

1. Product and Company Identification

Product Name BRASSO® Metal Polish
CAS # Mixture

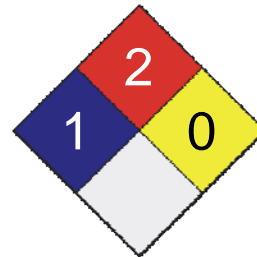
This MSDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulation.
This MSDS is designed for workplace employees, emergency personnel and for other conditions 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).

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	/ 1
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 May cause eye irritation.
 Avoid eye contact.

Skin May cause skin irritation. Not expected to be a skin sensitizer.
 Avoid skin contact.

Inhalation None expected during normal conditions of use.

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 Components of this product have been identified as having potential environmental concerns.

3. Composition/Information on Ingredients

Ingredient(s)	CAS #	Percent
Ethanol	64-17-5	0.1 - 1
Oxalic acid	6153-56-6	1 - 5
Isopropanol	67-63-0	1 - 5
Ammonium hydroxide	1336-21-6	1 - 5
Limestone	1317-65-3	10 - 30
Pumice	1332-09-8	3 - 7

4. First Aid Measures

First aid procedures

Eye contact	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice if symptoms persist.
Skin contact	Wash skin with water. Get medical attention if irritation develops and persists.
Inhalation	Move to fresh air.
Ingestion	Rinse mouth with water. Drink plenty of water. Call a physician or Poison Control Center IMMEDIATELY. 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. Alcohol foam.
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.
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	<p>CAUTION EYE AND SKIN IRRITANT. COMBUSTIBLE Avoid contact with eyes, skin and clothing. Ensure adequate ventilation. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash thoroughly after handling. Not for use on silver, lacquered, painted or antiqued-finished surfaces.</p>
Storage	<p>Keep out of reach of children. Keep from freezing. Do not store at temperatures above 120°F (49°C). Store in a cool dry place inaccessible to children and pets.</p>

8. Exposure Controls / Personal Protection

Exposure limit values

Ingredient(s)	Exposure limit values
Ammonium hydroxide	ACGIH-TLV Not established
Ethanol	ACGIH-TLV TWA: 1000 ppm STEL: 1000 ppm
Isopropanol	ACGIH-TLV TWA: 200 ppm STEL: 400 ppm
Limestone	ACGIH-TLV TWA: 5 mg/m ³
Oxalic acid	ACGIH-TLV TWA: 1 mg/m ³ STEL: 2 mg/m ³
Pumice	ACGIH-TLV Not established

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.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Ammonium hydroxide	Not available
Ethanol	31623 ppm rat
Isopropanol	16970 mg/l/4h rat
Limestone	Not available
Oxalic acid	Not available
Pumice	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Ammonium hydroxide	350 mg/kg rat
Ethanol	3450 mg/kg mouse; 7060 mg/kg rat
Isopropanol	4396 mg/kg rat
Limestone	6450 mg/kg rat
Oxalic acid	375 mg/kg rat
Pumice	14105 mg/kg rat

Effects of acute exposure

Eye	May cause eye irritation. Avoid eye contact.
Skin	May cause skin irritation. Not expected to be a skin sensitizer. Avoid skin contact.
Inhalation	None expected during normal conditions of use.
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 Desmodesmus subspicatus: >1000 mg/L; 72 Hr EC50 Desmodesmus subspicatus: >1000 mg/L
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Ecotoxicity - Freshwater Fish - Acute Toxicity Data

Ammonium hydroxide	1336-21-6	96 Hr LC50 Pimephales promelas: 8.2 mg/L
Ethanol	64-17-5	96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400 - 15100 mg/L [flow-through]
Isopropanol	67-63-0	96 Hr LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 11130 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: >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 Daphnia pulex: 0.66 mg/L
Ethanol	64-17-5	48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 24 Hr EC50 Daphnia magna: 10800 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L [Static]
Isopropanol	67-63-0	48 Hr EC50 Daphnia magna: 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)

Not Regulated by DOT (Road/Rail Only) 173.150 (f) (2)

Transportation of Dangerous Goods (TDG - Canada)

Not Regulated by TDG (Road/Rail Only), TDG Part 1.36

IMDG (Marine Transport)

UN 1987, Alcohols, N.O.S. (Isopropanol, Ethanol), Class 3, PG III, Limited Quantity, (Flashpoint 40.556°C cc)

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 %
Ethanol	64-17-5	0.1 %
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 - 0175699v1.0

Issue date 19-Dec-2012

Effective Date 15-Dec-2012

Expiry Date 15-Dec-2015

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.