



**MATERIAL SAFETY DATA SHEET**  
**#45 CLEANER**

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**SECTION I - IDENTIFICATION**  
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TRANSPORTATION EMERGENCY: NFPA PROTECTION ..... X  
CHEM-TEL 1-800-255-3924 NFPA HEALTH ..... 3  
INFORMATION: 860-347-2505 NFPA FLAMMABILITY ..... 0  
DU-LITE CORPORATION NFPA REACTIVITY ..... 1  
171 RIVER ROAD PREPARED BY: WALTER J. SMITH  
MIDDLETOWN, CT 06457 DATE: 1/07/2006

PRODUCT NAME .....#45 CLEANER  
DESCRIPTION .....Soak cleaner for ferrous metals.  
DOT DESCRIP.: CORROSIVE SOLIDS, N.O.S. 8, UN1759, PG-II  
(Contains: Sodium Hydroxide)  
DOT LABEL: CORROSIVE DOT PLACARDS: CORROSIVE PLACARD

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**SECTION II - HAZARDOUS INGREDIENTS**  
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HAZARDOUS COMPONENT	CAS NUMBER	TLV(MG/M3)	PEL(MG/M3)	PERCENT
SODIUM HYDROXIDE	1310-73-2	2.0(Air)	2.0	<45
OTHER NON-HAZARDOUS	N/A	N/A	N/A	<57

N/E = NOT ESTABLISHED N/A = NOT APPLICABLE

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**SECTION III - PHYSICAL DATA**  
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BOILING POINT(°F).....N/A SPECIFIC GRAVITY (H2O=1)... 2.155 Est.  
VAPOR PRESSURE (mm Hg)....N/A MELTING POINT..... 300°C Est.  
VAPOR DENSITY (Air=1)....N/A EVAPORATION RATE..... N/A  
SOLUBILITY IN H2O.....Complete PH.....14.0 @ 5%  
APPEARANCE/ODOR.....White granular material - No odor.

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**SECTION IV - REACTIVITY DATA**  
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CHEMICAL STABILITY: Stable CONDITIONS TO AVOID: Heat above 1000°F.  
INCOMPATIBLE MATERIALS: Organic materials, acids, cyanides,  
aluminum, leather, tin, zinc, food sugars.  
DECOMPOSITION PRODUCTS: Steam, oxides of nitrogen, contact with food sugars  
may form carbon monoxide, contact with incompatible metals will release  
explosive hydrogen gas.

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**SECTION V - FIRE AND EXPLOSION HAZARD DATA**  
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FLASH POINT.....None FLAMMABLE LIMITS.....None  
LOWER FLAME LIMIT.....N/A HIGHER FLAME LIMIT.....N/A  
IN CASE OF FIRE: Non-flammable.  
Use water mist to cool fire exposed containers.  
SPECIAL FIREFIGHTING PROCEDURES: Do not scatter material with water spray.  
Wear protective clothing with self-contained breathing apparatus.  
UNUSUAL FIRE HAZARDS: Contact with some metals (i.e. aluminum, tin, zinc, etc.)  
may release flammable hydrogen gas.  
Oxidizer when water is removed.

May increase the flammability of combustibles.  
Contact with food sugars may form carbon monoxide.

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**SECTION VI - HEALTH HAZARD DATA**  
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ROUTES OF ENTRY: Eye contact, skin contact, inhalation, ingestion.  
HEALTH HAZARDS (ACUTE, CHRONIC):  
Contains STRONG ALKALI (Caustic Soda).  
Causes severe eye, skin and tissue burns. May be harmful or fatal if swallowed.  
May cause respiratory tract irritation, depending upon exposure.  
Avoid contact with eyes, skin or clothing.  
CARCINOGENICITY: None. NTP?: No. IARC?: No. OSHA REGULATED?: No.  
SYMPTOMS OF EXPOSURE: Eye, skin and respiratory tract irritation.  
Eye, skin and tissue burns.  
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: N/E  
FIRST AID: INHALATION: Move victim to fresh air.  
If not breathing, use artificial respiration.  
If breathing is difficult, give oxygen.  
Seek medical attention.  
EYES: Flush with running water for at least 15 minutes.  
Seek medical attention.  
SKIN: Wash affected area with plenty of water.  
Remove contaminated clothing.  
Neutralize with vinegar.  
Seek medical attention.  
INGESTION: If conscious, give plenty of water.  
Do not induce vomiting.  
Seek medical attention.

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**SECTION VII - PRECAUTIONS/PROCEDURES**  
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IN CASE OF SPILL: Wear proper protective clothing.  
Contain spills with inert absorbent.  
Recover material into a chemical waste container.  
Neutralize spill area with dilute acid or water.  
WASTE DISPOSAL METHOD: Dilute spent solutions 1:10 with water.  
Add Urea and mix well. Slowly add dilute acid till pH is between 7.5-8.5.  
Allow sludge to settle. Perform this procedure only in a well ventilated area.  
PRECAUTIONS: Wear proper protective clothing when using this product.  
Use with adequate ventilation.  
Wash thoroughly after handling.  
Store away from strong acids.  
Material gives off intense heat and may erupt if not added slowly and mixed well.  
When making a solution, add slowly to room temperature water with constant stirring.  
OTHER PRECAUTIONS: Emptied containers of this product may contain hazardous residue.  
Clean thoroughly before reusing or discarding.  
Do not use a welding torch to cut container.  
Do not use for water or food storage.

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**SECTION VIII - SPECIAL PROTECTION**  
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VENTILATION: Normal plant ventilation generally adequate.  
RESPIRATORY PROTECTION: Use NIOSH approved respirator if dust or vapors are excessive.  
MECHANICAL EXHAUST...X  
PROTECTIVE GLOVES: Rubber.  
LOCAL EXHAUST.....X  
EYE PROTECTION: Safety goggles, face shield.  
OTHER PROTECTIVE EQUIP.. Rubber apron, rubber boots, coveralls.  
WORK/HYGIENIC PRACTICES.. Wash after handling, launder clothes.

**SECTION IX - SARA TITLE III INFORMATION**

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HAZARDOUS COMPONENT	CERCLA RQ LBS.	SECT 302 TPQ LBS.	SECT 313 TOXIC	SECT 311/312 HAZARDS
SODIUM HYDROXIDE	1000	N/A	NO	A, E

A=IMMEDIATE (ACUTE HEALTH HAZARD)    B=DELAYED (CHRONIC) HEALTH HAZARD  
 C=FIRE HAZARD    D= SUDDEN RELEASE OF PRESSURE HAZARD    E=REACTIVE HAZARD