



SAFETY DATA SHEET (SDS)

1 - IDENTIFICATION

TOWERDRAW E-610

Chemical family: Hydrocarbon

Recommended use: Drawing & Stamping Metalworking

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:

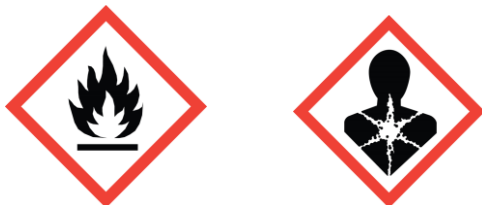
This material is classified as hazardous under OSHA regulations (29CFR 1910.1200) (Hazcom 2012)

Flammable liquid: Category 3

Aspiration toxicant: Category 1

Signal word: DANGER

Hazard Pictograms:



Hazard statements:

H226 Flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

Precautionary statements:

P210	Keep away from sparks, open flames, hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground container and receiving equipment.
P241	Use explosion-proof electrical and equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P280	Wear chemical resistant gloves, goggles and face shield.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER / doctor.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P370+P378	In case of fire: Use water fog, foam, dry chemical or carbon dioxide to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
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
Naphtha (petroleum), hydrotreated heavy	64742-48-9	90 - 100%	H226, H304, H316

4 - FIRST-AID MEASURES

Description of first aid measures:

Inhalation: Remove to fresh air, if breathing has stopped apply artificial respiration. Call physician.

Ingestion: Do not induce vomiting. Get medical attention.

Skin: Wash with warm water and mild soap. Remove contaminated clothing.

Eye: Flush with water for 15 minutes or until irritation subsides.

Note to physician: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

Symptoms and effects, both acute and delayed:

Acute: Mild eye and skin irritation. Excessive inhalation may cause irritation, dizziness, nausea, or unconsciousness; if symptoms occur seek medical attention.

Chronic: Prolonged or repeated skin contact may tend to remove natural oils, resulting in development of dermatitis.

5 - FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Unsuitable: Straight streams of water.

Specific hazards and combustion products: Oxides of carbon upon combustion. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Special protective equipment and precautions for fire-fighters: Use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: All persons dealing with the spill should wear appropriate personal protective equipment. Keep others away from spill. Restrict access to area until the spill has been cleaned up. Extinguish all sources of ignition.

Methods and materials for containment and cleaning up: Extinguish all sources of ignition. Flush with water into retaining area and soak up in absorbent medium. Transfer to suitable containers. If spill enters sewer, notify proper authorities.

7 - HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin, eyes and clothing. Use proper bonding and/or grounding procedures. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause and electrical spark (ignition source).

Conditions for safe storage: Keep containers closed when not in use. Store in cool conditions and away from sources of ignition. Use with adequate ventilation.

Incompatible materials: Strong oxidizing agents.

8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure limits:

Source	Form	Limit/ Standard			Note
Naphtha (petroleum), Hydrotreated heavy	Vapor	RCP - TWA	1200 mg/m ³	177 ppm	Total Hydrocarbons

Engineering controls: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: Adequate ventilation should be provided so that exposure limits are not exceeded. Use explosion-proof ventilation equipment.

Individual protection measures and personal protective equipment: Splash goggles, neoprene or nitrile chemical resistant gloves, chemical resistant apron if exposure is likely to be prolonged or repeated. If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Types of respirators to be considered for this material include a half-face filter respirator. For high airborne concentrations, use a NIOSH/MSHA approved air-supplied respirator.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless to pale yellow liquid.
Odor:	Bland solvent.
Odor threshold:	Data currently unavailable.
Product pH:	N/A
Freezing point:	Data currently unavailable.
Boiling point:	354°F (178.9°C) - 369°F (187.2°C)
Flash point:	>120°F (>49°C) [ASTM D-56]
Evaporation rate:	0.16 (nButyl Acetate=1)
Flammability:	Data currently unavailable.
Upper/lower flammability limits:	LEL: 0.7% UEL: 5.4%
Vapor pressure:	0.08 kPa (0.56 mm Hg) at 20°C
Vapor density:	5.4 at 101 kPa [calculated] (Air=1)
Relative density:	0.75 (Water= 1)
Solubility:	Negligible solubility in water.
Partition coefficient (n-octanol/water):	Information not available.
Auto-ignition temperature:	689°F (365°C)
Decomposition temperature:	Information not available.
Viscosity:	1.8 (cSt @ 25°C)
VOC:	727 gm/L [EPA Method 24]

10 - STABILITY AND REACTIVITY

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Material does not decompose at ambient temperatures. Oxides of carbon upon combustion.

11 - TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation: Acute Toxicity: (Rat) 8 hour(s) LC50 > 5000 mg/m³ (Vapor)

Ingestion: Acute toxicity (Rat) LD50 > 5,000 mg/kg.

Skin: Acute Toxicity (Rabbit) LD50 > 5,000 mg/kg.

Eye: Yes

Potential symptoms of exposure:

Inhalation: Minimally toxic, based on test data for the material. Negligible hazard at ambient/normal handling temperatures.

Ingestion: Minimally toxic, based on test data for the material.

Skin: Minimally toxic, based on test data for the material. Mildly irritating to skin with prolonged exposure.

Eye: May cause mild, short-lasting discomfort to eyes.

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: Material may cause long-term adverse effects in the aquatic environment.

Persistence and degradability:

Biodegradation: Material expected to be readily biodegradable.

Hydrolysis: Material transformation due to hydrolysis not expected to be significant.

Photolysis: Material transformation due to photolysis not expected to be significant.

Atmospheric Oxidation: Material expected to degrade rapidly in air.

Bioaccumulative potential: Data not available.

Mobility in soil: Data not available.

Other adverse effects: None known.

13 - DISPOSAL CONSIDERATIONS

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

14 - TRANSPORT INFORMATION

DOT Shipping: Combustible Liquid

DOT Hazard class: 3

UN/NA Number: UN1268/NA1993

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.)	TPQ (lbs.)	CAS#
NONE	-	-	-	-

Sections 311, 312 and 40 CFR Part 355 – Hazard Categories:

ACCUTE(IMMEDIATE HEALTH HAZARD):	YES	FIRE HAZARD:	YES
CHRONIC (DELATED HEALTH HAZARD):	NO	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#
NONE	-	-	-

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 TOWERDRAW E-610

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: June 13, 2014

Revision Date: June 1, 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.