

# SAFETY DATA SHEET

# Hot-N-Tuff

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION:

**DISTRIBUTOR:** Kleen Solutions, Inc.  
1360 West Crowell Lane  
Halsey, OR 97348  
(866) 77-KLEEN / (866) 775-5336

**INFORMATION:**

**EMERGENCY PHONE:** CHEMTREC: (800) 424-9300

**PRODUCT NAME:** Hot-N-Tuff

**PRODUCT NUMBER:** KS-455

**DATE PREPARED:** 10/01/2015

**LAST REVISION:** 09/26/2022

**SYNONYMS:**

Uses: All Purpose Cleaner - Degreaser

PURE:  LIQUID:

MIXTURE:  SOLID:

## 2. HAZARDOUS IDENTIFICATION:

**EMERGENCY OVERVIEW:** Corrosive

**GHS CLASSIFICATION:** Corrosive to Metals (Category 1), Skin Irritation: (Category 1A), Eye Irritation: (Category 1), Acute Toxicity Oral: (Category 4)  
Reproductive Toxicity (Category 2)

**GHS Label elements, including precautionary statements**

**SIGNAL WORD:** **Danger** **PICTOGRAM:**

**HAZARD STATEMENT(S):**

H290: May be Corrosive to metals  
H302: Harmful if swallowed  
H314: Causes severe skin burns and eye damage  
H332: Harmful if inhaled  
H361: Suspected of damaging fertility or the unborn



**PRECAUTIONARY STATEMENT(S):**

P202 Do not handle until all safety precautions have been read and understood.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312+P330+331: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.  
P304+P340: IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.  
P305 +P351 +P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 IF SKIN irritation or rash occurs: Get medical advice/attention.  
P337+P313: IF eye irritation persists: Get medical advice/attention.  
P363 Wash contaminated clothing before reuse.  
P390 Absorb spillage to prevent material damage.  
P405 Store locked up.  
P501 Dispose of contents/ container to an approved waste disposal plant.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS: *Balance of formula contains water and proprietary ingredients*

Chemical Name	CAS #	Wt. Range %
POTASSIUM HYDROXIDE	1310-58-3	15 – 20%
2-BUTOXYETHANOL	111762	1 – 5%
ALKYL (C10-16) DIMETHYL AMINE OXIDE	70592-80-2	1 – 3%

*While some substances are claimed as trade secret in accordance with the provision of OSHA 29 CFR 1910.1200(i), all known hazards are clearly communicated within this document.*

## 4. FIRST AID MEASURES:

**GENERAL ADVICE:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.  
**EYE CONTACT:** Immediately flush eyes with water for at least 15 minutes. Hold eyelids open while flushing the eyes. Get medical attention.  
**INHALATION:** Remove to fresh air and Keep at rest in a position comfortable for breathing.. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.  
**INGESTION:** If swallowed, do NOT induce vomiting. Give victim lots of water or milk. Get medical attention immediately. Never give anything by mouth to an unconscious or convulsing person.  
**SKIN CONTACT:** Wash with soap and water. Change contaminated clothing. Get medical attention if irritation develops or persists.  
**AGGRAVATED MEDICAL CONDITIONS:** Pre-existing eye, skin or respiratory conditions.  
**SUPPLEMENTAL HEALTH INFORMATION:** The effects of long-term, low-level exposure to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all effects from repetitive acute exposures.

## 5. FIRE FIGHTING MEASURES:

**EXTINGUISHING MEDIA:** Use extinguishing media appropriate for surrounding fire.  
**SPECIAL FIRE FIGHTING PROCEDURES:** Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None known. **COMBUSTION PRODUCTS:** None Known

**6. ACCIDENTAL RELEASE MEASURES:**

**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:** Do not walk through any spills without wearing proper safety attire. High risk of slipping due to leakage/spillage of product. Small spills: Mop up, wipe up or soak up immediately. Large spills: Evacuate area. Contain liquid; transfer to closed poly containers. Or soak up with inert material and shovel into poly drums for disposal. Do not let product enter drains. Discharge into the environment must be avoided.

**7. HANDLING AND STORAGE:**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Do not handle until all safety precautions have been read and understood. Protect from freezing. Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet. Wear personal protection as required per safety program. Follow all SDS/label precautions even after container is emptied.

**OTHER PRECAUTIONS:** For industrial and institutional use only. Keep away from children. Keep containers closed while not in use.

**8. EXPOSURE CONTROL/PERSONAL PROTECTION:**

Contains no additional substances with occupational exposure limit values other than those listed below.

Chemical Name	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
POTASSIUM HYDROXIDE	2 mg/M <sup>3</sup>	--	2 mg/M <sup>3</sup>	--
2-BUTOXYETHANOL	50ppm(240mg/M3)(SKIN)		25ppm(121 mg/M3)(SKIN)	

**PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY PROTECTION:** Wear a NIOSH/MSHA approved respirator appropriate for vapor concentration at point of use.

**VENTILATION:** Local exhaust sufficient to keep exposure below TLV.

**WORK/HYGENIC PRACTICES:** When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking.

**EYE PROTECTION:** Use chemical safety goggles and/or full face shield when splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

**PROTECTIVE GLOVES:** Rubber or other impervious material with gauntlets. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

**OTHER PROTECTIVE EQUIP:** Boots, apron, lab coat or coveralls of impervious material, as appropriate to avoid skin contact.

**ENGINEERING CONTROLS:** Facilities storing or utilizing this material should be equipped with an eye wash facility and safety shower.

**9. PHYSICAL AND CHEMICAL PROPERTIES:****INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:**

a) <b>Appearance:</b> Purple Liquid	k) <b>Vapor pressure (mm/hg):</b> < 10
b) <b>Odor:</b> Butyl Odor	l) <b>Vapor density (Air = 1):</b> 2 - 4
d) <b>pH:</b> 13.98	m) <b>Relative density (Specific Gravity):</b> 1.07
e) <b>Melting point/freezing point:</b> No data available	n) <b>Water solubility:</b> 100% Complete
f) <b>Initial boiling point and boiling range:</b> (98.88 °C) 210 °F	p) <b>Auto-ignition temperature:</b> n/a
g) <b>Flash point:</b> >203 <b>Method Used:</b> n/a	r) <b>Viscosity:</b> No data available
h) <b>Evaporation rate:</b> No data available	-) <b>Pounds Per Gallon:</b> 9
j) <b>Upper/lower flammability or explosive limits:</b> UEL: n/a LEL: n/a	<b>OTHER:</b> No other data is available for this product. . . .

**10. STABILITY AND REACTIVITY:**

**STABLE:** Stable under recommended storage conditions.

**INCOMPATIBILITY:** Acids and metals such as zinc, aluminum and tin

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Oxides of carbon

**HAZARDOUS POLYMERIZATION:** Will Not Occur

**CONDITIONS TO AVOID:** Contact with incompatible materials.

**11. TOXICOLOGICAL INFORMATION:**

None of the components of this product are listed as carcinogens. No other data available.

**12. ECOLOGICAL INFORMATION:**

None of the components of this product are listed as carcinogens,

**13. DISPOSAL CONSIDERATIONS:**

Dilute with large amounts of water and dispose to municipal or industrial waste treatment facility in accordance with applicable Local, State and Federal regulations.

**14. TRANSPORT INFORMATION:**

**EMERGENCY RESPONSE GROUP #**

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	3266	Corrosive Liquids, Basic, Inorganic, n.o.s. (Potassium hydroxide)	8	II

**15. REGULATORY INFORMATION:**

No data available

**16. OTHER INFORMATION:**

**HMS INFORMATION: HEALTH: 2 FLAMMABILITY: 1 PHYSICAL HAZARD: 0 PERSONAL PROTECTION : B**

**NFPA INFORMATION: TOXICITY: 2 FIRE: 1 REACTIVITY: 0**

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