

1. Product and Company Identification

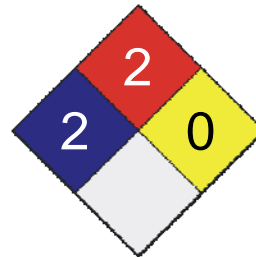
Product Name BRASSO® Metal Polish
CAS # Mixture
 This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the Canadian Workplace Hazardous Materials Information System (WHMIS).
 This MSDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulation.

Product Use Metal Polish

Distributed by Reckitt Benckiser (Canada) Inc.
 1680 Tech Avenue Unit #2
 Mississauga, ON L4W 5S9
 In Case of Emergency: 1-800-338-6167
 Transportation Emergencies: 24 Hour Number:
 North America: CHEMTREC: 1-800-424-9300
 Outside North America: 1-703-527-3887

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	* 2
Flammability	2
Physical Hazard	0
Personal Protection	B



2. Hazards Identification

Emergency Overview CAUTION
 MAY IRRITATE EYES AND SKIN.
 Keep out of reach of children.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Eyes Severely irritating to eyes. Risk of serious damage to eyes.
 Avoid eye contact.

Skin Slightly irritating to the skin. Not expected to be a skin sensitizer.
 Avoid skin contact.

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion Health injuries are not known or expected under normal use.

Target organs Blood. Eyes. Liver. Respiratory system. Skin.

Chronic effects The finished product is not expected to have chronic health effects.

Signs and symptoms Symptoms may include redness, oedema, drying, defatting and cracking of the skin.
 Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Potential environmental effects See section 12.

3. Composition/Information on Ingredients

Ingredient(s)	CAS #	Percent
Isopropanol	67-63-0	1 - 5
Ammonium oxalate	6009-70-7	1 - 5
Limestone	1317-65-3	10 - 30
Ammonium hydroxide	1336-21-6	5 - 10

4. First Aid Measures

First aid procedures

Eye contact

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower eyelids. Get medical attention immediately.

Skin contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.

Inhalation

Move exposed person to fresh air. Get medical attention immediately.

Ingestion

Call medical doctor or poison control center immediately. Wash out mouth with water. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.

Notes to physician

Treat patient symptomatically.

General advice

Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice (show the label where possible). 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. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire-fighting Measures

Flammable properties

Combustible by WHMIS criteria.

Extinguishing media**Suitable extinguishing media**

Dry chemical. Carbon dioxide. Foam. Fog.

Unsuitable extinguishing media

Not available

Protection of firefighters**Specific hazards arising from the chemical**

Not available

Protective equipment for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products

May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Some metallic oxides.

Explosion data**Sensitivity to mechanical impact**

Not available

Sensitivity to static discharge

Not available

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Environmental precautions

Do not discharge into lakes, streams, ponds or public waters. Advise authorities if product has penetrated drains, sewers or water pipes.

Methods for containment

Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Remove sources of ignition. Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

7. Handling and Storage

Handling	Ensure adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid breathing mists or vapours. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash thoroughly after handling. Remove sources of ignition. Not for use on silver, lacquered, painted or antiqued-finished surfaces.
Storage	Keep out of reach of children. Keep from freezing. Do not store at temperatures above 120°F (49°C). Keep container tightly closed. Store away from direct sunlight and incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limit values

Ingredient(s)	Exposure limit values
Ammonium hydroxide	ACGIH-TLV Not established
Ammonium oxalate	ACGIH-TLV TWA: 1 mg/m ³
Isopropanol	ACGIH-TLV TWA: 200 ppm STEL: 400 ppm
Limestone	ACGIH-TLV TWA: 5 mg/m ³

Engineering controls

General ventilation normally adequate.

Personal protective equipment

Consult the product label for special protection or precautions that have been identified for using this product under directed consumer use conditions. The following recommendations are given for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure.

Eye / face protection

Avoid contact with eyes. If splashing is likely to occur or for occupational exposures, wear appropriate eye protection.
Emergency responders should wear full eye and face protection.

Hand protection

Wear impervious gloves where the potential for contact with the liquid is possible.
Emergency responders should wear impermeable gloves.

Skin and body protection

As required by employer code.
Usual safety precautions while handling the product will provide adequate protection against injury or irritation.
Follow label directions carefully.

Respiratory protection

No special requirements under normal use conditions. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of vapours generated by this product during a spill or other clean-up operations.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.
When using do not eat or drink.
Wash hands before breaks and immediately after handling the product.
Avoid contact with eyes, skin and clothing.

9. Physical and Chemical Properties

Appearance	Liquid
Colour	Light tan
Form	Liquid

Odour	ammoniacal
Odour threshold	Not available
Physical state	Liquid
pH	9.6 - 10.2
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation Rate	Not available
Flash point	40.55 °C (105 °F) TCC
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability Limits in Air, Upper, % by Volume	Not available
Vapour pressure	Not available
Vapour density	Not available
Specific gravity	1.104 - 1.140
Octanol/water coefficient	Not available
Solubility (H2O)	Insoluble
VOC (Weight %)	Not available
Viscosity	Viscous
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	DO NOT MIX WITH BLEACH or use in conjunction with other household products.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Avoid high temperatures. Do not mix with other chemicals. Excessive heat and moisture. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible materials	Not for use on silver, lacquered, painted or antiqued finished surfaces.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Some metallic oxides.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Ammonium hydroxide	Not available
Ammonium oxalate	Not available
Isopropanol	16970 mg/l/4h rat
Limestone	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Ammonium hydroxide	350 mg/kg rat
Ammonium oxalate	70 mg/kg human
Isopropanol	4396 mg/kg rat
Limestone	6450 mg/kg rat

Effects of acute exposure

Eye	Severely irritating to eyes. Risk of serious damage to eyes. Avoid eye contact.
Skin	Slightly irritating to the skin. Not expected to be a skin sensitizer. Avoid skin contact.

Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	Health injuries are not known or expected under normal use.
Sensitisation	The finished product is not expected to have chronic health effects.
Chronic effects	The finished product is not expected to have chronic health effects.
Carcinogenicity	The finished product is not expected to have chronic health effects.
Mutagenicity	The finished product is not expected to have chronic health effects.
Reproductive effects	The finished product is not expected to have chronic health effects.
Teratogenicity	The finished product is not expected to have chronic health effects.
Name of Toxicologically Synergistic Products	Not available

12. Ecological Information

Ecotoxicity	Components of this product have been identified as having potential environmental concerns.	
Ecotoxicity - Freshwater Algae - Acute Toxicity Data		
Isopropanol	67-63-0	96 Hr EC50 <i>Desmodesmus subspicatus</i> : >1000 mg/L; 72 Hr EC50 <i>Desmodesmus subspicatus</i> : >1000 mg/L
Ecotoxicity - Freshwater Fish - Acute Toxicity Data		
Ammonium hydroxide	1336-21-6	96 Hr LC50 <i>Pimephales promelas</i> : 8.2 mg/L
Isopropanol	67-63-0	96 Hr LC50 <i>Pimephales promelas</i> : 9640 mg/L [flow-through]; 96 Hr LC50 <i>Pimephales promelas</i> : 11130 mg/L [static]; 96 Hr LC50 <i>Lepomis macrochirus</i> : >1400000 µg/L
Ecotoxicity - Water Flea - Acute Toxicity Data		
Ammonium hydroxide	1336-21-6	48 Hr EC50 water flea: 0.66 mg/L; 48 Hr EC50 <i>Daphnia pulex</i> : 0.66 mg/L
Isopropanol	67-63-0	48 Hr EC50 <i>Daphnia magna</i> : 13299 mg/L
Persistence and degradability	Not available	
Bioaccumulation/accumulation	Not available	
Mobility in environmental media	Not available	
Environmental effects	Not available	
Aquatic toxicity	Not available	
Partition coefficient	Not available	
Chemical fate information	Not available	
Other adverse effects	Not available	

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations. Empty container can be disposed of as household trash or rinsed and recycled where appropriate.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)

UN1987, Alcohols, n.o.s. (propan-2-ol), Class 3, PG III, Limited Quantity

Transportation of Dangerous Goods (TDG - Canada)

UN1987, ALCOHOLS, N.O.S. (propan-2-ol), Class 3, PG III, Limited Quantity

IMDG (Marine Transport)

UN1987, ALCOHOLS, N.O.S.. (propan-2-ol), Class 3, PG III

IATA/ICAO (Air)

UN1987, Alcohols, n.o.s. (propan-2-ol), Class 3, PG III

15. Regulatory Information

Canadian federal regulations

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.

Product Registration: Product is compliant with CCCR regulatory guidelines; a specific registration is not required for this product.

Smectite group minerals and limestone are listed on the NDSL. However, they are exempt from notification to Environment Canada because the substances are naturally occurring.

Canada - WHMIS - Ingredient Disclosure List

Ammonium hydroxide	1336-21-6	1 %
Isopropanol	67-63-0	1 %

WHMIS classification

Exempt - Consumer product

Inventory Status

Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer

This product should only be used as directed on the label and for the purpose intended. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Further information

BRASSO® Metal Polish, 142 mL - 8043677v1.0

Issue date

28-May-2013

Effective Date

15-May-2013

Expiry Date

15-May-2016

Prepared by

Reckitt Benckiser Regulatory Department 800-333-3899

Other Information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.