





# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	Not controlled under WHMIS (Canada).	HCS Class: Irritating substance.
WHMIS (Pictograms)	WHMIS (Classification)	HCS

## Section 1. Chemical Product and Company Identification

<b>Product Name/ Trade name</b>	<b>Hard As Nails</b>	<b>Code</b>	<b>659</b>
<b>Synonym</b>	Not available.	<b>CAS #</b>	Mixture.
<b>Chemical Family</b>	Not available.	<b>Validation Date</b>	6/28/2005
<b>Chemical Formula</b>	Not applicable.	<b>Print Date</b>	6/28/2005
<b>Manufacturer/ Supplier</b>	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (800) 666-2156	<b>In Case of Emergency</b>	CHEMTREC (800) 424-9300
<b>TSCA</b>	TSCA Inventory: All components listed or are exempt from listing.		
<b>DSL/ NDSL</b>	All components listed unless noted elsewhere on this MSDS		
		<b>Protective Clothing</b> 	

## Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits	LC <sub>50</sub> /LD <sub>50</sub>
Acrylate Copolymer	N/A	10 - 15	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	Not available.	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.
Potassium Hydroxide	1310-58-3	0.1 - 1	Not available.	Not available.
Ethoxylated Secondary Alcohol	TSRN 48515005-5071	0.1 - 1	Not available.	Not available.

## Section 3. Hazards Identification

<b>Potential Acute Health Effects</b>	Hazardous in case of eye contact (irritant), of ingestion. Slightly hazardous in case of skin contact (irritant), .
<b>Potential Chronic Health Effects</b>	Repeated skin exposure can produce local skin destruction, or dermatitis.
<b>Carcinogenic Effects</b>	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

#### **Section 4. First Aid Measures**

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
<b>Ingestion</b>	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.

#### **Section 5. Fire Fighting Measures**

<b>Products of Combustion</b>	Not applicable.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

#### **Section 6. Accidental Release Measures**

<b>Small Spill and Leak</b>	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
<b>Large Spill and Leak</b>	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.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

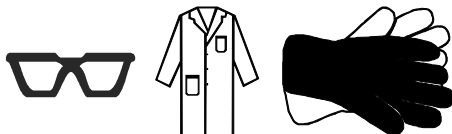
#### **Section 7. Handling and Storage**

<b>Precautions</b>	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.
<b>Incompatibility</b>	Reactive with oxidizing agents, acids, alkalis.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area.

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

<b>Engineering Controls</b>	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.
<b>Personal Protection</b>	
<i>Eyes</i>	Safety glasses.
<i>Body</i>	Lab coat.
<i>Respiratory</i>	A respirator is not needed under normal and intended conditions of product use. Wear appropriate respirator when ventilation is inadequate.
<i>Hands</i>	Nitrile gloves. Butyl gloves.

**Protective Clothing  
(Pictograms)**



**Exposure Limits**

Not available.

**Section 9. Physical and Chemical Properties**

<b>Physical State and Appearance</b>	Liquid.	<b>Odor</b>	Characteristic.
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	Not available.
<b>pH</b>	Not available.	<b>Color</b>	White.
<b>Boiling/Condensation Point</b>	100°C (212°F)		
<b>Melting/Freezing Point</b>	May start to solidify at 0°C (32°F) based on data for: Water.		
<b>Critical Temperature</b>	Not available.		
<b>Instability Temperature</b>	Not available.		
<b>Specific Gravity</b>	1.01 (Water = 1)		
<b>Vapor Pressure</b>	Not available.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	>50% (w/w).		
<b>VOC</b>	62.034 (g/l).		
<b>Evaporation Rate</b>	<1 compared to Butyl acetate.		
<b>Dispersion Properties</b>	See solubility in water, methanol, acetone.		
<b>Solubility</b>	Easily soluble in methanol, acetone. Partially soluble in cold water, hot water.		
<b>The Product is:</b>	Non-flammable.		
<b>Auto-ignition Temperature</b>	Not applicable.		
<b>Flash Points</b>	Not applicable.		
<b>Flammable Limits</b>	Not applicable.		
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.		
<b>Explosion Hazards in Presence of Various Substances</b>	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	Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 5540 mg/kg [Rat]. (Diethylene Glycol Ethyl Ether).
Acute Effects on Humans	<p><i>Eyes</i> Hazardous in case of eye contact (irritant).</p> <p><i>Skin</i> 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.</p> <p><i>Inhalation</i> May be irritating to respiratory system, especially at elevated temperatures.</p> <p><i>Ingestion</i> Hazardous in case of ingestion.</p>
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

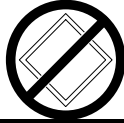
Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	These products are nitrogen oxides (NO, NO <sub>2</sub> ...).
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation	Not available.

### 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

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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

WHMIS (Classification) Not controlled under WHMIS (Canada).



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.

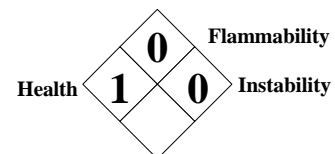
**International Regulations Lists**

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.)



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.

Specific Hazard

**Section 16. Other Information**

Validated by CRushton on 6/28/2005.

Verified by CRushton.

Printed 6/28/2005.

**Information Contact** COMPANY NAME  
COMPANY ADDRESS  
EMERGENCY PHONE

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 6/28/2005.

**Hard As Nails**

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