



MATERIAL SAFETY DATA SHEET

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 U.S. Government's Occupational Safety and Health Administration (OSHA).

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

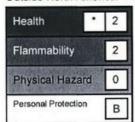
Morris Corporate Center IV 399 Interpace Parkway

P.O. Box 225

Parsippany, NJ 07054-0225

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

LEGENI HMIS/NFF	5000
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





2. Hazards Identification

Emergency overview

CAUTION

EYE IRRITANT. May be irritating to skin. Avoid contact with 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, edema, drying, defatting and cracking of the skin.

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and

vomiting.

OSHA Regulatory Status

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Issue date

Standard, 29 CFR 1910.1200.

Potential environmental effects

See section 12.

3. Composition / Information on Ingredients

CAS#	Percent
1336-21-6	2.5 - 10
1317-65-3	10 - 20
6009-70-7	1 - 2.5
67-63-0	1 - 2.5
	1336-21-6 1317-65-3 6009-70-7

4. First Aid Measures

Firet aid	procedures
riistaiu	procedures

In case of contact with eyes, rinse eyes IMMEDIATELY with plenty of water. If persistent Eye contact

irritation occurs, seek medical advice. Check for and remove any contact lenses.

In case of skin contact, wash area thoroughly with water. Wash clothing before reuse. Skin contact

Obtain medical attention if irritation persists.

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

Call medical doctor or poison control center immediately. Wash out mouth with water. Ingestion

DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.

Treat patient symptomatically. Notes to physician

Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice General 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 OSHA 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

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

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 to original

containers for re-use.

7. Handling and Storage			
Handling	Ensure adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid breathing mists or vapors. 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).		

8. Exposure Controls / Personal Protection

Store away from direct sunlight and incompatible materials.

Keep container tightly closed.

Exposure limits Ingredient(s)	Exposure Limits	
Ammonium hydroxide	ACGIH-TLV	
· · · · · · · · · · · · · · · · · · ·	Not established	
	OSHA-PEL	
	Not established	
Ammonium oxalate	ACGIH-TLV	
	TWA: 1 mg/m3	
	OSHA-PEL	
	TWA: 1 mg/m3	
Isopropanol	ACGIH-TLV	
	TWA: 200 ppm	
	STEL: 400 ppm	
	OSHA-PEL	
	TWA: 400 ppm	
Limestone	ACGIH-TLV	
	TWA: 5 mg/m3	
	OSHA-PEL	
	TWA: 15 mg/m3	

Engineering controls

Personal protective equipment

General ventilation normally adequate.

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

Liquid Appearance Light tan Color Liquid Form ammoniacal Odor Not available Odor threshold Liquid Physical state pH 9.6 - 10.2Not available Freezing point Not available **Boiling point** Not available Pour point

Not available **Evaporation rate** 105 °F (40.55 °C) Tag Closed Cup Flash point

Not available Auto-ignition temperature Not available Flammability limits in air, lower, %

Flammability limits in air, upper, %

by volume

Not available Vapor pressure Not available Vapor density 1.104 - 1.140 Specific gravity Octanol/water coefficient

Not available Insoluble Solubility (H2O) Not available VOC (Weight %) Viscous Viscosity Not available Percent volatile

10. Stability and Reactivity

DO NOT MIX WITH BLEACH or use in conjunction with other household products. Reactivity Hazardous polymerization does not occur.

Possibility of hazardous reactions

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. Not for use on silver, lacquered, painted or antiqued finished surfaces. Incompatible materials

Not available

Hazardous decomposition products

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

11. Toxicological Information

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

Component analysis - Oral LD50

ingredient(s)	LDSU	
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.

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

Name of Toxicologically Synergistic Not available

Products

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

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

Ammonium hydroxide 1336-21-6 96 Hr LC50 Pimephales promelas: 8.2 mg/L

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

Isopropanol 67-63-0 48 Hr EC50 Daphnia magna: 13299 mg/L

Persistence / degradability

Bioaccumulation / accumulation

Mobility in environmental media

Environmental effects

Aquatic toxicity

Partition coefficient

Chemical fate information

Not available

Not available

Not available

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

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15. Regulatory Information

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous

chemical

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

U.S. - CAA (Clean Air Act) - Reactivity Factors for VOCs in Aerosol Coatings

67-63-0

0.71 G Ozone/g VOC Reactivity Factor

U.S. - CAA (Clean Air Act) - Volatile Organic Compounds (VOCs) in SOCMI

Isopropanol

67-63-0

Present

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Ammonium hydroxide

1336-21-6

1000 Lb final RQ; 454 kg final RQ

6009-70-7

Ammonium oxalate

5000 Lb final RQ (listed under Ammonium oxalate); 2270 kg final RQ (listed under

Ammonium oxalate)

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Isopropanol

67-63-0

1.0 % de minimis concentration (only if manufactured by the strong acid process, no

supplier notification)

U.S. - CWA (Clean Water Act) - Hazardous Substances

Ammonium hydroxide

Present Present

1336-21-6 Ammonium oxalate

CERCLA (Superfund) reportable quantity Ammonium hydroxide: 1000.0000 Ammonium oxalate: 5000.0000

Benzene, ethyl-: 1000.0000 Naphthalene: 100.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

Section 302 extremely

hazardous substance

Section 311 hazardous chemical No

Clean Water Act (CWA)

#17228

Hazardous substance

State regulations

This product is not subject to warning labeling under the California Proposition 65 regulation

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Ammonium hydroxide 1336-21-6 Present (refers to solutions >=4%)
Ammonium oxalate 6009-70-7 Present
Isopropanol 67-63-0 Present

U.S. - Louisiana - Reportable Quantity List for Pollutants

Ammonium hydroxide 1336-21-6 1000 Lb final RQ; 454 kg final RQ

Ammonium oxalate 6009-70-7 5000 Lb final RQ (listed under Ammonium oxalate); 2270 kg final RQ (listed under

Ammonium oxalate

U.S. - Massachusetts - Right To Know List

 Ammonium hydroxide
 1336-21-6
 Present

 Ammonium oxalate
 6009-70-7
 Present

 Isopropanol
 67-63-0
 Present

 Limestone
 1317-65-3
 Present

U.S. - Minnesota - Hazardous Substance List

Limestone 1317-65-3 sn 4001 U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

Ammonium hydroxide 1336-21-6 1000 Lb RQ (air); 100 lb RQ (land/water)
Ammonium oxalate 6009-70-7 5000 Lb RQ (air); 100 lb RQ (land/water)

U.S. - Pennsylvania - RTK (Right to Know) List

Ammonium hydroxide 1336-21-6 Environmental hazard Ammonium oxalate 6009-70-7 Environmental hazard Isopropanol 67-63-0 Environmental hazard Limestone 1317-65-3 Present

U.S. - Rhode Island - Hazardous Substance List

Isopropanol 67-63-0 Toxic; Flammable

Limestone 1317-65-3 Toxic

Inventory status

Country(s) or region Inventory name On inventory (yes/no)*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

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, 8 fl oz - 8043677v1.0

 Issue date
 28-May-2013

 Effective date
 15-May-2013

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.