

BSL13200005

MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Information

Product #:
FC 1320

Product Name:
Knockout

Product Use:
Classroom Finish

Distributor Name:
Bright Solutions

Distributor Address:
4114 South Creek Road
Chattanooga, TN 37406

Emergency Phone #:
1-800-635-5053

Date Prepared/Updated:
2-15-07

Hazardous Material Information System (HMIS)
Health:
1

Fire Hazard:
0

Reactivity:
0

Precautionary Label Statements:
Caution

Section 2. Composition and Information on Ingredients

Ingredients	CAS#	%	Exposure Limits
Water	7732-18-5	60-75	Not Listed
Acrylic Copolymer	Not Available	15-20	Not Listed
Diethylene Glycol Ethyl Ether	111-90-0	<10	Not Listed
Wax Emulsion	Not Available	<10	Not Listed
Tributoxyethyl Phosphate	78-51-3	<5	Not Listed

Section 3. Hazards Identification

Route of Entry:
None expected

Potential Acute Health Effects:
None Known

Section 4. First Aid Measures

Eye Contact:
Flush immediately with water for 15 minutes being careful to flush behind the eyelids. Seek medical attention if irritation persists or develops.

Inhalation:
No harmful effects expected.

Skin Contact:
No harmful effects expected. Prolonged or repeated contact may dry skin and cause irritation.

Ingestion:
Immediately drink plenty of water. If discomfort persists, get medical attention.

Section 5. Fire Fighting Measures

Flashpoint:
N/A

Fire Fighting Media and Instructions:
Extinguish with water spray or carbon dioxide; dry chemical powder or appropriate foam. Normal fire fighting procedure may be used.

Unusual Fire and Explosion Hazards:
None known

Section 6. Accidental Release Measures

Personal Precautions:
Put on appropriate personal protective equipment (see Section 8).

Environmental Precautions:
In the event of major spillage: Use appropriate containment to avoid environmental contamination. Collect spilled 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

Handling:
Use appropriate hygiene methods when handling product. For industrial use only.

Storage:
Store in a cool well ventilated area. Protect from freezing. Keep out of reach of children.

Section 8. Exposure Controls & Personal Protection

Engineering Controls:
None usually needed. General room ventilation is adequate.

Personal Protection:
Eyes:
No special requirements under normal use conditions.

Hands:
No special requirements under normal use conditions.

Respiratory:
No special requirements under normal use conditions.

Additional Measures:
N/A

Listed Carcinogen:
No ingredients listed by NTP, IARC or OSHA Subpart Z

Medical Condition Aggravated effects:
Persons with pre-existing skin disorders may be susceptible to irritating effects.

Section 9. Physical and Chemical Properties

Fragrance:
Characteristic

Physical State:
Liquid

Color:
White

pH:
8.5-9.0

Specific Gravity:
1.04

Boiling/Condensation Point:
Approximately 212°F

Melting/Freezing Point:
Approximately 32°F

Solubility in Water:
Complete at 25°C

Section 10. Stability and Reactivity

Stability and Reactivity:
Stable

Conditions of Instability:
None Known

Incompatibility with Various Substances:
None Known

Decomposition Products Hazardous Polymerization:
When exposed to fire: Produces normal products of combustion.

Section 11. Toxicological Information

Effects of Chronic Exposure:
None Known

Section 12. Ecological Information

Effects of Chronic Exposure:
None Known

Section 13. Disposal Considerations

Dispose of all wastes according to all federal, state and local legislation.

Section 14. Transport Information

DOT Classification:
NOT Non-Hazardous

Section 15. Regulatory Information

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

U.S. Regulation:
Not Regulated.

Federal:
Not Regulated.

State:
Not Regulated.

Registered Product Information:
Not EPA Registered.

Section 16. Other Information

None reported.

Section 312: Immediate (Acute) Health

Method:
Tag Open Cup

Extinguish with water spray or carbon dioxide; dry chemical powder or appropriate foam. Normal fire fighting procedure may be used.

Unusual Fire and Explosion Hazards:
None known

Section 313: Toxic Release Inventory Reporting

Registered Product Information:
Contains 4.5% Glycol Ethers.

Section 316: Other Information

None reported.

Other Special Considerations:

None reported.

Manufacturer:
Midlab, Inc.

Address:
232 Industrial Park Road
Sweetwater, TN 37874

Primary Distributor:
Kelson, Inc.

Address:
5109 National Drive
Knoxville, TN 37914

Product #1320

BSL13200005

BSL13200041

Notice to Reader: This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied as to the accuracy of the information contained herein. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and must comply with all federal, state, Provincial and Local Laws and Regulations.

Distributed By: KEL-SAN, INC.

Material Safety Data Sheet

Optimax High Solids

Section 1. Chemical Product and Company Identification

Product Name	Optimax High Solids	
Product Number	BL0873	
Product Use	Not available	
Manufacturer/ Supplier	Amrep, Inc. 990 Industrial Park Drive Marietta, GA 30062	
Phone Number	(770) 422-2071 (Mon-Fri/ 8am- 5pm ET)	
D.O.T. Emergency Phone:	CHEM TEL (800) 255-3924 INTERNATIONAL: + 01-813-248-0584	
Date of Preparation	May 5 2009	Revision Number

Section 2. Hazards Identification

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

CAUTION!

Avoid contact with eyes. Do not ingest. Wash thoroughly after handling.

Potential Acute Health Effects Hazardous in case of eye contact (irritant), of ingestion. Slightly hazardous in case of skin contact (irritant), .

Routes of Entry Dermal contact. Eye contact. Inhalation. Ingestion.

Eyes Hazardous in case of eye contact (irritant).

Skin Sensitization of the product: Not available.
Slightly hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Inhalation May be irritating to respiratory system, especially at elevated temperatures.

Ingestion Hazardous in case of ingestion.

Medical conditions aggravated by exposure: Repeated skin exposure can produce local skin destruction, or dermatitis.

Potential Chronic Health Effects Repeated skin exposure can produce local skin destruction, or dermatitis.

Carcinogenic Effects Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Target organs

Environmental Tests

Section 3. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
Acrylate Copolymer	N/A	15 - 20	Not available.	Not available.
Diethylene Glycol Ethyl Ether	111-90-0	1 - 5	TWA: 25 ppm CEIL: 25 ppm	ORAL (LD50): Acute: 5540 mg/kg [Rat].
Dipropylene Glycol Methyl Ether	34590-94-8	1 - 5	ACGIH TLV (United States). TWA: 100 ppm 8 hour(s). STEL: 150 ppm 15 minute(s).	Not available.
Tributoxyethyl Phosphate	78-51-3	1 - 5	Not available.	Not available.
Oxidized Ethylene Copolymer	68441-17-8	1 - 2	Not available.	Not available.
Ammonium Hydroxide	1336-21-6	1 - 2	Not available.	Not available.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
General Advice	In case of Accident or if you feel unwell, seek medical advice immediately (show label or MSDS where possible).

Notes to
Physician

Section 5. Fire Fighting Measures

Flammability	Not applicable.
Fire Fighting Media and Instructions	Not applicable.
Products of Combustion	Not applicable.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	
Sensitivity to Mechanical Impact	
Sensitivity to Static Discharge	
	Not available.
Protection of Fire Fighters	See special remarks on Fire Hazards

Section 6. Accidental Release Measures

Personal Precautions	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Methods for Containment	Absorb with an inert material and put the spilled material in an appropriate waste disposal. Absorb with DRY earth, sand or other non-combustible material. Do not allow any potentially contaminated water including rain water, runoff from fire fighting or spills to enter any waterway, sewer or drain

Environmental
Precautions
Methods for Clean Up

See Methods for Containment
See Methods for Containment

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Section 7. Handling and Storage

Precautions	Do not ingest. Do not breathe gas/fumes/ vapor/spray. Avoid contact with eyes. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, alkalis.
Incompatibility	Reactive with oxidizing agents, acids, alkalis.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Avoid contact with eyes. Do not ingest. Wash thoroughly after handling.

Section 8. Exposure Controls/Personal Protection

Engineering Controls

Personal Protection

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Eyes

Safety glasses.

Body

No special protective clothing is required.

Respiratory

A respirator is not needed under normal and intended conditions of product use. Wear appropriate respirator when ventilation is inadequate.

Hands

Impervious gloves.

Protective Clothing (Pictograms)



Exposure Limits

See Section 2 For Applicable Exposure Limits

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Characteristic.
		Color	White.
Molecular Weight	Not applicable.		
pH	Not available.		
Boiling/Condensation Point	100°C (212°F)		
Melting/Freezing Point	May start to solidify at 0°C (32°F) based on data for: Water.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	1.03		
Vapor Pressure	Not available.		
Vapor Density	Not available.		
Volatility	>50% (w/w).		
VOC	62.034 (g/l).		
Evaporation Rate	<1 compared to Butyl acetate.		
Dispersion Properties	See solubility in water, methanol, acetone.		
Solubility	Easily soluble in methanol, acetone. Partially soluble in cold water, hot water.		
The Product is:	Non-flammable.		

Auto-ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Not available.

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Incompatibility with Various Substances	Reactive with oxidizing agents, acids, alkalis.
Hazardous Decomposition Products	Not available.

Section 11. Toxicological Information

Routes of Entry

Toxicity to Animals	Dermal contact. Eye contact. Inhalation. Ingestion.
Acute Effects on Humans	Acute oral toxicity (LD50): 5540 mg/kg [Rat]. (Diethylene Glycol Ethyl Ether).
yes	Hazardous in case of eye contact (irritant).
Skin	Sensitization of the product: Not available. Slightly hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Inhalation	May be irritating to respiratory system, especially at elevated temperatures.
Ingestion	Hazardous in case of ingestion.
Chronic Effects on Humans	Repeated skin exposure can produce local skin destruction, or dermatitis.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	These products are nitrogen oxides (NO, NO ₂ ...).
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation	Not available.

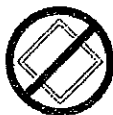
Section 13. Disposal Considerations

Waste Information Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste Stream Not available.

Section 14. Transport Information

DOT (U.S.A)
(Pictograms)



TDG Classification

-



PIN UN, Proper Shipping Name, PG Not applicable.

Maritime Transportation Not available.

Special Provisions for Transport Not available.

Section 15. Other Regulatory Information and Pictograms

Regulatory Lists No products were found.

Other Regulations Not available. or of its ingredients

Other Classifications HCS (U.S.A.) HCS Class: Irritating substance.

USA Regulatory Lists **WARNING:** This product contains chemical(s) known to the state of California to cause cancer, birth defects or other reproductive harm: Formaldehyde

WARNING: This product contains chemical(s) known to the state of California to cause cancer.: Formaldehyde

Massachusetts RTK: Formaldehyde

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Diethylene Glycol Ethyl Ether: Fire hazard

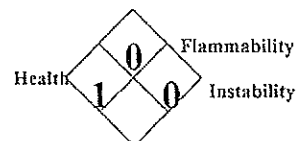
DSD (EEC) This product is not classified according to the EU regulations.

International Regulations Lists No products were found.

Hazardous Material
Information System
(U.S.A.)

Health	1
Flammability	0
Physical Hazard	0

National Fire
Protection
Association
(U.S.A.)



Specific Hazard



The Hazard Ranking systems presented on this MSDS provide only a quick reference for hazard information. The ENTIRE MSDS must be consulted to determine any specific hazards, First Aid measures, and PPE associated with this product.

Section 16. Other Information

Expiry date 3 (Three Years) from the date of preparation indicated in Section 1

Validated by CRushton on 5/5/2009.

Verified by CRushton.

Printed 5/5/2009.

Information Contact Amrep, Inc.
990 Industrial Park Drive
Marietta, GA 30062

Notice to Reader:

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.

Validated on 5/5/2009.

Optimax High Solids



HMIS RATINGS:
Health: 1
Flammability: 0
Reactivity: 0
Personal Protection: B

Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: ULTIMATE - (L-550)
Chemical Family: Polymer Emulsion
Company Identification: ABC COMPOUNDING CO., INC.
PO BOX 16247
ATLANTA, GA 30321-0247

Emergency Phone: 800-535-5053
Date Prepared: 01/16/09
MSDS Number: 6550
Mfgd By: ABC COMPOUNDING CO., INC.
PO BOX 16247

ATLANTA, GA 30321-0247

Section 2: COMPOSITION, INFORMATION ON INGREDIENTS

CAS NUMBER	CHEMICAL NAME	% BY WGHT.	OSHA PEL/ ACGIH TLV	SARA 302/304(1)*	SARA 313 (2)*	STATE INFO(3)(4)
111-90-0	Diethylene Glycol	< 6.0	25ppm-TWA	NO	YES	NO
	Monoethyl Ether		25ppm-TWA			

* See Section 15 for more information

n/e = none established - n/a = not applicable

Section 3: HAZARDS IDENTIFICATION

EMF* NCY OVERVIEW

CAUTION. May cause irritation of skin and respiratory tract.
White emulsion with acrylic odor.

Primary Route of Entry: Eye contact, skin contact, inhalation

Acute/Potential Health Effects:

EYES: Causes severe irritation, experienced as discomfort or pain, excess blinking and tear production, with redness and swelling of the conjunctiva.

SKIN: May cause mild skin irritation. Prolonged or repeated contact may cause defatting or drying of skin.

INHALATION: High concentrations of vapor may cause irritation of the respiratory tract.

INGESTION: May cause headache, dizziness, incoordination, nausea, vomiting, diarrhea and general weakness.

Chronic / Long Term Effects: None known.

Signs and Symptoms of Overexposure: Ingestion may cause nausea, vomiting and diarrhea.

Target Organ Effects: No data.

Reproductive/Developmental Information: No data.

Carcinogenic Information: This material is not listed as a carcinogen by IARC, NTP or OSHA.

Trade Name: ULTIMATE - (L-550)

MSDS Number: 6550

Section 4: FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

SKIN: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

INGESTION: Seek medical attention immediately. Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Never give anything by mouth to an unconscious person.

Section 5: FIRE FIGHTING MEASURES

Flash Point: No flash by standard methods.

Extinguishing Media: Use appropriate methods for combating surrounding fire.

Special Fire Fighting Instructions: Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode. Chemical resistant PPE is recommended.

Section 6: ACCIDENTAL RELEASE MEASURES

Stop all leaks. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Absorb spill with inert material (e.g. dry sand, earth). Prevent runoff from entering drains, sewers or other bodies of water. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

Section 7: HANDLING AND STORAGE

Follow all MSDS/label precautions even after container is emptied because they may contain product residues. Use with adequate ventilation. Do not get in eyes, on skin or clothing. Store in a cool, dry place. Keep container closed when not in use. Keep out of reach of children.

Section 8: EXPOSURE CONTROLS and PERSONAL PROTECTION

Eye Protection: Wear safety glasses or goggles.

Skin Protection: To prevent repeated or prolonged contact, wear impervious gloves (made from rubber, nitrile or neoprene), clothing and boots.

Respiratory Protection: When respiratory protection is required, use an organic vapor cartridge. A respiratory program that meets OSHA's 29 CFR 1910.34 & ANSI Z88.2 requirements must be followed.

Engineering Controls: Good general ventilation required.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White emulsion with acrylic odor

pH Concentrate: 8.5

Solubility in Water: Emulsion

Vapor Pressure [mmHg]: n/e

Trade Name: ULTIMATE - (L-550)

MSDS Number: 6550

Evaporation Rate (Butyl Acetate=1): n/e
Vapor Density [Air=1]: n/e
Specific Gravity [H2O=1]: 1.04
Boiling Point: > 212 F

Section 10: REACTIVITY

Stability: Stable
Hazardous Polymerization: Will not occur
Conditions to avoid: High temperature
Hazardous Decomposition Products: CO, CO2
Incompatibility: Strong acids, alkalis, oxidizing agents

Section 11: TOXICOLOGICAL INFORMATION

Diethylene Glycol Monoethyl Ether: Peroral LD50=6.7 ml/kg (male rat). Percutaneous LD50=11.3 ml/kg (male rat). SKIN-Rabbit, 4 h occluded, 0.5 ml results: no irritation. EYE-Rabbit, 0.1 ml results: minor conjunctival irritation, healed by 24 hours.

Section 12: ECOLOGICAL INFORMATION

Diethylene Glycol Monoethyl Ether: Toxicity to fish: Fathead Minnow; 96 h; LC50
Results: >10000 mg/l

Section 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Wastes must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: TRANSPORTATION INFORMATION

D.O.T. Shipping Name / Class:

Not regulated for domestic shipments

Section 15: REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA (Toxic Substances Control Act): The intentional ingredients of product are listed.

Title III Section 311/312 Hazardous Categories - 40 CFR 370.2:

ACUTE (X) Chronic () Fire () Pressure () Reactive () Not Applicable ()

(1) Title III Section 302/304 Extremely Hazardous Substances - 40 CFR 355 Appendix A

(2) Title III Section 313 Toxic Chemicals - 40 CFR 372.65

If indicated under Section 2 of this MSDS, this product contains toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right to Know Act of 1986. This information must be included in all MSDS that are copied and distributed for this material.

RCRA Status: Under RCRA, it is the responsibility of the product user to determine

Trade Name: ULTIMATE - (L-550)

MSDS Number: 6550

at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. If this product becomes a hazardous waste it would be assigned RCRA Code(s)
None

State and Local Regulations: Certain states maintain their own ingredient lists which differ slightly from the Federal standards. If indicated under Section 2 of this MSDS, states listed below may have regulations on ingredients contained in this product. Check with your state for any additional regulations.

- (3) California proposition 65 (Safe Drinking Water & Toxic Enforcement Act of 1986)
- (4) Massachusetts (Hazardous Substance Disclosure by Employers)

Section 16: OTHER INFORMATION

This information was compiled from current manufacturer's MSDS's of the component parts of the product.

Disclaimer: The Manufacturer believes that the information contained in the Material Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily all inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements.

Thoroughbred

SECTION I

HARVARD CHEMICAL RESEARCH

PO BOX 16458

ATLANTA, GA 30354

Date: 2/22/02

Phone:

INQUIRY: (404) 701-0657

EMERGENCY: (800) 424-8400

HEALTH
FLAMMABILITY
REACTIVITY

1

0

0

CCLP
1-5000
2-40000
3-1000
4-Extreme

SECTION II HAZARDOUS INGREDIENTS/INFORMATION

HAZARDOUS COMPONENTS

DIETHYLENE GLYCOL METHYL ETHER
DIBUTYL PHTHALATE

CAS#

111-77-3

84-74-2

OSHA/PEL

NE

5mg/m³

ACGIH/TLV

NI

5mg/m³

OTHER/STEL

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: ND
Vapor Pressure (mm Hg): ND
Vapor Density (Air=1): ND
Solubility in Water: COMPLETE

Appearance and odor: White liquid with bland odor.

Specific Gravity (H₂O=1): 1.04

Melting Point: NA

Evaporation Rate: (Butyl Acetate=1) ND

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): ND

Extinguishing Media: N/A

Special Fire Fighting Procedures: Do not enter confined fire space without proper protective equipment including a NIOSH approved self-contained breathing apparatus.

Explosion Hazards: NONE

Flammable Limits: LEL: N/A

UEL: N/A

SECTION V - REACTIVITY DATA

Stability: Stable

Incompatibility (Materials to Avoid): Oxidizers or strong acids.

Hazardous Decomposition or Byproducts: Heat, carbon dioxide, and carbon monoxide.

Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

Health Hazards (Acute and Chronic): NONE KNOWN

Routes of Entry, Signs of Exposure, and Symptoms of Exposure:

SKIN and EYES: Severe irritant to eyes.

INHALATION: Irritation and difficulty in breathing.

INGESTION: Gastric pain and vomiting.

Medical Conditions Generally Aggravated by Exposure: Unknown

Carcinogenicity: NONE

Emergency and First Aid Procedures:

SKIN & EYE CONTACT:

Rinse skin with clear water.

For eye contact immediately flush with clear running water for 15 minutes. Get medical attention.

INHALATION: Remove to fresh air. If breathing does not return to normal, get medical attention.

INGESTION: Immediately drink large quantities of water. Get medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

SPILLS: Dilute with water and flush in sanitary sewer.

Handling and Storage: Keep container closed when not in use. Do not freeze. Follow label instructions.

Other Precautions: Keep this and all chemicals out of the reach of children.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (Specify Type): For exposure above established limits (see section II) use NIOSH/MSMA approved dust/mist mask.

Ventilation: Mechanical: Recommended.

Protective Gloves: Rubber or neoprene.

Eye Protection: Chemical goggles with side shields.

Other Protective Clothing or Equipment: Draining safety shower and eye wash station.

SECTION IX - ADDITIONAL INFORMATION

ENVIRONMENTAL BIODEGRADABILITY: BIODEGRADABLE.

SARA TITLE III REPORTING REQUIREMENTS

SECTION 302, 304

311, 312

313

CERCLA

REPORTING NOT REQUIRED

REPORTING REQUIRED FOR INVENTORY ABOVE TPO.

REPORTING MAY BE REQUIRED FOR USERS IN MANUFACTURING SECTOR.

SAME AS SECTION 304

**Harvard Chemical Research, Inc.**

Research • Development • Manufacturer

NASS**DESCRIPTION**

This product is an extra heavy duty non-ammoniated, alkaline based, wax and finish remover. This product removes even the toughest of buildups of wax and finishes, with speed and ease. This product is a very effective cleaner when used against oily and greasy soils. This product is recommended for use in areas where no scrub strippers are needed to remove heavy finish buildups, such as in office buildings, supermarkets, industrial plants and doctors offices. At 4 to 1 dilutions, this product will strip most finishes with ease and allow for easy removal.

INSTRUCTIONS

When cleaning heavy wax or finish from floors, use this product at 1 part stripper to 1 part water. For lighter jobs, this product may be diluted up to a 1 part stripper to 8 parts water. Make sure entire area is covered by water to ensure complete contact with solution. After allowing product to soak for about 10 minutes floor may be mopped or scrubbed to remove finish and stripper, it is not always necessary to rinse after using but for best results with all products, rinsing is recommended prior to applying finish or floor sealers.

FEATURES

- Works well on all surfaces
- Works in all types of water, regardless of hardness
- Non-Ammoniated
- Wash and rinse water may be hot or cold

SPECIFICATIONS

Appearance:	Yellow Liquid	pH:	12 - 14
Odor	Sweet	USDA Approval:	NA
Specific gravity	1.01	Detergency:	Excellent

SAFETY

Keep this and all chemicals out of the reach of children! Users should take care of skin contact when using this product at full strength and not allow product to splash into their eyes. Always wash hands thoroughly after using this product.

3544 Zip Industrial Blvd. Atlanta, Georgia 30321
(404) 761-0657 • (800) 423-7514 • Fax (404) 761-0709

CAREFREE

National Fire Protection Association (NFPA)	Fire Hazard	Hazardous Material Information System (HMIS)	Health	1
	Health		0	
	Reactivity		Reactivity	0
Specific Hazard				
Protective Clothing	None required.	Emergency Overview	Opaque Off-white. Liquid. See Section 9. CAUTION: May be mildly irritating to eyes. May be mildly irritating to skin.	

Section 1. Chemical Product and Company Identification

Product Name	CAREFREE	Code	5431 & 5432 & 3029503
Product Use	Industrial/Institutional: Floor care.	PMS#	449013
MSDS#	114172004	Validation Date	1/2/2003
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	1/2/2003
		Supersedes	1/29/2002.
		In Case of Emergency	(800) 851-7145

Section 2. Composition and Information on Ingredients

Ingredients	CAS#	% by Weight	Exposure Limits	LC50/LD50
Ethylene Homopolymer	68441-17-8	1-5	Not available.	Not available.
Ethylene Glycol 2-Ethylhexyl Ether	1559-35-9	1-5	Not available.	ORAL (LD50): Acute: 3080 mg/kg [Rat].
Diethylene Glycol Ethyl Ether	111-90-0	1-5	Not available.	ORAL (LD50): Acute: 5540 to 9740 mg/kg [Rat].
Acrylic Polymers		10-30	Not available.	Not available.
Water	7732-18-5	60-100	Not available.	ORAL (LD50): Acute: 90000 mg/kg [Rat].

Section 3. Hazards Identification

Routes of Entry	Inhalation. Skin contact. Eye contact.
Potential Acute Health Effects	
	Eyes May be mildly irritating to eyes.
	Skin May be mildly irritating to skin.
	Inhalation None known.
	Ingestion None known.
Medical Conditions	None known.
Aggravated by Overexposure:	
See Toxicological Information (section 11)	

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5109 NATIONAL DR., KNOXVILLE, TN 37914

Continued on Next Page

Page: 1/4

Section 4. First Aid Measures

Eye Contact	Flush immediately with plenty of water. Get medical attention if irritation occurs.
Skin Contact	Flush immediately with plenty of water. Get medical attention if irritation occurs.
Inhalation	No specific first aid measures are required.
Ingestion	No specific first aid measures are required.

Section 5. Fire Fighting Measures

Flammability of the Product	None known.
Flash Points	Not available.
Products of Combustion	None known.
Fire Fighting Media and Instructions	Extinguish with water spray or carbon dioxide, dry chemical powder or appropriate foam. Normal fire fighting procedure may be used.
Special Remarks on Fire and Explosion Hazards	None known.

Section 6. Accidental Release Measures

Personal Precautions	Put on appropriate personal protective equipment (see Section 8).
Environmental Precautions and Clean-up Methods	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

Handling	Avoid contact with skin and eyes. FOR INDUSTRIAL USE ONLY.
Storage	Store in a dry, cool and well-ventilated area. Protect from freezing. KEEP OUT OF REACH OF CHILDREN.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	No special ventilation requirements. General room ventilation is adequate.
Personal Protection	
Eyes	No special requirements under normal use conditions.
Hands	No special requirements under normal use conditions.
Respiratory	No special requirements under normal use conditions.
Feet	No special requirements under normal use conditions.
Body	No special protective clothing is required.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid. (Opaque)
Odor	Mild.
Color	Off-white.
pH	8.5 to 9.5 [Basic.]
Specific Gravity	1.03
Boiling/Condensation Point	100°C (212°F)
Melting/Freezing Point	0°C (32°F)
Solubility in water	Complete.

Continued on Next Page

Section 10. Stability and Reactivity

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

Section 11. Toxicological Information

Acute toxicity	ORAL (LD50) Greater than 5000 mg/kg (rat).
Effects of Chronic Exposure	None known.
Other Toxic Effects	Not available.

Section 12. Ecological Information

Not available.

Section 13. Disposal Considerations

Waste Information	No special precautions. Dispose of according to all federal, state and local regulations.
-------------------	---

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.
--------------------------	---

Section 15. Regulatory Information

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

US Regulations

Federal SARA 313 toxic chemical notification and release reporting: Ethylene Glycol 2-Ethylhexyl Ether, Diethylene Glycol Ethyl Ether
CERCLA: Hazardous substances.: Ethylene Glycol 2-Ethylhexyl Ether, Diethylene Glycol Ethyl Ether

State New Jersey spill list: Ethylene Glycol 2-Ethylhexyl Ether, Diethylene Glycol Ethyl Ether
New Jersey: Ethylene Glycol 2-Ethylhexyl Ether, Diethylene Glycol Ethyl Ether
Pennsylvania RTK: Ethylene Glycol 2-Ethylhexyl Ether, Diethylene Glycol Ethyl Ether

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

Registered Product Information Not applicable.

Canadian Regulations

WHMIS Classification Not controlled under WHMIS (Canada).

WHMIS Icon



Registered Product Information Not applicable.

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.

Continued on Next Page

Section 16. Other InformationOther Special
Considerations

MSDS Serial Range: 2-4

Version

1.03

Notice to Reader

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

Johnson wax
PROFESSIONAL

JWX04071

Material Safety Data Sheet

VECTRA

National Fire Protection Association (NFPA)	Fire Hazard Health Reactivity	Hazardous Material Information System (HMIS)	Health Fire Hazard Reactivity	1 0 0
Specific Hazard				
Protective Clothing		Emergency Overview		
None required.		Translucent. Opaque Emulsion. See Section 9. CAUTION: May be mildly irritating to eyes. May be mildly irritating to skin.		

Section 1. Chemical Product and Company Identification

Product Name	VECTRA		Code	4071 & 4074 & 4078
Product Use	Industrial/Institutional: Floor care.		PMS#	3105027
MSDS#	114070010		Validation Date	4/14/2003
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) 748-5971	Print Date	4/14/2003	
		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
Tributoxyethyl phosphate	78-51-3	1-5	Not available.	ORAL (LD50): Acute: 3000 mg/kg [Rat]. 3000 mg/kg [Guinea pig]. 500 mg/kg [Mouse].
Dipropylene Glycol Methyl Ether	34580-94-8	1-5	OSHA (United States). Skin TWA: 800 mg/m ³ STEL: 900 mg/m ³ ACGIH (United States). Skin TWA: 606 mg/m ³ STEL: 908 mg/m ³	ORAL (LD50): Acute: 5119 mg/kg [Rat]. DERMAL (LD50): Acute: 9480 mg/kg [Rabbit].
Diethylene Glycol Ethyl Ether	111-90-0	1-5	Not available.	ORAL (LD50): Acute: 5540 to 9740 mg/kg [Rat].
Zinc Ammonium Carbonate	40861-29-8	1-5	Not available.	Not available.
Acrylic Polymers	10-30	10-30	Not available.	Not available.
Water	7732-18-6	80-100	Not available.	Not available.

Section 3. Hazards Identification

Routes of Entry	Inhalation, Skin contact, Eye contact.
Potential Acute Health Effects	
	Eyes May be mildly irritating to eyes.
	Skin May be mildly irritating to skin.
	Inhalation None known.
	Ingestion None known.
Medical Conditions	None known.
Aggravated by Overexposure:	
See Toxicological Information (section 11)	

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5109 NATIONAL DR., KNOXVILLE, TN 37914

Continued on Next Page

Page: 1/4

JWX 04271

Johnson Wax
PROFESSIONAL

VECTRA

Material Safety Data Sheet

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Conditions of Instability None known.

Incompatibility with Various Substances None known.

Hazardous Decomposition Products When exposed to fire: Produces normal products of combustion.

Hazardous Polymerization Will not occur.

Section 11. Toxicological Information

Acute Toxicity ORAL (LD50) Greater than 5000 mg/kg (rat).

Effects of Chronic Exposure None known.

Other Toxic Effects None known.

Section 12. Ecological Information

Not available.

Section 13. Disposal Considerations

Waste Information No special precautions. Dispose of according to all federal, state and local regulations.

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.

Section 15. Regulatory InformationReporting in this section is based on ingredients disclosed in Section 2
US Regulations

Federal SARA 313 toxic chemical notification and release reporting: Diethylene Glycol Ethyl Ether, Zinc Ammonium Carbonate
 Clean Water Act (CWA) 307: Zinc Ammonium Carbonate
 CERCLA: Hazardous substances: Diethylene Glycol Ethyl Ether, Zinc Ammonium Carbonate

State New Jersey spill list: Diethylene Glycol Ethyl Ether, Zinc Ammonium Carbonate
 New Jersey: Dipropylene Glycol Methyl Ether, Diethylene Glycol Ethyl Ether, Zinc Ammonium Carbonate
 Massachusetts spill list: Zinc Ammonium Carbonate
 Massachusetts RTK: Dipropylene Glycol Methyl Ether, Zinc Ammonium Carbonate
 Pennsylvania RTK: Dipropylene Glycol Methyl Ether, Diethylene Glycol Ethyl Ether, Zinc Ammonium Carbonate

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

Registered Product Information Not applicable.

Canadian Regulations

Canadian NPRI Canadian NPRI: Zinc Ammonium Carbonate.

WHMIS Classification Not controlled under WHMIS (Canada).

WHMIS Icon



Continued on Next Page

Page: 3/4

Johnson wax
PROFESSIONAL

VECTRA

JWX04071

Material Safety Data Sheet

Registered Product Not applicable.
Information

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 InformationOther Special MSDS Serial Range: 010-012.
Considerations

Version 2.5

Notice to Reader

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Johnson wax
PROFESSIONAL VECTRA

 JwX04071
 Material Safety Data Sheet

Section 4. First Aid Measures

Eye Contact	Flush immediately with plenty of water. Get medical attention if irritation occurs.
Skin Contact	Flush immediately with plenty of water. Get medical attention if irritation occurs.
Inhalation	No specific first aid measures are required.
Ingestion	No specific first aid measures are required.

Section 5. Fire Fighting Measures

Flammability of the Product	None known.
Flash Points	Closed cup: >93,333°C (200°F).
Products of Combustion	None known.
Fire Fighting Media and Instructions	Extinguish with water spray or carbon dioxide, dry chemical powder or appropriate foam. Normal fire fighting procedure may be used.
Special Remarks on Fire and Explosion Hazards	None known.

Section 6. Accidental Release Measures

Personal Precautions	Put on appropriate personal protective equipment (see Section 8).
Environmental Precautions and Clean-up Methods	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

Handling	Avoid contact with skin and eyes. FOR COMMERCIAL AND INDUSTRIAL USE ONLY
Storage	Store in a dry, cool and well-ventilated area. Protect from freezing. KEEP OUT OF REACH OF CHILDREN.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	No special ventilation requirements. General room ventilation is adequate.
Personal Protection	
Eyes	No special requirements under normal use conditions.
Hands	No special requirements under normal use conditions.
Respiratory	No special requirements under normal use conditions.
Feet	No special requirements under normal use conditions.
Body	No special protective clothing is required.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid. (Emulsion.)
Odor	Ammoniacal.
Color	Translucent. Opaque
pH	8.5 to 9 [Basic.]
Specific Gravity	1.03
Solubility in water	Dispersible.

Continued on Next Page

Page: 2/4

Material Safety Data Sheet

MIDLAB, INC.
200 Industrial Park Rd.
Sweetwater, TN 37874

423-337-3180(8AM-5PM WEEKDAYS)

DATE PREPARED:..... 08/12/88
PREPARED BY:.. Regulatory Dept.,
MP
REVISION DATE:....
EMERGENCY PHONE # INFOTRAC
1-800-635-8053 24 HRS DAILY

PRODUCT NUMBER:..182498
PRODUCT NAME: 1824 (T2) FC1824
24% FLOOR FIN
CUSTOMER NUMBER:.. 18047
DISTRIBUTED BY:.....NORTH
GEORGIA PAPER AND

DISTRIBUTOR ADDRESS.....SPECIALTY
COMPANY
P.O. BOX 1807
BLUE RIDGE
GA

SECTION I - IDENTIFICATION

PRODUCT NAME:..
SYNONYMS:.. Ultimate
Burnable High Solids Floor Finish
CHEMICAL FAMILY: Acrylic
Polymers

PROPER SHIPPING NAME:
NOL Non-Hazardous

HMS HEALTH:..... 1
HMS FLAMMABILITY: 0
HMS REACTIVITY:..... 0
HMS PERSONAL
PROTECTION:..... 2

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER	REL
Diethylene Glycol Ethyl Ether	<10	111-80-0	Not Listed
Styrene Acrylic Copolymer	10-20	63744-88-3	100 ppm
Tri(butoxyethyl) Phosphate	<3	78-51-3	Not Listed
Water	<75	7732-18-5	Not Listed
Zinc Oxide Complex	<1	1314-13-2	Not Listed

SECTION III - PHYSICAL DATA

APPEARANCE:..... White, opaque liquid with a faint ammonia odor.
EVAPORATION RATE: >1
SOLUBILITY IN WATER: Dispersible
FREEZING POINT:..... 32 Degrees F.
PH:..... 8.5-9.5
VAPOR PRESSURE: Not Known
SPECIFIC GRAVITY:..... 1.04
BOILING POINT:..... 212 Degrees F.
VAPOR DENSITY(AIR=1): >1
% VOL:..... 77

SECTION IV - FIRE AND EXPLOSION DATA

FLASHPOINT:.. Not Applicable
UPPER EXPLOSION LIMIT:.. NA
SPECIAL FIRE FIGHTING PROCEDURES: Wear full protective gear including self-contained breathing apparatus. Keep heated containers cool with water spray.
METHOD:.. Not Applicable
EXTINGUISHING MEDIA:.. Water, Carbon Dioxide, Dry Chemical or Foam
LOWER EXPLOSION LIMIT:.. NA
UNUSUAL FIRE/EXPLOSION HAZARDS:.. Item may cause product decomposition. See Hazardous Decomposition Products in Section V.

SECTION V - REACTIVITY DATA

STABILITY:..... Stable
HAZARDOUS POLYMERIZATION:.. Will not occur
INCOMPATIBILITY:.. Strong acids, strong alkalis and oxidizing or reducing agents.
DECOMPOSITION:.. Oxides of carbon and/or of nitrogen, ammonia, amines

SECTION VI - HEALTH DATA

THRESHOLD LIMIT VALUE:.. Not established for mixture.
LISTED CARCINOGEN:..... No ingredients listed by NTP, IARC or OSHA Subpart Z
INITIALATION:.. Inhaling concentrated vapors may cause respiratory irritation. Inhaling concentrated vapors may cause nausea, fatigue, Central Nervous System Depression, dizziness and/or other anesthetic effects.
INGESTION:..... Ingestion may be severely irritating to digestive system and mucous membranes.
EYES:.. Any contact with product is severely irritating to eyes.
SKIN(DERMAL):.. Product is a skin irritant.
MEDICAL CONDITIONS AGGRAVATED:.. Pre-existing eye or skin disorders. Pre-existing respiratory disorders. Pre-existing central nervous system disorders. Pre-existing digestive disorders.

Material Safety Data Sheet

SECTION VII FIRST AID

BREATHING(INHALATION):.. Remove victim to fresh air. Administer cardio-pulmonary resuscitation if breathing or heart have stopped. Get immediate medical attention. If available, oxygen may be administered to facilitate breathing.

SWALLOWING(INGESTION):.. Immediately drink large amounts of milk, vegetable oil, citrus juice or, if these are not available, water to dilute. **DO NOT INDUCE VOMITING.** Get immediate medical attention. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN:.. Emesis should be avoided due to the possibility of aspiration of solvent vapors into the lungs. If a dangerous amount has been ingested, gastric lavage following insertion of a cuffed endotracheal tube should be considered.

EYES:..... Immediately flush eyes with running water for at least 15 minutes. Remove and discard contaminated contact lenses. Get immediate medical attention. If possible, continue to flush eyes with running water until medical aid is received.

SKIN(DERMAL):.. Immediately flush affected area with running water for at least 15 minutes. Remove contaminated clothing and wash before reuse. Apply a good moisturizing lotion and seek prompt medical attention if irritation develops or persists.

SECTION VIII EMPLOYEE PROTECTION

RESPIRATORY PROTECTION:..... NIOSH approved respirator for organic vapors as necessary to prevent irritation or overexposure.

PROTECTIVE CLOTHING:..... Rubber, nitrile, neoprene, PVC or other chemically resistant skin protection as required to prevent irritation. Chemical splash glasses, splash goggles or full face shield as necessary to prevent contact.

ADDITIONAL MEASURES:.... Eyewash and shower facilities suggested.

VENTILATION:..... Mechanical exhaust is sufficient for most short-term exposures.

SECTION IX - SPILL AND DISPOSAL DATA

SPILL:..... Wear full protective gear. Dike & contain spill. Recover as much material as possible before absorbing any remaining residues with an inert absorbent.

WASTE DISPOSAL:.... Dispose of all wastes according to all federal, state and local legislation.

SECTION XI - OTHER REGULATORY INFORMATION

RCRA STATUS:..... Triggered only by product characteristics after use.

TSCA STATUS:..... All ingredients of this product are listed on the TSCA inventory.

SARA(SECTION 302) Extremely Hazardous Substance:.. No

SARA SECTION 312:... Immediate (Acute) Health Hazard,

SARA SECTION 313 Toxic Release Inventory Reporting:..

Contains 7.17% Glycol Ethers which, as a class, are regulated under SARA Section 313 Toxic Release Inventory reporting requirements.

SECTION XII - PRECAUTIONARY LABEL STATEMENTS

WARNING:..... **CAUTION: KEEP OUT OF REACH OF CHILDREN.** For Industrial and Institutional Use Only.

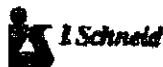
SECTION XIII - ADDITIONAL INFORMATION

ADDITIONAL:.. Use Product only as recommended on the label and literature.

DISCLAIMER:.. NOTICE: The information contained in this MSDS is believed to be correct as of the date prepared. No representations or warranties, either express or implied, of the merchantability, fitness for a particular purpose, or of any other nature are made with respect to information concerning the product referred to in this MSDS.

PRODUCT NUMBER:..1524

BAR CODE:.....



NFPA/HMIS: HEALTH - 2
FLAMMABILITY - 2
REACTIVITY - 0

MATERIAL SAFETY DATA SHEET U.S. DEPARTMENT OF LABOR
COMPLIES WITH OSHA SAFETY AND HEALTH REGULATIONS, (29 CFR 1910.1200)

SECTION I CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MIRRO FLEX
PRODUCT USE: POLYURETHANE COATING

I. SCHNEID, INC.
1428 FAIRMONT AVE. NW
ATLANTA, GA 30318

PRODUCT CODE: 5825
MSDS NUMBER: KOS: 34

EMERGENCIES: (404) 351-4705
HOURS: M-F 8AM-5PM EASTERN
REVISION DATE: 040998 (5)

SECTION II COMPOSITION/INFORMATION ON INGREDIENTS

CAS NUMBER	CHEMICAL NAMES	%	TLV(UNITS)
8052-41-3	MINERAL SPIRITS	< 40.00	100 (PPM)
27263-32-3	MANGANESE, 8%	< 0.50	5 MG/CU M
22484-89-8	ZIRCONIUM, 6%	< 1.50	6 MG/CU M

n/e = none established

SECTION III HAZARDS IDENTIFICATION

PRIMARY ROUTE(S) OF ENTRY: Skin contact/absorption, inhalation and eye contact

SIGN AND SYMPTOMS OF OVEREXPOSURE: Gastrointestinal irritation (nausea, vomiting, diarrhea), irritation to nose, throat, and respiratory tract.

TARGET ORGAN EFFECTS: Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals, and may aggravate pre-existing disorders of these organs in humans: mild, reversible liver effects, mild, reversible kidney effects.

IMMEDIATE HEALTH EFFECTS

EYES: Exposure may cause mild eye irritation. Symptoms may include stinging, tearing, and redness.

SKIN: Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms include redness, burning, drying and cracking, and skin burns. Additional symptoms of skin contact may include: Allergic skin reaction. Skin absorption is possible, but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

INGESTION: Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful.

INHALATION: Exposure to vapor or mist is possible. Short term inhalation is not likely to cause harmful effects; breathing large amounts may be harmful. Symptoms are more typically seen at air concentrations exceeding the recommended exposure limits.

REPRODUCTIVE/DEVELOPMENTAL INFORMATION

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

CARCINOGENIC INFORMATION

This material is not listed as a carcinogen by IARC, NTP or OSHA.

LONG TERM EFFECTS

No data

SECTION IV FIRST AID MEASURES

EYES: Flush with water, if irritation persists, call physician.

SKIN: Flush with water.

MIRRO FLEX 1 OF 4

INGESTION: Drink milk or other liquid to dilute substance, call a physician immediately. Do not induce vomiting.
INHALATION: If symptoms of overexposure develop, remove victim to fresh air.

SECTION V FIRE FIGHTING MEASURES

Flash Point

103 degrees Fahrenheit (C.C. Method)

Explosive Limit

No data

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, other flames and ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media

Dry chemical, foam, carbon dioxide

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS

NFPA/HMIS Ratings

Health: 2, Flammability: 2, Reactivity: 0

SECTION VI ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb liquid on vermiculite, floor absorbent or other absorbent material.

LARGE SPILL: Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

SECTION VII HANDLING AND STORAGE

HANDLING

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five gallon pails and larger metal containers including tank cars and tank trucks should be grounded and/or bonded when material is transferred. Warning: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperatures values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions

SECTION VIII EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

SKIN PROTECTION

Wear rubber gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

RESPIRATORY PROTECTION

If workplace exposure limits of product or any component are exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

ENGINEERING CONTROLS

Provide sufficient mechanical (general and local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

SECTION IX PHYSICAL AND CHEMICAL PROPERTIES**Appearance and Odor**

Clear, amber liquid with solvent odor

Vapor Pressure

Unknown

Vapor Density

Unknown

Boiling Point

360 degrees Fahrenheit

Solubility in Water

Insoluble

Evaporation Rate

(N-Bu-Alc=1) : 0.095

Percent Volatiles

72%

Specific Gravity

(H₂O=1) 0.83 +/- 0.02

SECTION X STABILITY AND REACTIVITY**Chemical Stability**

Stable

Conditions To Avoid

Temperature extremes

Incompatibility

Avoid strong oxidizing agents

Hazardous Decomposition

May form carbon monoxide, carbon dioxide, acid fumes & smoke

Hazardous Polymerization

Will not occur

SECTION XI TOXICOLOGICAL INFORMATION

No Data

SECTION XII ECOLOGICAL INFORMATION

No Data

SECTION XIII DISPOSAL CONSIDERATION**WASTE DISPOSAL INFORMATION**

Dispose of in accordance with all applicable Federal, State, and Local regulations.

SECTION XIV TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

PAINT AND RELATED MATERIAL
ITEM 149980 Sub 2 (Class 55)

Packaged in steel containers

RQ (Reportable Quantity) - 49 CFR 172.101
Not applicable

SECTION XV REGULATORY INFORMATION**US FEDERAL REGULATIONS**

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 355 Appendix A

None

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate(X) Delayed(X) Fire(X) Reactive() Sudden
Release of Pressure()

SARA 313 Components - 40 CFR 372.86

None

STATE AND LOCAL REGULATIONS

California Proposition 65

None

North Carolina Administrative Code 2D.1104 and 2H.0510

None

South Carolina Regulation 62.5 Standard Number 8

None

SECTION XVI OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

This information was compiled from current manufacturer's MSDS's of the component parts of the product.
As well as other sources, such as:

Code of Federal Regulations 29, Revised as of July 1, 1994.

Code of Federal Regulations 40, Revised as of July 1, 1994.

ACGIH, Guide to Occupational Exposure Values, 1998.

ANSI Z129.1-1994, Precautionary Labeling for Hazardous Industrial Chemicals.

Hazard Communication Handbook, A Right To Know Compliance Guide, Craig A. Moyer & Michael Francis. Clark Brodman Company, Ltd. New York, NY 1992.

Jan-10-02 05:37P harvard chemical

404 / 61 0709

P.01

SPLENDID**SECTION I****HARVARD CHEMICAL RESEARCH**

P.O. BOX 18438

ATLANTA, GA 30321

Date 02-09-98

Phone:

INQUIRY-
EMERGENCY-(404) 761-0657
(800) 424-9303

HEALTH

FLAMMABILITY

REACTIVITY

1

0

0

0=Lowest
1=slight
2=moderate
3=high
4=extreme**SECTION II HAZARDOUS INGREDIENTS/INFORMATION****HAZARDOUS COMPONENTS**

DETHYLENE GLYCOL METHYL ETHER

DIBUTYL PHTHALATE

CAS#

111-77-3

84-74-2

OSHA / PEL

NE

5mg/m³

ACGM / TLV

NE

5mg/m³

OTHER / STEL

SK

NOTE: AN " UNDER "SK" (SKIN) INDICATES THAT OSHA REQUIRES SKIN PROTECTION TO PREVENT OR REDUCE EXPOSURE TO THIS INGREDIENT.

SECTION III -PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: ND

Vapor Pressure (mm Hg): ND

Vapor Density (Air=1): ND

Solubility in Water: COMPLETE

Appearance and odor: White liquid with b and odor

Specific Gravity (H2O=1): 1.04

Melting Point: NA

Evaporation Rate: (Butyl Acetate=1) ND

SECTION IV-FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): ND Flammable Limits: LEL: N/A UEL: N/A

Extinguishing Media: N/A.

Special Fire Fighting Procedures: Do not enter confined fire space without proper protective equipment including a NIOSH approved self contained breathing apparatus.

Explosion Hazards: NONE

SECTION V-REACTIVITY DATA

Stability: Stable

Incompatibility (Materials to Avoid): Oxidizers or strong acids.

Hazardous Decomposition or Byproducts: Heat, carbon dioxide, and carbon monoxide

Hazardous Polymerization: Will not occur.

SECTION VI-HEALTH HAZARD DATA

Health Hazards (Acute and Chronic): NONE KNOWN

Routes of Entry, Signs of Exposure, and Symptoms of Exposure.

SKIN and EYES: Severe irritant to eyes.

INHALATION: Irritation and difficulty in breathing

INGESTION: Gastric pain and vomiting.

Medical Conditions Generally Aggravated by Exposure: Unknown

Carcinogenics: NONE

Emergency and First Aid Procedures:

SKIN & EYE CONTACT: Rinse skin with clear water. For eye contact immediately flush with clear running water for 15 minutes

Get medical attention.

INHALATION: Remove to fresh air. If breathing does not return to normal, get medical attention

INGESTION: Immediately drink large quantities of water. Get medical attention.

SECTION VII-PRECAUTIONS FOR SAFE HANDLING AND USE

SPILLS: Dilute with water and flush to sanitary sewer.

Handling and Storing: Keep container closed when not in use. Do not freeze. Follow label instructions.

Other Precautions: Keep this and all chemicals out of the reach of children.

SECTION VIII-CONTROL MEASURES

Respiratory Protection (Specify Type): For exposure above established limits (see section II) use NIOSH/MSMA approved dust/mist mask.

Ventilation: Mechanical: Recommended.

Protective Gloves: Rubber or neoprene

Eye Protection: Chemical goggles with side shields.

Other Protective Clothing or Equipment: Drenching safety shower and eye wash station.

SECTION IX-ADDITIONAL INFORMATION**ENVIRONMENTAL**

BIODEGRADABILITY: BIODEGRADABLE.

SARA TITLE III REPORTING REQUIREMENTS

SECTION 302, 304

311, 312

313

CERCLA

REPORTING NOT REQUIRED

REPORTING REQUIRED FOR INVENTORY ABOVE TPO.

REPORTING MAY BE REQUIRED FOR USERS IN MANUFACTURING SECTOR.

SAME AS SECTION 304