



# Material Safety Data Sheet

This MSDS is prepared in accordance with OSHA 29 CFR 1910.1200

	WHMIS CLASS D-2: Material causing other toxic effects.	Class: Irritating substance.
WHMIS (Pictograms)	WHMIS (Classification)	HCS

## Section 1. Chemical Product and Company Identification

Product Name/ Trade name	<b>Factory Formula NF</b>	Code	191
Synonym	No foam parts cleaner	CAS #	Not applicable.
Chemical Family	Not available.	Validation Date	3/22/2004
Chemical Formula	Not applicable.	Print Date	3/27/2004
Manufacturer/ Supplier	Betco Corporation 1001 Brown Avenue Toledo, Ohio 43607 (419) 241-2156	In Case of Emergency	Chemtrec (800) 424-9300
TSCA	TSCA Inventory: All components listed or are exempt from listing.		
DSL/ NDSL	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>
1) Sodium Carbonate	497-19-8	<6	Not available.	Not available.
2) Amphoteric Surfactant	73772-46-0	<6	Not available.	Not available.

## Section 3. Hazards Identification

Potential Acute Health Effects	Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. This product is an eye irritant. Harmful if swallowed.
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.

## 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	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

### Section 5. Fire Fighting Measures

Products of Combustion	Not available.
Fire Fighting Media and Instructions	N/A
Special Remarks on Fire Hazards	N/A
Special Remarks on Explosion Hazards	N/A

### Section 6. Accidental Release Measures

Small Spill and Leak	Safety glasses recommended
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	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

Precautions	Keep locked up and out of reach of children. For Institutional and Commercial Use Avoid contact with skin and eyes.
Incompatibility	Not available.
Storage	Keep out of reach of children. Keep only in the original container. For Institutional and Commercial Use

### Section 8. Exposure Controls/Personal Protection

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

#### Personal Protection

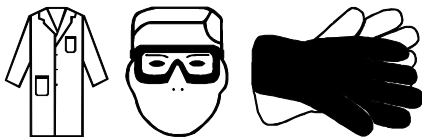
*Eyes* Splash goggles.

*Body* No special recommendations.

*Respiratory* Wear appropriate respirator when ventilation is inadequate.

*Hands* Gloves.

#### Protective Clothing (Pictograms)



Exposure Limits Not available.

### Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Characteristic. (Strong.)
Molecular Weight	Not applicable.	Taste	Not available.
pH	10.5 to 11 [Basic.]	Color	Amber. (Light.)
Boiling/Condensation Point	215 F initial		
Melting/Freezing Point	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Specific Gravity	1.03 (Water = 1)		

<b>Vapor Pressure</b>	20 mm Hg @ 68 F
<b>Vapor Density</b>	>1 (Air = 1)
<b>Volatility</b>	85
<b>VOC</b>	Not available.
<b>Evaporation Rate</b>	<1 compared to Butyl acetate.
<b>Dispersion Properties</b>	See solubility in water.
<b>Solubility</b>	Easily soluble in cold water.
<b>The Product is:</b>	May be combustible at high temperature.
<b>Auto-ignition Temperature</b>	Not available.
<b>Flash Points</b>	Not available.
<b>Flammable Limits</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	No specific information is available in our database regarding the flammability of this product in presence of various materials.
<b>Explosion Hazards in Presence of Various Substances</b>	Not applicable

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

<b>Stability</b>	The product is stable.
<b>Incompatibility with Various Substances</b>	Not available.
<b>Hazardous Decomposition Products</b>	Will not occur

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

<b>Routes of Entry</b>	Eye contact. Ingestion. Inhalation. Skin contact.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 3030 mg/kg [Rat]. (Tetrasodium EDTA).
<b>Acute Effects on Humans</b>	<p><i>Eyes</i> Hazardous in case of eye contact (irritant).</p> <p><i>Skin</i> Hazardous in case of skin contact (irritant). Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.</p> <p><i>Inhalation</i> Slightly hazardous in case of inhalation.</p> <p><i>Ingestion</i> Hazardous in case of ingestion.</p>
<b>Chronic Effects on Humans</b>	Repeated skin exposure can produce local skin destruction, or dermatitis.
<b>Special Remarks on Toxicity to Animals</b>	No additional remark.
<b>Special Remarks on Chronic Effects on Humans</b>	No additional remark.

**Section 12. Ecological Information**

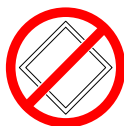
Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation	No additional remark.

**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) WHMIS CLASS D-2: Material causing other toxic effects.



Regulatory Lists CEPA DSL: No products were found.

Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

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

USA Regulatory Lists No products were found.

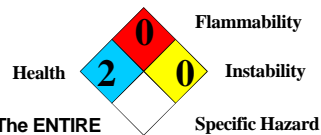
DSD (EEC)

International Regulations Lists No products were found.

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

Health	2
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.

**Section 16. Other Information**

Validated by CRushton on 3/22/2004.

Verified by CRushton.

Printed 3/27/2004.

**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 3/22/2004.

**Factory Formula NF**

Page: 5/5

**Continued on Next Page**