

31688/90

MATERIAL SAFETY DATA SHEET



BRAVO HEAVY DUTY LOW ODOR STRIPPER

HMIS		NFPA	Personal protective equipment		
Health	3	3			
Fire Hazard	0	0			
Reactivity	0	0			

Version Number: 2

Preparation date: 2005-05-12

1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** BRAVO HEAVY DUTY LOW ODOR STRIPPER

**MSDS #:** 114585005

**Product code:** 04576, 04583, 04588, 114585x

**Recommended use:** Floor stripper.

**Manufacturer, importer, supplier:**

US Headquarters JohnsonDiversey, Inc. 8310 16th St. Sturtevant, Wisconsin 53177-0902 Phone: 1-888-352-2249 MSDS Internet Address: www.johnsondiverse.com	Canadian Headquarters JohnsonDiversey - Canada, Inc. 2401 Bristol Circle Oakville, Ontario L6H 6P1 Phone: 1-800-668-3131
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**Emergency telephone number:** 1-800-851-7145 (Prosar); 1-651-917-6133 (Int'l Prosar); 01-800-710-3400 (México)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER. CORROSIVE. CAUSES EYE AND SKIN BURNS . HARMFUL OR FATAL IF SWALLOWED.

**Principle routes of exposure:** Eyes. Skin contact. Inhalation. Ingestion.

**Skin contact:** Corrosive. May cause permanent damage.

**Eye contact:** Corrosive. Causes permanent eye damage, including blindness.

**Inhalation:** May cause irritation and corrosive effects to nose, throat and respiratory tract.

**Ingestion:** Corrosive. Causes burns to mouth, throat and stomach.

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

Ingredient	CAS #	Weight %	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hydroxide	1310-73-2	5 - 10%	140 mg/kg (rat)	Not available	Not available
Monoethanolamine	141-43-5	1 - 5%	1720 mg/kg (rat)	1 mL/kg (rabbit)	Not available

4. FIRST AID MEASURES

**Eye contact:** Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.

**Skin contact:** Flush immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

**Inhalation:** If breathing is affected, remove to fresh air. Get medical attention immediately.

**Ingestion:** Do not induce vomiting. Immediately drink one cupful of water or milk. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Aggravated Medical Conditions:** Persons with pre-existing skin disorders may be more susceptible to irritating effects

5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Dry chemical, water spray, foam, carbon dioxide.

**Specific hazards:** None known.

**Unusual hazards:** Corrosive material (See sections 8 and 10).

**Specific methods:** No special methods required

**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**Extinguishing media which must not be used for safety reasons:** None.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Put on appropriate personal protective equipment (see Section 8.).  
**Environmental precautions and clean-up methods:** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use a water rinse for final clean-up.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin, eyes and clothing. Do not taste or swallow. Avoid breathing vapors or mists. Wash thoroughly after handling. Remove and wash contaminated clothing and footwear before re-use. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. Use only with adequate ventilation. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

**Storage:** Keep tightly closed in a dry, cool and well-ventilated place. Protect from freezing. Keep out of the reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures to reduce exposure:** Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.

### Personal Protective Equipment

**Eye protection:** Chemical splash goggles.  
**Hand protection:** Chemical resistant gloves. Includes neoprene gloves.  
**Skin and body protection:** If major exposure is possible, wear suitable protective clothing and footwear.  
**Respiratory protection:** If aerosols, mists, or vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over-exposure. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.  
**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice

Ingredient	CAS #	ACGIH	OSHA	Mexico
Sodium hydroxide	1310-73-2	2 mg/m <sup>3</sup> (Ceiling)	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup> (Ceiling)
Monoethanolamine	141-43-5	6 ppm (STEL) 3 ppm (TWA)	6 mg/m <sup>3</sup> 3 ppm	8 mg/m <sup>3</sup> (TWA) 15 mg/m <sup>3</sup> (STEL)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b> Liquid	<b>Appearance:</b> Liquid
<b>Color:</b> Colourless	<b>Boiling point/range:</b> Not determined
<b>Odor:</b> Bland	<b>Melting point/range:</b> Not determined
<b>Specific gravity:</b> 1.10	<b>pH:</b> 13.4
<b>Dilution pH:</b> No information available	<b>Density:</b> 1.10
<b>Bulk density:</b> No information available	<b>Decomposition temperature:</b> Not determined
<b>Vapor density:</b> No information available	<b>Autoignition temperature:</b> No information available
<b>Evaporation rate:</b> No information available	<b>Solubility:</b> Soluble
<b>Solubility in other solvents:</b> No information available	<b>VOC:</b> 1.5
<b>Viscosity:</b> No information available	<b>Flash point:</b> >200 (°F) >93.3 (°C)
<b>Partition coefficient (n-octanol/water):</b> No information available	

## 10. STABILITY AND REACTIVITY

**Stability:** The product is stable  
**Polymerization:** Hazardous polymerisation does not occur  
**Hazardous decomposition products:** None reasonably foreseeable.  
**Materials to avoid:** Acids. Oxidising agents.  
**Conditions to avoid:** Do not freeze.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity** Corrosive  
**Component information:** See Section 3  
**Chronic toxicity:** None known  
**Specific effects**  
**Carcinogenic effects:** None known

Mutagenic effects: None known  
 Reproductive toxicity: None known  
 Target organ effects: None known

**12. ECOLOGICAL INFORMATION**

Environmental Information: When used for its intended purpose this product should not cause adverse effects in the environment

**13. DISPOSAL CONSIDERATIONS**

Waste from residues / unused products:  
 Undiluted product is regulated under environmental and transportation laws as a corrosive waste . Dispose of according to all federal, state and local applicable regulations .

**14. TRANSPORT INFORMATION**

DOT/TDG: Please refer to the Bill of Lading/receiving documents for up to date shipping information

**15. REGULATORY INFORMATION**

**International Inventories**  
 All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL/NDL).

**U.S. Regulations**  
**California Proposition 65:** This product is not subject to the reporting requirements under California's Proposition 65

**STATE RIGHT TO KNOW**

Ingredient	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:	ILRTK:	CTRTK:
Water	7732-18-5	-	-	-	-	-	-
Sodium hydroxide	1310-73-2	Listed	Listed	Listed	Listed	Listed	Listed
Monoethanolamine	141-43-5	Listed	Listed	Listed	Listed	Listed	Listed

**CERCLA / SARA**

Ingredient	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Sodium hydroxide	1310-73-2	5 - 10%	1000		

CAA HAP/CAA ODS/CWA Priority Pollutants: None  
 Canada  
 WHMIS hazard class: E Corrosive material .



**16. OTHER INFORMATION**

Reason for revision: Not applicable  
 Prepared by: NAPRAC  
 Additional advice: None

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# BRAVO HEAVY DUTY LOW ODOR STRIPPER

National Fire Protection Association (NFPA)	Fire Hazard	Hazardous Material Information System (HMIS)	Health	3
	Health		Reactivity	0
Protective Clothing	Emergency Overview	Clear Liquid. See Section 9. DANGER. CORROSIVE. CAUSES EYE AND SKIN BURNS. HARMFUL OR FATAL IF SWALLOWED.		

## Section 1. Chemical Product and Company Identification

Product Name	<b>BRAVO HEAVY DUTY LOW ODOR STRIPPER</b>	Code	4576 & 4583 & 4588
Product Use	Industrial/Institutional: Floor care. This product is intended to be diluted prior to use.	PMS#	455721
MSDS#	114585005	Validation Date	4/5/2002
U.S. Headquarters Johnson Wax Professional 8310 16th Street Sturtevant, Wisconsin 53177-0902 Phone: (888) 352-2249 MSDS Internet Address: www.jwp.com	Canadian Headquarters Johnson Wax Professional 100 Matheson Blvd. East, Suite 203 Mississauga, Ontario L4Z 2G7 Phone: (905) 755-0913 or (888) 746-5971	Print Date	4/5/2002
		Supersedes	No Previous Validation
		In Case of Emergency	(800) 851-7145

## Section 2. Composition and Information on Ingredients

Ingredients	CAS #	% by Weight	Exposure Limits	LC50/LD50
Monoethanolamine	141-43-5	1-5	OSHA (United States). TWA: 8 mg/m <sup>3</sup> STEL: 15 mg/m <sup>3</sup> ACGIH (United States). TWA: 7.5 mg/m <sup>3</sup> STEL: 15 mg/m <sup>3</sup>	ORAL (LD50): Acute: 1720 mg/kg [Rat]. DERMAL (LD50): Acute: 1018 mg/kg [Rabbit].
Sodium Hydroxide	1310-73-2	5-10	OSHA (United States). CEIL: 2 mg/m <sup>3</sup> ACGIH (United States). STEL: 2 mg/m <sup>3</sup>	Not available.
Water	7732-18-5	60-100	Not available.	Not available.

## Section 3. Hazards Identification

Routes of Entry	Inhalation. Skin contact. Eye contact.
Potential Acute Health Effects	<p><b>Eyes</b> Corrosive. May cause permanent damage including blindness.</p> <p><b>Skin</b> Corrosive. May cause permanent damage.</p> <p><b>Inhalation</b> May cause irritation and corrosive effects to nose, throat and respiratory tract.</p> <p><b>Ingestion</b> Corrosive. May cause burns to mouth, throat, and stomach.</p>
Medical Conditions	Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc., may be more susceptible to irritating effects.
Aggravated by Overexposure:	
See Toxicological Information (section 11)	

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**Section 4. First Aid Measures**

<b>Eye Contact</b>	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.
<b>Skin Contact</b>	Flush immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
<b>Inhalation</b>	If breathing is difficult: Remove to fresh air. Get medical attention immediately.
<b>Ingestion</b>	Do not induce vomiting. Immediately drink one cupful of water or milk. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

<b>Flammability of the Product</b>	None known.
<b>Flash Points</b>	None known.
<b>Products of Combustion</b>	None known.
<b>Fire Fighting Media and Instructions</b>	Extinguish with water spray or carbon dioxide, dry chemical powder or appropriate foam. Normal fire fighting procedure may be used.
<b>Protective Clothing (Fire)</b>	Put on appropriate personal protective equipment (see Section 8).
<b>Special Remarks on Fire and Explosion Hazards</b>	Corrosive material (See sections 8 and 10).

**Section 6. Accidental Release Measures**

<b>Personal Precautions</b>	Put on appropriate personal protective equipment (see Section 8).
<b>Environmental Precautions and Clean-up Methods</b>	In the event of major spillage: Use appropriate containment to avoid environmental contamination. Sweep or scrape up material. Place in suitable clean, dry containers for disposal by approved methods. Use a water rinse for final clean-up.

**Section 7. Handling and Storage**

<b>Handling</b>	Avoid contact with eyes, skin and clothing. Do not taste or swallow. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Wash thoroughly after handling. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.
<b>Storage</b>	Keep container tightly closed. Protect from freezing. Store in a dry, cool and well-ventilated area. KEEP OUT OF REACH OF CHILDREN.

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.
<b>Personal Protection</b>	
<i>Eyes</i>	Chemical splash goggles.
<i>Hands</i>	Chemical resistant gloves. Includes: Neoprene gloves. Rubber gloves.
<i>Respiratory</i>	If mists/vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over exposure. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
<i>Feet</i>	Protective footwear.
<i>Body</i>	If major exposure is possible, wear suitable protective clothing and footwear.

**Section 9. Physical and Chemical Properties**

<b>Physical State and Appearance</b>	Liquid.
<b>Odor</b>	Bland.
<b>Color</b>	Clear
<b>pH</b>	13.4 [Basic.] (Undiluted.)
<b>Specific Gravity</b>	1.1
<b>Solubility in water</b>	Complete.

**Section 10. Stability and Reactivity**

Stability and Reactivity	The product is stable.
Conditions of Instability	None known.
Incompatibility with Various Substances	Reactive with oxidizing agents, acids.
Hazardous Decomposition Products	When exposed to fire: Produces normal products of combustion.
Hazardous Polymerization	Will not occur.

**Section 11. Toxicological Information**

Acute toxicity	Acute oral toxicity (LD50): Estimated to be 860 mg/kg. Corrosive.
Effects of Chronic Exposure	None known.
Other Toxic Effects	None known.

**Section 12. Ecological Information**

Not available.

**Section 13. Disposal Considerations**

Waste Information	Undiluted product is regulated under environmental and transportation laws as a corrosive waste. Dispose of according to all federal, state and local regulations.
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**Section 14. Transport Information**

**DOT Classification**

DOT Proper Shipping Name Please refer to the Bill of Lading/receiving documents for up to date shipping information.

**TDG Classification**

TDG Proper Shipping Name Please refer to the Bill of Lading/receiving documents for up to date shipping information.  
TDG Class

**Section 15. Regulatory Information**

Reporting in this section is based on ingredients disclosed in Section 2

**US Regulations**

**Federal** Clean Water Act (CWA) 311: Sodium hydroxide  
 CERCLA: Hazardous substances.: Sodium hydroxide

**State** New Jersey spill list: Sodium hydroxide  
 New Jersey: Monoethanolamine, Sodium hydroxide  
 Massachusetts spill list: Monoethanolamine, Sodium hydroxide  
 Massachusetts RTK: Monoethanolamine, Sodium hydroxide  
 Pennsylvania RTK: Monoethanolamine, Sodium hydroxide

This product is not subject to the reporting requirements under California's Proposition 65.

Registered Product Information Not applicable.

**Canadian Regulations**

WHMIS Classification CLASS E: Corrosive liquid.

WHMIS Icon



Registered Product Information Not applicable.

**Johnson wax**  
PROFESSIONAL

**BRAVO HEAVY DUTY LOW ODOR STRIPPER**

Material Safety Data Sheet

**Chemical Inventory Status** All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**Section 16. Other Information**

**Other Special Considerations** Not available.

**Version** 1.02

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