

Material Safety Data Sheet



REVITALIZE 41 GUM REMOVER

Section 1. Chemical product and company identification

Trade name : REVITALIZE 41 GUM REMOVER
Product use : Cleaning product
Supplier : Ecolab, Professional Products Division
370 Wabasha Street N
St. Paul MN 55102
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326
Code : 926568-01
Date of issue : 09-November-2005

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

Section 2. Composition, information on ingredients

Name	CAS number	% by weight
1,1,1,2-tetrafluoroethane	811-97-2	60 - 100

Section 3. Hazards identification

Physical state : Liquid. (Aerosol.)
Emergency overview : CAUTION!
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
Liquid can cause burns similar to frostbite.
Can cause central nervous system depression.
Intentional misuse by deliberate inhalation may be harmful or fatal.
CONTENTS UNDER PRESSURE.
Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight.
Avoid contact with skin and clothing. Do not breathe vapour or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Avoid all possible sources of ignition (spark or flame). Keep away from heat and direct sunlight.
Routes of entry : Skin contact, Eye contact, Inhalation, Ingestion
Potential acute health effects
Eyes : Moderately irritating to eyes. Liquid can cause burns similar to frostbite.
Skin : Moderately irritating to the skin. Liquid can cause burns similar to frostbite.
Inhalation : Moderately irritating to the respiratory system. High vapour concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness. Intentional misuse by deliberate inhalation may be harmful or fatal.
Ingestion : No known significant effects or critical hazards.

See toxicological information (section 11)

Section 4. First-aid measures

Eye contact : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
Skin Contact : Dermal contact with a rapidly evaporating liquid could result in freezing of the tissues or frostbite. Try to warm up the frozen tissues. Obtain medical attention immediately.
Inhalation : If inhaled, remove to fresh air.
Ingestion : Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.

Section 5. Fire-fighting measures

Auto-ignition temperature	: Not available.
Flash point	: > 100°C
Flammable limits	
Upper:	Not available.
Lower:	Not available.
Products of combustion	: These products are halogenated compounds, hydrogen fluoride.
Fire-fighting media and instructions	: Use an extinguishing agent suitable for the surrounding fire. Cool closed containers exposed to fire with water. Bursting aerosol containers may be propelled from a fire at high speed. Dyke area of fire to prevent runoff. No specific hazard.
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.
Risk of explosion of the product in the presence of mechanical impact: Not available.	
Risk of explosion of the product in the presence of static discharge: Not available.	

Section 6. Accidental release measures

Personal Precautions	: Ventilate area of leak or spill. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8). Stop leak if without risk. Prevent entry into sewers, water courses, basements or confined areas.
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Methods for cleaning up	: If emergency personnel are unavailable, contain spilt material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilt material in an appropriate container for disposal.

Section 7. Handling and storage

Handling	: Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapour or mist. Wash thoroughly after handling.
Storage	: Keep out of the reach of children. Keep container tightly closed. Keep container in a cool, well-ventilated area. Store between 0 and 40°C

Section 8. Exposure controls, personal protection

Engineering controls	: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.
Personal protection	
Eyes	: Eye protection recommended.
Hands	: For prolonged or repeated handling, use Impervious gloves.
Skin	: No protective equipment is needed under normal use conditions.
Respiratory	: Avoid breathing vapour or mist.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Physical state	: Liquid. (Aerosol.)
Colour	: Colourless.
Odour	: Hydrocarbon.
pH	: Not applicable.
Boiling/condensation point	: <35 °C
Melting/freezing point	: Not available.
Specific gravity	: 1 (Water = 1)
Vapour pressure	: Not applicable.

Vapour density	: Not available.
Odour threshold	: Not available.
Evaporation rate	: Not available.
LogK _{ow}	: Not available.
Solubility	: Very slightly soluble in cold water, hot water.

Section 10. Stability and reactivity

Stability	: The product is stable.
Conditions of instability	: Not available.
Incompatibility with various substances	: Not available.
Hazardous Decomposition Products	: These products are halogenated compounds, hydrogen fluoride.

Section 11. Toxicological information

Potential acute health effects

Eyes	: Moderately irritating to eyes. Liquid can cause burns similar to frostbite.
Skin	: Moderately irritating to the skin. Liquid can cause burns similar to frostbite.
Inhalation	: Moderately irritating to the respiratory system. High vapour concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness. Intentional misuse by deliberate inhalation may be harmful or fatal.
Ingestion	: No known significant effects or critical hazards.
Irritancy of Product	: Hazardous by WHMIS criteria.

Potential chronic health effects

Carcinogenic effects	: No known significant effects or critical hazards.
Mutagenic effects	: No known significant effects or critical hazards.
Teratogenic effects	: No known significant effects or critical hazards.
Reproductive effects	: No known significant effects or critical hazards.
Sensitization to Product	: No known significant effects or critical hazards.
Synergistic products (toxicologically)	: Not available.

Toxicity data

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Not applicable.				

Target organs	: Contains material which causes damage to the following organs: heart, central nervous system (CNS).
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Section 12. Ecological information

Products of degradation	: These products are carbon oxides (CO, CO ₂) and water, halogenated compounds.
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Section 13. Disposal considerations

Waste disposal	: The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
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Consult your local or regional authorities.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional information
TDG Classification	-	Consumer commodity	-	-	-

APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

Section 15. Regulatory information

WHMIS : Class A: Compressed gas.
Class D-2B: Material causing other toxic effects (Toxic).

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*.

Section 16. Other information

Date of issue : 09-November-2005.
Responsible name : Regulatory Affairs
Date of previous issue : 28-September-2005.

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.