

SAFETY DATA SHEET



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	Product AT USE DILUTION
Eye contact	: No known effect after eye contact. Rinse with water for a few minutes.	Product is sold ready to use.
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.	
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/m ³ , (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/m ³ 10 hours.
PROPANE	ACGIH TLV (United States, 3/2012). TWA: 1000 ppm 8 hours. OSHA PEL (United States, 6/2010). TWA: 1800 mg/m ³ 8 hours. TWA: 1000 ppm 8 hours. NIOSH REL (United States, 6/2009). TWA: 1000 ppm 10 hours. TWA: 1800 mg/m ³ 10 hours.

Section 8. Exposure controls/personal protection

	Product AS SOLD	Product AT USE DILUTION
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 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	Product AT USE DILUTION
Physical state	: Aerosol	Product is sold ready to use.
Color	: Off-white	
Odor	: citrus	
pH	: Not applicable	
Flash point	: Not applicable	
Explosion limits	: Lower: 1.8% 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.	

Section 9. Physical and chemical properties

Viscosity : Kinematic (40°C (104°F)): 39 cm²/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	Rat	>5.68 mg/l
	Dusts and mists		
	LD50 Dermal	Rabbit	>2000 mg/kg
	LD50 Oral	Rat	>5000 mg/kg
butane	LC50 Inhalation	Rat	280000 ppm
	Gas.		

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

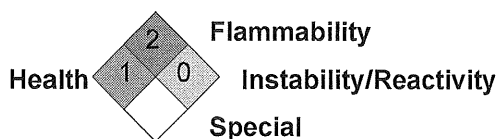
Section 16. Other information

Product AS SOLD

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

Health	*	1
Flammability		2
Physical hazards		0

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.