

## Section 5. Fire-fighting measures

**Product AS SOLD**

**Suitable fire extinguishing media** : Use water spray, fog or foam.

**Specific hazards arising from the chemical** : Flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

**Specific fire-fighting methods** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

## Section 5. Fire-fighting measures

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

**Product AS SOLD**

**Personal precautions** : Use personal protective equipment as required.

**Environmental precautions** : Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.

**Methods for cleaning up** : Use a water rinse for final clean-up.

**Product AT USE DILUTION**

Product is sold ready to use.

## Section 7. Handling and storage

**Product AS SOLD**

**Handling** : Store and use away from heat, sparks, open flame or any other ignition source. Liquid and vapor under pressure. Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight. Use only with adequate ventilation. Wash thoroughly after handling.

**Storage** : Keep out of reach of children. Keep container tightly closed and sealed until ready for use. Keep container in a cool, well-ventilated area. Avoid all possible sources of ignition (spark or flame). Do not puncture or incinerate container.

Do not store above the following temperature: 50°C

**Product AT USE DILUTION**

Product is sold ready to use.

## Section 8. Exposure controls/personal protection

**Control parameters**

| Ingredient name | Exposure limits |
|---|---|
| distillates (petroleum), hydrotreated light | **ACGIH TLV (United States, 3/2012).** **Absorbed through skin.** TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours. |
| BUTANE | **ACGIH TLV (United States, 3/2012).** TWA: 1000 ppm 8 hours. **NIOSH REL (United States, 6/2009).** TWA: 800 ppm 10 hours. TWA: 1900 mg/m³ 10 hours. |
| PROPANE | **ACGIH TLV (United States, 3/2012).** TWA: 1000 ppm 8 hours. **OSHA PEL (United States, 6/2010).** TWA: 1800 mg/m³ 8 hours. TWA: 1000 ppm 8 hours. **NIOSH REL (United States, 6/2009).** TWA: 1000 ppm 10 hours. TWA: 1800 mg/m³ 10 hours. |

## Section 8. Exposure controls/personal protection

| | Product AS SOLD |
|---|---|
| **Appropriate engineering controls** | : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. |

**Product AT USE DILUTION**
Product is sold ready to use.

**Personal protection**

| | |
|---|---|
| **Eye protection** | : No protective equipment is needed under normal use conditions. |
| **Hand protection** | : No protective equipment is needed under normal use conditions. |
| **Skin protection** | : No protective equipment is needed under normal use conditions. |
| **Respiratory protection** | : A respirator is not needed under normal and intended conditions of product use. |
| **Hygiene measures** | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. |

## Section 9. Physical and chemical properties

| | Product AS SOLD |
|---|---|
| **Physical state** | : Aerosol |
| **Color** | : Off-white |
| **Odor** | : citrus |
| **pH** | : Not applicable |
| **Flash point** | : Not applicable |
| **Explosion limits** | : Lower: 1.8%<br>Upper: 9.5% |
| **Flammability (solid, gas)** | : Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. |
| **Melting point** | : Not available. |
| **Boiling point** | : Not available. |
| **Evaporation rate (butyl acetate = 1)** | : Not available. |
| **Vapor pressure** | : Not available. |
| **Vapor density** | : Not available. |
| **Relative density** | : 0.8714 to 0.8716 (Water = 1) |
| **Solubility** | : Not available. |
| **Partition coefficient: n-octanol/water** | : Not available. |
| **Auto-ignition temperature** | : Not available. |
| **Decomposition temperature** | : Not available. |
| **Odor threshold** | : Not available. |

**Product AT USE DILUTION**
Product is sold ready to use.

## Section 9. Physical and chemical properties

**Viscosity** : Kinematic (40°C (104°F)): 39 $cm^2/s$ (3900 cSt)

**Aerosol product**

**Type of aerosol** : Spray

**Heat of combustion** : 10.49 kJ/g

**Ignition distance** : Not available.

**Flame height** : Not available.

**Flame duration** : Not available.

## Section 10. Stability and reactivity

**Product AS SOLD**

**Stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).

**Materials to avoid** : Not available.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

**Route of exposure** : Skin contact, Eye contact, Inhalation, Ingestion

**Product AS SOLD**

**Symptoms**

**Eye contact** : No specific data.

**Skin contact** : No specific data.

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

**Ingestion** : No specific data.

**Acute toxicity**

**Eye contact** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. Intentional misuse by deliberate inhalation may be harmful or fatal.

**Ingestion** : Can cause central nervous system (CNS) depression.

**Product AT USE DILUTION**

Product is sold ready to use.

**Toxicity data**

| Product/ingredient name | | | |
|---|---|---|---|
| distillates (petroleum), hydrotreated light | LC50 Inhalation Dusts and mists | Rat | >5.68 mg/l |
| | LD50 Dermal | Rabbit | >2000 mg/kg |
| | LD50 Oral | Rat | >5000 mg/kg |
| butane | LC50 Inhalation Gas. | Rat | 280000 ppm |

## Section 11. Toxicological information

**Chronic toxicity**

| | |
|---|---|
| **Carcinogenicity** | : No known significant effects or critical hazards. |
| **Mutagenicity** | : No known significant effects or critical hazards. |
| **Teratogenicity** | : No known significant effects or critical hazards. |
| **Developmental effects** | : No known significant effects or critical hazards. |
| **Fertility effects** | : No known significant effects or critical hazards. |

## Section 12. Ecological information

**Product AS SOLD**

**Ecotoxicity** : This material is harmful to aquatic life with long lasting effects.

**Aquatic and terrestrial toxicity**

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| distillates (petroleum), hydrotreated light | Chronic LC50 >1 mg/l | Fish | 96 hours |
| butane | Acute LC50 22.03 mg/l | Fish | 96 hours |

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Product AS SOLD**

**Disposal methods** : Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not puncture or incinerate container. Discard empty container in trash.

**RCRA classification** : Unused product is D001 (Ignitable)

**Product AT USE DILUTION**

Product is sold ready to use.

## Section 14. Transport information

**Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.**

**DOT**

| | |
|---|---|
| **DOT Classification** | UN1950 |
| **DOT Proper shipping name** | Aerosols, flammable |
| **Class** | 2.1 |
| **Packing group** | - |

**IMO/IMDG**

| | |
|---|---|
| **IMO/IMDG Classification** | UN1950 |
| **IMO/IMDG Proper shipping name** | AEROSOLS, FLAMMABLE |
| **Class** | 2.1 |
| **Packing group** | - |

**For transport in bulk, see shipping documents for specific transportation information.**

**Product AT USE DILUTION**

Not intended for transport.

## Section 15. Regulatory information

**Product AS SOLD**

**U.S. Federal regulations**

**TSCA 8(b) inventory** : All components are listed or exempted.

**SARA 302/304/311/312 extremely hazardous substances**: No listed substance

**SARA 302/304 emergency planning and notification**: No listed substance

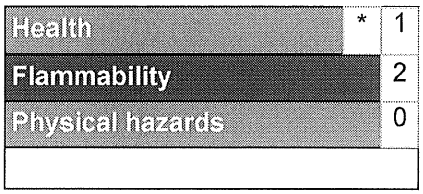
| SARA 313 | Product name | CAS number | Concentration |
|---|---|---|---|
| **Form R - Reporting requirements** | : No listed substance | | |

**California Prop. 65** : No listed substance

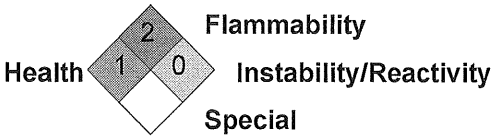
## Section 16. Other information

**Product AS SOLD**

**Hazardous Material Information System (U.S.A.)** :




**National Fire Protection Association (U.S.A.)** :




**NFPA Aerosol Level** : **Level 1**

**Date of issue** : **09 Oct 2013**

**Prepared by** : Regulatory Affairs
1-800-352-5326

**Notice to reader**

**The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.**