

REC 76523



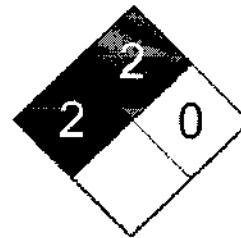
MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name BRASSO® Metal Polish
CAS # UPC CODES Refer to Section 16
Product use Mixture
Manufacturer Metal Polish
 Reckitt Benckiser
 Morris Corporate Center IV
 399 Interpace Parkway
 P.O. Box 225
 Parsippany, NJ 07054-0225
 In Case of Emergency: 1-800-228-4722
 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
 EYE IRRITANT. Skin irritation possible with prolonged exposure. Do not get in eyes, on skin or on clothing.
 Combustible liquid. Keep away from heat and flame.
 Use only in well-ventilated areas.

Potential short term health effects

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

Eyes Causes irritation.

Skin May cause irritation.

Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

Ingestion May cause stomach distress, nausea or vomiting.

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

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

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.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Isopropanol	67-63-0	2.5 - 10
Limestone	1317-65-3	10 - 20
Ammonium hydroxide	1336-21-6	1 - 2.5
Ethanedioic acid, dihydrate	6153-56-6	1 - 2.5
Ethanol	64-17-5	1 - 2.5

4. First Aid Measures

First aid procedures	
Eye contact	Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.
Skin contact	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Ingestion	Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
Notes to physician	Symptoms may be delayed.
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 OSHA 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.
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	Use good industrial hygiene practices in handling this material.
Storage	Keep out of reach of children. Keep from freezing. Do not store at temperatures above 120°F (49°C). Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits Ingredient(s)	Exposure Limits
Ammonium hydroxide	ACGIH-TLV Not established OSHA-PEL Not established
Ethanedioic acid, dihydrate	ACGIH-TLV TWA: 1 mg/m ³ STEL: 2 mg/m ³ OSHA-PEL TWA: 1 mg/m ³
Ethanol	ACGIH-TLV TWA: 1000 ppm STEL: 1000 ppm OSHA-PEL TWA: 1000 ppm
Isopropanol	ACGIH-TLV TWA: 200 ppm STEL: 400 ppm OSHA-PEL TWA: 400 ppm
Limestone	ACGIH-TLV TWA: 5 mg/m ³ OSHA-PEL TWA: 15 mg/m ³
Engineering controls	General ventilation normally adequate.
Personal protective equipment	
Eye / face protection	Safety glasses if eye contact is possible. Emergency responders should wear full eye and face protection.
Hand protection	Protective gloves are recommended for prolonged or repeated exposure. Emergency responders should wear impermeable gloves.
Skin and body protection	As required by employer code.
Respiratory protection	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.

9. Physical and Chemical Properties

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

Flash point	40.55 °C (105 °F) Tag Closed Cup
Evaporation rate	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	Not available
Octanol/water coefficient	Not available
Solubility (H2O)	Insoluble
Auto-ignition temperature	Not available
VOC (Weight %)	Not available
Viscosity	Viscous
Percent volatile	Not available

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Avoid high temperatures. Do not mix with other chemicals.
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.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

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

Component analysis - Oral LD50

Ingredient(s)	LD50
Ammonium hydroxide	350 mg/kg rat
Ethanedioic acid, dihydrate	375 mg/kg rat
Ethanol	3450 mg/kg mouse; 7060 mg/kg rat
Isopropanol	4396 mg/kg rat
Limestone	6450 mg/kg rat

Effects of acute exposure

Eye	Causes irritation.
Skin	May cause irritation.
Inhalation	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
Ingestion	May cause stomach distress, nausea or vomiting.
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.

ACGIH - Threshold Limit Values - Carcinogens

Ethanol 64-17-5
Isopropanol 67-63-0

A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
A4 - Not Classifiable as a Human Carcinogen

IARC - Group 1 (Carcinogenic to Humans)

Ethanol 64-17-5

Monograph 96 [in preparation] (in alcoholic beverages)

IARC - Group 3 (Not Classifiable)

Isopropanol 67-63-0

Monograph 71 [1999]; Supplement 7 [1987]; Monograph 15 [1977]

Mutagenicity

The finished product is not expected to have chronic health effects.
Mutagenic effects were observed in somatic and reproductive cells of live animals (rats and mice) exposed to high oral doses of ethanol.

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.
Animal studies demonstrate that ingestion of ethanol can cause embryotoxicity, teratogenicity and fetotoxicity in the presence of maternal toxicity.

Synergistic Materials

Not available

12. Ecological Information

Ecotoxicity

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

Ecotoxicity - Freshwater Algae Data

Isopropanol 67-63-0

96 Hr EC50 *Scenedesmus subspicatus*: >1000 mg/L; 72 Hr EC50 *Scenedesmus subspicatus*: >1000 mg/L

Ecotoxicity - Freshwater Fish Species 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 - Microtox Data

Ethanol 64-17-5

5 Min EC50 *Photobacterium phosphoreum*: 35470 mg/L; 30 min EC50 *Photobacterium phosphoreum*: 34634 mg/L

Isopropanol 67-63-0

5 Min EC50 *Photobacterium phosphoreum*: 35390 mg/L

Ecotoxicity - Water Flea 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 mg/L; 24 Hr EC50 *Daphnia magna*: 10800 mg/L

Isopropanol 67-63-0

48 Hr EC50 *Daphnia magna*: 13299 mg/L

Environmental effects

Not available

Aquatic toxicity

Not available

Persistence / degradability

Not available

Bioaccumulation / accumulation

Not available

Partition coefficient

Not available

Mobility in environmental media

Not available

Chemical fate information

Not available

13. Disposal Considerations

Waste codes

Not available

Disposal instructions

Dispose in accordance with all applicable regulations.

Waste from residues / unused products

Not available

Contaminated packaging

Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Not Regulated - (Non-Bulk Road / Rail) see CFR 173.150 (f), (2), (3)

Transportation of Dangerous Goods (TDG - Canada)

Not Regulated - (Non-Bulk Road / Rail) see TDG Part 2.17.2 & 23.2

IMDG (Marine Transport)

UN 1993 - Flammable Liquid, N.O.S. (Isopropyl Alcohol) Class 3, PG III –
Limited Quantity, FP 40.556°C (105°F) Closed Cup

IATA/ICAO (Air)

UN 1993 - Flammable Liquid, N.O.S. (Isopropyl Alcohol) Class 3, PG III,
FP 40.556°C (105°F) Closed Cup

15. Regulatory Information

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

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

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 1336-21-6 Present

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Ammonium hydroxide: 1000.0000

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 No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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

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

U.S. - Massachusetts - Right To Know List

Ammonium hydroxide 1336-21-6 Present
 Ethanol 64-17-5 Teratogen
 Isopropanol 67-63-0 Present
 Limestone 1317-65-3 Present

U.S. - Minnesota - Hazardous Substance List

Ethanol 64-17-5 Present
 Isopropanol 67-63-0 Present
 Limestone 1317-65-3 Present (dust)

U.S. - New Jersey - Right to Know Hazardous Substance List

Ammonium hydroxide 1336-21-6 sn 0103
 Ethanol 64-17-5 sn 0844
 Isopropanol 67-63-0 sn 1076
 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)

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

Ammonium hydroxide 1336-21-6 Environmental hazard
 Ethanedioic acid, dihydrate 6153-56-6 Present
 Ethanol 64-17-5 Present
 Isopropanol 67-63-0 Environmental hazard
 Limestone 1317-65-3 Present

U.S. - Rhode Island - Hazardous Substance List

Ethanedioic acid, dihydrate 6153-56-6 Flammable
 Ethanol 64-17-5 Toxic; Flammable
 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	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

UPC CODES: 26600-06200 (8 oz.)

FORMULA NUMBER: 0175699

Issue date

23-Oct-2009

Effective date

15-Oct-2009

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.