

SAFETY DATA SHEET (SDS)

1 - IDENTIFICATION

TOWERKLENE 45-ARP

Chemical family: Alkaline Cleaner

Recommended use: Cleaner

Tower Metalworking Fluids 4300 South Tripp Ave. Chicago, IL 60632

Information telephone #: (773) 927-6161 (7:30 AM to 4 PM, CST, Monday to Friday) **24 Hr. emergency telephone #:** CHEMTREC: (800) 424-9300

2 - HAZARDS IDENTIFICATION

Classification of chemical:

This material is classified as hazardous under OSHA regulations (29CFR 1910.1200)(Hazcom 2012).

Signal word: DANGER

Hazard Pictogram:



Hazard statement:

- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.

Precautionary statement:

P264	Wash contact area thoroughly after handling.
P280	Wear chemical resistant gloves, goggles and face shield.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN(or hair): Take off immediately all contaminated clothing. Rinse skin with
	water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep 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.
P363	Wash contaminated clothing before reuse.
P310	Immediately call a POISON CENTER/doctor.
P405	Store locked up.
P501	Dispose of contents/ containers in accordance with federal, state and local regulations.

3 - COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical name	CAS #	Concentration	GHS Hazard Codes
Potassium hydroxide	1310-58-3	2.0 - 3.0%	H314

4 - FIRST-AID MEASURES

Description of first aid measures:

Inhalation: Remove to fresh air. If breathing becomes difficult or symptoms persist, administer artificial respiration and get medical attention.

Ingestion: Do not induce vomiting. If conscious give large amounts of water. Get immediate medical attention.

- Skin: Remove contaminated clothing and immediately wash affected area(s) with plenty of soap and water for several minutes. Continue washing with large amounts of water for a maximum of 15-20 minutes. Get immediate medical attention.
- Eye: Remove contact lenses, if present and easy to do. Flush with water for 15 minutes or until irritation subsides. Hold eyelids open during flushing. Seek immediate medical attention. If physician is not immediately available, apply one or two drops of pontocain hydrochloride solution, followed by a second flushing of water for 15 minutes.

Symptoms and effects, both acute and delayed:

Acute: May cause severe burns when in contact with skin or eyes. Vapors, mists and liquids are extremely corrosive to the eyes and dermal tissue. Inhalation may result in severe irritation and lung tissue damage.

Chronic: Prolonged or repeated contact can result in skin irritation.

5 - FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable: Non-flammable. Unsuitable: None.

Specific hazards and combustion products: Thermal decomposition can liberate fumes of nitrogen and phosphorus oxides. If near fire, cool exposed containers with cold water to prevent rupture.

Special protective equipment and precautions for fire-fighters: Exposure to high temperatures may cause drums to bulge and rupture. In case of fire, keep drums cooled with water.

6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: All persons dealing with the spill should wear complete personal protective equipment. When near a spill, wear acid resistant slicker suit. Keep others away from spill. Restrict access to area until the spill has been cleaned up.

Methods and materials for containment and cleaning up: Contain spill with soil or other non-comubstible absorbent medium. Prevent entry into sewers and waterways. Avoid contact with eyes and clothing. Disposal procedure must be in accordance with local, state & federal regulations.

7 - HANDLING AND STORAGE

Precautions for safe handling	g: Wear proper personal protective equipment. Use impervious gloves (rubber, nitrile or neoprene). Wear safety glasses, chemical splash goggles. Wash thoroughly before meals and at end of work periods. Launder or dry-clean soiled clothing before reuse. Aqueous solutions, if evaporated rapidly, may emit corrosive mist and leave a caustic residue.
Conditions for safe storage:	Keep containers closed when not in use. Protect from freezing temperatures. Avoid heating above 120°F for prolonged periods of time. Do not store or handle near strong oxidants. Empty containers may retain product residue; all precautions apply to empty containers.

Incompatible materials: Acids and acid cleaning compounds.

8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure	limits:

Material	%	ACGIH TWA	OSHA (Ceiling) Vacated	CAS #
Potassium Hydroxide	<2.5	CEIL: 2 mg/m ³	2 mg/m^3	1310-58-3
Sodium Hydroxide	<1.0	PEL: 2 mg/m ³	2 mg/m ³	1310-73-2

Engineering controls: None required under normal use conditions.

Individual protection measures and personal protective equipment: Splash goggles, face shield, chemical impervious resistant gloves. Use chemical resistant apron if needed to avoid skin contact.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid.
Odor:	Bland
Odor threshold:	Data currently unavailable
Product pH:	13.5 Typical.
Freezing point:	32°F
Boiling point:	Approximately 212°F
Flash point:	None
Evaporation rate:	<1 (BA=1)
Flammability:	Non-flammable
Upper/lower flammability limits:	Information not available.
Vapor pressure:	Data currently unavailable.
Vapor density:	>1 (Air = 1)
Relative density:	1.11 (Water = 1)
Solubility:	Soluble in water and alcohols.
Partition coefficient (n-octanol/water):	Information not available.
Auto-ignition temperature:	Information not available.
Decomposition temperature:	Information not available.
Viscosity:	Not determined.

10 - STABILITY AND REACTIVITY

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Excessive heat. Aqueous solutions, if evaporated rapidly may emit corrosive mist and leave a caustic residue.

Incompatible materials: Acids and acid cleaning compounds.

Hazardous decomposition products: Thermal decomposition can liberate fumes of nitrogen and phosphorus oxides.

11 - TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation:	Yes
T (*	37

- Ingestion: Yes
 - Skin: Yes
 - Eye: Yes

Potential Symptoms of exposure:

Inhalation: No information available.

Ingestion: No information available.

Skin: May cause severe burns when in contact with the Skin

Eye: May cause severe burns when in contact with the Eyes.

Toxicological data: No data available.

NTP, IARC or OSHA carcinogen: None of the constituents of this product have been identified as possible or proven carcinogens by NTP, IARC, or OSHA.

12 - ECOLOGICAL INFORMATION

Ecotoxicity: Due to this product's high pH when undiluted or un-neutralized it is considered to be acutely harmful to aquatic life.

Persistence and degradability: Not determined.

Bioaccumulative potential: Has the potential to bioaccumulate.

Mobility in soil: Not determined.

Other adverse effects: None Known.

13 - DISPOSAL CONSIDERATIONS

Waste disposal method: Dispose of in accordance with federal, state and local regulations.

14 - TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101: Proper Shipping Name: Corrosive Liquid, N.O.S. UN Number: UN1760 Hazard Class/Division: 8 Packing Group: III

15 - REGULATORY INFORMATION

Sara III (Superfund Amendment and Reauthorization Act of 1986) 40 CFR Part 372 and 40 CFR Part 355

Sections 302, 304 and 40 CFR Part 355 – Extremely Hazardous Substances:

Component % RQ (lbs.)

CAS#

TPQ (lbs.)

NONE –	-	-	_		
Sections 311, 312 and 40 CFR Part 355 – Hazard Categories:					
ACCUTE(IMMEDIATE HEALTH HAZARD):	YES	FIRE HAZARD:	NO		
CHRONIC (DELATED HEALTH HAZARD):	YES	REACTIVE HAZARD:	NO		
SUDDEN PRESSURE RELEASE:	NO				
Sections 313 and 40 CFR Part 372 – Toxic Chemicals:					
Component	%	CAS#			
None	_	_			

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

Section 102 and 40 CFR Part 302 – Hazardous Substances:

Component	%	RQ (lbs.)	CAS#
Potassium hydroxide	< 2.5	1,000	1310-58-3
Sodium hydroxide	< 1.0	1,000	1310-73-2

CLEAN WATER ACT

Under section 311 (b) (4) of this act, contamination of surface waters by petroleum products must be reported immediately to the National Response Center. SECTION 311 (b) (4) DOES APPLY TO TOWERKLENE 45-ARP

California Proposition 65: None of the ingredients are listed.

TSCA (Toxic Substances Control Act): All components of this formula are listed in the TSCA inventory.

16 - OTHER INFORMATION

Preparation Date: February 19, 2015

Revision Date: June 13, 2017

The information appearing in this document is based upon data obtained from raw material manufacturers and/or recognized technical sources. While this information is believed to be correct, TOWER METALWORKING FLUIDS makes no representations as to its accuracy or sufficiency, usage, or the hazards connected with the use of this material. Since this product may be applied under conditions unfamiliar to us or beyond our control, we claim no responsibility for the results of its use, and users are responsible for the verification of this information under their own operation conditions to determine whether the product is suitable for their particular purposes, and these users assume all risks of their use, handling, and disposal of the product. This information relates only to the product designated above and does not relate to its use in combination with any other material in any other process.