



# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	Not controlled under WHMIS (Canada).	Not controlled under the HCS (United States).
WHMIS (Pictograms)	WHMIS (Classification)	HCS

## Section 1. Chemical Product and Company Identification

<b>Product Name/ Trade name</b>	<b>Knuckle Under Heavy Duty Hand Cleaner With Citrus Solvents and Pumice</b>	<b>Code</b>	<b>762</b>
<b>Synonym</b>	Heavy Duty Hand Cleaner	<b>CAS #</b>	Mixture.
<b>Chemical Family</b>	Not Applicable	<b>Validation Date</b>	11/28/2007
<b>Chemical Formula</b>	Not applicable.	<b>Print Date</b>	11/30/2007
<b>Manufacturer/ Supplier</b>	Betco Corporation 1001 Brown Avenue Toledo, Oh 43607 (419) 241-2156	<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>
Pumice	N/A	10 - 15	Not available.	Not available.
Low Odor Base Solvent	64742-47-8	5 - 10	TWA: 100 ppm <b>OSHA (United States).</b>	Not available.
Petroleum Distillates	64742-47-8	1 - 5	TWA: 100 ppm <b>OSHA (United States).</b>	Not available.
Triethanolamine	102-71-6	1 - 5	TWA: 300 ppm Not available.	ORAL (LD50): Acute: 4000 mg/kg [Rat].

## Section 3. Hazards Identification

<b>Potential Acute Health Effects</b>	This product is an eye 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>	Avoid contact with eyes In case of contact with eyes, rinse immediately with plenty of water.
<b>Skin Contact</b>	Repeated skin exposure can produce local skin destruction, or dermatitis. In case of prolonged irritation seek medical attention.
<b>Inhalation</b>	No specific data.
<b>Ingestion</b>	Seek medical attention.

### Section 5. Fire Fighting Measures

**Products of Combustion** Not available.

**Fire Fighting Media and Instructions** SMALL FIRE: Use DRY chemical powder.  
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards** Not available.

**Special Remarks on Explosion Hazards** Not available.

### Section 6. Accidental Release Measures

**Small Spill and Leak** Absorb with an inert material and place in an appropriate waste disposal container.

**Large Spill and Leak** Absorb with an inert material and put the spilled material in an appropriate waste disposal.

**Personal Protection in Case of a Large Spill** Gloves. Safety glasses.

### Section 7. Handling and Storage

**Precautions** Avoid contact with eyes

**Incompatibility** Reactive with oxidizing agents, reducing agents.

**Storage** Keep out of the reach of children. Not for use or storage in or around the home.

### Section 8. Exposure Controls/Personal Protection

**Engineering Controls** Good general ventilation should be sufficient to control airborne levels.

#### Personal Protection

*Eyes* No special recommendations.

*Body* No special recommendations.

*Respiratory* No special recommendations.

*Hands* No special recommendations.

**Protective Clothing (Pictograms)**

**Exposure Limits** **Low Odor Base Solvent**  
TWA: 100 (ppm)  
TWA: 100 (ppm) from OSHA (PEL) [United States]  
  
Consult local authorities for acceptable exposure limits.

### Section 9. Physical and Chemical Properties

**Physical State and Appearance** Liquid.

**Odor** Pleasant.

**Molecular Weight** Not applicable.

**Taste** Not available.

**pH** 7 to 8 [Basic.]

**Color** White.

**Boiling/Condensation Point** >100°C (212°F)

**Melting/Freezing Point** Not available.

**Critical Temperature** Not available.

**Instability Temperature** Not available.

**Specific Gravity** 1.026 (Water = 1)

<b>Vapor Pressure</b>	Not available.
<b>Vapor Density</b>	Not available.
<b>Volatility</b>	Not available.
<b>VOC</b>	Not available.
<b>Evaporation Rate</b>	Not available.
<b>Dispersion Properties</b>	See solubility in water.
<b>Solubility</b>	Soluble in cold water, hot water.
<b>The Product is:</b>	May be combustible at high temperature.
<b>Auto-ignition Temperature</b>	Not available.
<b>Flash Points</b>	CLOSED CUP: >100°C (212°F).
<b>Flammable Limits</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not available.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

### **Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Incompatibility with Various Substances</b>	Reactive with oxidizing agents, reducing agents.
<b>Hazardous Decomposition Products</b>	Not available.

### **Section 11. Toxicological Information**

<b>Routes of Entry</b>	Eye contact. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 4000 mg/kg [Rat]. (Triethanolamine). Acute dermal toxicity (LD50): 5000 mg/kg [Rabbit]. (Citrus Terpenes).
<b>Acute Effects on Humans</b>	<i>Eyes</i> Irritant. <i>Skin</i> Not expected to cause irritation on an acute basis. <i>Inhalation</i> According to our data base, the product will not easily enter the human body. <i>Ingestion</i> May cause gastrointestinal discomfort.
<b>Chronic Effects on Humans</b>	Repeated skin exposure can produce local skin destruction, or dermatitis.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	Not available.

**Section 12. Ecological Information**

Ecotoxicity Not available.

BOD5 and COD Not available.

Products of Biodegradation Not available.

Toxicity of the Products of Biodegradation Not available.

Special Remarks on the Products of Biodegradation Not available.

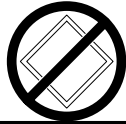
**Section 13. Disposal Considerations**

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 Not controlled under TDG (Canada).



PIN UN, Proper Shipping Name, PG Not applicable.

Maritime Transportation Not available.

Special Provisions for Transport Not applicable.

**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.) Not controlled under the HCS (United States).

USA Regulatory Lists

Pennsylvania RTK: Propylene Glycol

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Citrus Terpenes: fire, immediate health hazard

DSD (EEC)

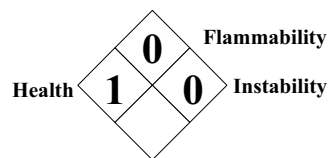
International Regulations Lists

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 11/28/2007.

Verified by CRushton.

Printed 11/30/2007.

**Information Contact Betco Corporation  
1001 Brown Avenue  
Toledo, Ohio 43607**

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 11/28/2007.

**Knuckle Under Heavy Duty Hand  
Cleaner With Citrus Solvents and  
Pumice**

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