



Material Safety Data Sheet

Section 1. Product and Company Identification			
Product Name	ZUD® HEAVY DUTY CLEANSER (LIQUID)	MSDS#	Not available
Product Description	Acidic hard surface cleanser with mild abrasive.	Validation Date	4/12/2005
Manufacturer	Reckitt Benckiser North America, Inc. Morris Corporate Center IV 399 Interpace Parkway (P.O. Box 225) Parsippany, N.J. 07054-0225	Print Date	4/12/2005
Product Identifier	Not available.	In case of Emergency: Telephone: 800-228-4722 Transportation Emergencies: Chemtrec: 1-800-424-9300 (U.S. & Canada) Outside the U.S & Canada (North America), call: 703-527-3887	
Item Number	359583		
Formula Number	434-095		
UPC Number	62338-74610 (19 oz.).		

Section 2. Composition and Information on Ingredients			
Name	CAS #	% by Weight	Exposure Limits : TLV/PEL
1) OXALIC ACID	144-62-7	3-5	TWA: 1 STEL: 2 (mg/m ³) from ACGIH (TLV) TWA: 1 (mg/m ³) from OSHA (PEL)
2) SILICA, CRYSTALLINE	14808-60-7	7-10	TWA: 0.1 (mg/m ³) from ACGIH (TLV) Respirable. TWA: 0.3 (mg/m ³) from OSHA (PEL) Respirable.
3) DIPROPYLENE GLYCOL MONOMETHYL ETHER	34590-94-8	3-5	TWA: 606 STEL: 909 (mg/m ³) from ACGIH (TLV) TWA: 100 STEL: 150 (ppm) from ACGIH (TLV) SKIN

Section 3. Hazards Identification	
Emergency Overview	CAUTION: EYE AND SKIN IRRITANT. DO NOT get in eyes or on skin. Causes eye irritation. Contains Oxalic Acid. Avoid contact with eyes. DO NOT mix with any other product, especially Chlorine bleach, Ammonia or alkaline products, as toxic fumes may result! Contains Oxalic Acid. KEEP OUT OF REACH OF CHILDREN.

Section 4. First Aid Measures	
Eye Contact	In case of eye contact, hold eyes open and IMMEDIATELY rinse eyes thoroughly with plenty of water. Remove any contact lenses and continue rinsing for at least 15 minutes. If irritation persists, consult a physician.
Skin Contact	If on skin, wash with plenty of soap and water. If irritation persists, get medical attention.
Inhalation	None required under recommended use conditions. Remove to fresh air.
Ingestion	If swallowed, DO NOT induce vomiting! Rinse mouth and drink a glass of water. Call a Physician or Poison Control Center. NEVER give an unconscious person anything to ingest.

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Section 5. Fire and Explosion Data

Flammability	Not flammable. See Section 14 for any Shipping Classifications.
Flash Point	CLOSED CUP: Higher than 93.3°C (>200°F).
Explosive Limits in Air	Not available.
Products of Combustion	Not available.
Fire and Explosion Hazards	None known.
Fire Fighting Media and Instructions	Use water spray, foam, dry chemical or carbon dioxide, as suitable for the surrounding fire.
Special Fire Fighting Instructions	Wear self-contained breathing apparatus and protective clothing appropriate for fighting a chemical fire.

Section 6. Accidental Release Measures

Accidental Spill	Small spills: Soak up with an inert absorbent material and dispose of in an appropriate waste container. Rinse surface residue and flush to sink or sanitary sewer. Large spills should be diked, contained and collected for later disposal according to local, state or federal regulations.
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Section 7. Handling and Storage

Handling and Storage	CAUTION: EYE AND SKIN IRRITANT. DO NOT get in eyes or on skin. Causes eye irritation. Contains Oxalic Acid. Avoid contact with eyes. DO NOT mix with any other product, especially Chlorine bleach, Ammonia or alkaline products, as toxic fumes may result! Contains Oxalic Acid. Store in original container in an upright position in areas inaccessible to children and pets. KEEP OUT OF REACH OF CHILDREN.
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Section 8. Exposure Controls/Personal Protection

Ventilation Requirements	None required.
Eye Protection	Eye irritant. Wear eye protection if the possibility of splashing exists. Emergency responders should wear full eye and face protection.
Skin Protection	Skin irritant, wear rubber or other type of impervious gloves. Emergency responders should wear impermeable gloves.
Respiratory Protection	None required.
Other Protection	None required under normal use conditions. Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.
Work/Hygienic Practices	Wash thoroughly with soap and water after handling.

Section 9. Physical and Chemical Properties

Description	Smooth paste of creamy consistency.	Odor	Floral. Citrus.
pH	1 [Acidic.]	Color	White.
Boiling/Condensation Point	Not determined.		
Specific Gravity	1.1		
Vapor Pressure	Not determined.		
Vapor Density	Not determined.		

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Viscosity	Not available.
Solubility	Dispersible.
Physical Chemical Comments	Not available.

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	None known.
Incompatibility with Various Substances	Do not mix with any other products especially chlorine bleach, ammonia, or alkaline products.
Hazardous Decomposition Products	Oxalic acid may generate formic acid and carbon monoxide under fire conditions.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information**Exposure effects**

Eye Contact	Eye irritant. Causes eye irritation.
Skin Contact	Skin irritant. Causes skin irritation.
Inhalation	None expected.
Ingestion	May irritate or burn mouth, esophagus or stomach. Not orally toxic.
Carcinogenicity	Respirable crystalline silica is designated as a IARC Group 1 carcinogen, NTP suspect carcinogen and OSHA suspect carcinogen. However, the silica present in this product is not in a respirable form, when used according to label directions.

Section 12. Ecological Information

Ecotoxicity	Not available.
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Section 13. Disposal Considerations

Waste Disposal	Small spills: Absorb with an inert material and discard in appropriate waste container. Rinse surface and wipe dry to eliminate slippery or gritty condition. Large spills: Contain and collect liquid for evaluation and disposal according to local, state and federal regulations.
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Section 14. Transport Information

DOT Classification	ORM-D	
Proper Shipping Name	Consumer Commodity.	
DOT Identification Number	Not applicable.	
Packing Group	Not applicable.	
Maritime Transportation	Not applicable.	
Hazardous Substances Reportable Quantity	Not applicable.	


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Special Provisions for Transport	ORM-D: For US Domestic Shipments Only.
TDG Classification	Consumer Commodity - Transborder Consignment.
ADR Classification	Not applicable.
IMDG Classification	Corrosive liquid, acidic, organic n.o.s. (contains Oxalic Acid) class 8, UN3265, III-LTD QTY
IATA Classification	Does not qualify in manufactured case lot sizes.

Section 15. Regulatory Information

Federal and State Regulations	SARA Title III, Section 313 Toxic Chemical Notification & Release Reporting: None California Proposition 65: This product contains the following ingredients which require a warning under the Safe Drinking Water & Toxic Enforcement Act: 1) SILICA, CRYSTALLINE		
	Not available.	7-10	Not avai
Other Classifications	WHMIS (Canada)	CLASS D-2A: Material causing other toxic effects (VERY TOXIC).	

Section 16. Other Information

HMIS (U.S.A.)	<table border="1"> <tr> <td>Health Hazard</td> <td>2</td> </tr> <tr> <td>Fire Hazard</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> <tr> <td>Personal Protection</td> <td>B</td> </tr> </table>	Health Hazard	2	Fire Hazard	0	Reactivity	0	Personal Protection	B	National Fire Protection Association (U.S.A.)		Fire Hazard Reactivity Specific hazard
Health Hazard	2											
Fire Hazard	0											
Reactivity	0											
Personal Protection	B											
		NFPA Aerosol Level	Not applicable.									
Validated by Product Safety on 4/12/2005.		Printed 4/12/2005.										

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