



SAFETY DATA SHEET (SDS)

1 - IDENTIFICATION

TOWERDRAW E-312

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 liquids: Category 3

Aspiration hazard: Category 1

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2B

Acute toxicity, inhalation: Category 4

Specific target organ toxicity: Category 3

Signal word: DANGER

Hazard Pictograms:



Hazard statements:

H226 Flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

H315+ H320 Causes skin and eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness and dizziness.

Precautionary statements:**Prevention**

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.
P261	Avoid breathing vapors/mist.
P264	Wash contact area thoroughly after handling.
P271	Use only outdoors or in well-ventilated areas.
P280	Wear chemical resistant gloves, goggles and face shield.

Response

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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER / doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331	Do NOT induce vomiting.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/ attention.
P370+P378	In case of fire: Use water fog, foam, dry chemical or carbon dioxide to extinguish.

Storage

P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Disposal

P501	Dispose of contents/ containers in accordance with federal, state and local regulations.
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3 - COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical name	CAS #	Concentration
Distillates (petroleum), hydrotreated light	64742-47-8	95 – 100 %

4 - FIRST-AID MEASURES**Description of first aid measures:**

Inhalation: If overexposure occurs, remove to fresh air. If breathing is irregular or has stopped, apply artificial respiration by trained personnel. Seek medical attention immediately.

Ingestion: Do NOT induce vomiting. Get medical attention immediately. Wash out mouth with water. Remove to fresh air and keep at rest in comfortable position. Aspiration hazard if swallowed. Can enter the lungs and cause damage. If vomiting occurs spontaneously, keep head low below hips so that stomach content doesn't get into the lungs.

Skin: Wash with warm water and mild soap. Remove contaminated clothing. Get medical attention if irritation develops or persists.

Eye: Immediately flush with water for 15 minutes or until irritation subsides occasionally lifting the upper and lower eyelids. Remove contact lenses if present, continue rinsing for at least 10 minutes. Get medical attention if irritation persists.

Symptoms and effects, both acute and delayed:

Acute: Drying and defatting of skin. Eye irritation. Excessive inhalation may cause anesthesia, dizziness, nausea. May be fatal if swallowed and enters the airways. Irritating to mouth, throat and stomach.

Chronic: Prolonged or repeated skin contact may tend to remove natural oils, resulting in development of dermatitis. No other significant effects or critical hazards known.

5 - FIRE-FIGHTING MEASURES

Extinguishing media:

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

Unsuitable: Do not use straight streams of water, as this will spread the fire.

Specific hazards and combustion products: Combustible liquid. Typical hydrocarbon combustion products upon ignition. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Special protective equipment and precautions for fire-fighters: Use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Water spray and water fog can be used 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. Avoid breathing vapor or mist.

Methods and materials for containment and cleaning up: Extinguish all sources of ignition. Stop leak if without risk. Move containers from spill area. Flush with water into retaining area and soak up in absorbent medium. Transfer to suitable containers. If spill enters sewer, notify proper authorities. Dispose of via a licensed waste disposal contractor.

7 - HANDLING AND STORAGE

Precautions for safe handling: Use appropriate personal protective equipment. Do not swallow or breath vapor. Avoid contact with skin, eyes and clothing. Use only with adequate ventilation. 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). Store and use away from heat, sparks, open flame or any other ignition source.

Conditions for safe storage: Keep containers tightly closed when not in use. Store in cool, dry conditions and in a segregated area away from sources of ignition. Store in well ventilated area. Store locked up and in accordance with local regulations.

Incompatible materials: Strong oxidizing agents.

8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure limits:

Source	Form		Limit/ Standard	Note
Distillates (petroleum), hydrotreated light	Vapor	ACGIH TLV	212 ppm, 1200 mg/m ³ 8 hour(s)	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:	Water white liquid
Odor:	Mild hydrocarbon.
Odor threshold:	Data currently unavailable
Product pH:	N/A
Freezing point:	Data currently unavailable
Boiling point:	310°F (154°C) - 320°F (160°C)

Flash point: 105°F (40.6°C) [ASTM D-56]
Evaporation rate: 0.08 (nButyl Acetate=1)
Flammability: Data currently unavailable.
Upper/lower flammability limits: LEL: 1.0% UEL: 6.0%
Vapor pressure: 2 mm Hg at 20°C
Vapor density: 5 at 101 kPa [calculated] (Air=1)
Relative density: 0.77
Solubility: Negligible solubility in water.
Partition coefficient (n-octanol/water): Information not available.
Auto-ignition temperature: 500°F (260°C)
Decomposition temperature: Information not available.
Viscosity: <1.8 cSt @ 100°F
VOC: 724 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. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Material does not decompose at ambient temperatures. Typical hydrocarbon combustion products upon ignition.

11 - TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation: Low toxicity: LC50 greater than near-saturated vapor concentration. / 1 hours, Rat.
Ingestion: Expected to be of low toxicity: LD50 > 2,000 mg/kg, Rat.
Skin: Expected to be of low toxicity: LC50 > 2,000 mg/kg, Rat.
Eye: Not anticipated.

Potential symptoms of exposure:

Inhalation: Symptoms may include nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.
Ingestion: Aspiration hazard. Irritating to mouth, throat and stomach.
Skin: Symptoms may include irritation, redness.
Eye: Symptoms may include pain or irritation, watering, redness.

Toxicological data:

Ingestion Toxicity: LD50 > 2,000 mg/kg, Rat.
Skin Toxicity: LD50 > 2,000 mg/kg, Rat.

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: Acute Toxicity:

Fish: Low toxicity: LC/ED/IC50 > 1,000 mg/L
Aquatic Invertebrates: Low toxicity: LC/ED/IC50 > 1,000 mg/L
Algae: Low toxicity: LC/ED/IC50 > 1,000 mg/L
Microorganisms: Expected to be toxic: $1 < LC/EC/IC50 \leq 10$ mg/L

Persistence and degradability: Readily biodegradable. Oxidizes rapidly by photo-chemical reactions in air.

Bioaccumulative potential: Not expected to bioaccumulate.

Mobility in soil: Adsorbs to soil and has low mobility.

Other adverse effects: None known.

13 - DISPOSAL CONSIDERATIONS

Material Name: TOWERDRAW E-312
Revision Date: June 1, 2017

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

14 - TRANSPORT INFORMATION

UN/NA Number: UN 1268 / NA 1993
Proper shipping name: Petroleum distillates, n.o.s.
Class / Division: 3
Packing group: III
DOT Shipping: Combustible

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:

ACUTE(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-312

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 30, 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.