



## SAFETY DATA SHEET (SDS)

### 1 - IDENTIFICATION

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#### **BEND-ALL 002**

**Chemical family:** Synthetic gel

**Recommended use:** Drawing & Forming 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

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### 2 - HAZARDS IDENTIFICATION

**OSHA/HCS Status:** This material is classified as non-hazardous under OSHA regulations (29 CFR 1910.1200) (Hazcom 2012)

**Classification of chemical/mixture:** Not Classified

**Signal word:** None required.

**Hazard Pictogram:** None required.

**Hazard statement:** None required.

**Precautionary statement:** None required.

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### 3 - COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical name	CAS #	Concentration
Ingredients classified as non-hazardous under OSHA regulations (29CFR 1900-1200) (Hazcom 2012)		

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## 4 - FIRST-AID MEASURES

### Description of first aid measures:

Inhalation: Move to fresh air. Get medical attention if symptoms develop and persist.

Ingestion: Do not induce vomiting. Get medical attention.

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

Eye: Remove contact lenses, if present and easy to do. Flush with water for 15 minutes or until irritation subsides.

### Symptoms and effects, both acute and delayed:

Acute: None expected from short-term exposure. Possible mild skin and transient eye irritation for people with preexisting disorders and/or allergic tendencies.

Chronic: Long term or repeated exposure may result in minor irritation.

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## 5 - FIRE-FIGHTING MEASURES

### Extinguishing media:

Suitable: Foam, carbon dioxide, dry chemicals, water fog or spray.

Unsuitable: Straight streams of water.

**Specific hazards and combustion products:** Products may include and are not limited to oxides of carbon, nitrogen and other toxic gases upon combustion.

**Special protective equipment and precautions for fire-fighters:** If near fire, cool exposed containers with cold water to prevent rupture. Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

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## 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.

**Methods and materials for containment and cleaning up:** Contain spill and transfer to suitable containers or soak up in absorbent medium. If spill enters sewer, notify proper authorities.

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## 7 - HANDLING AND STORAGE

**Precautions for safe handling:** Wear proper personal protective equipment. Avoid contact with skin, eyes and clothing.

**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.

**Incompatible materials:** Strong oxidizing materials.

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## 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

**Exposure limits:** N/D

**Engineering controls:** None required under normal use conditions.

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

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## 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Light white/cream colored gel
<b>Odor:</b>	Bland
<b>Odor threshold:</b>	Data currently unavailable
<b>Product pH:</b>	Typically 6.0 – 7.0
<b>Freezing point:</b>	32°F

**Boiling point:** N/A  
**Flash point:** None  
**Evaporation rate:** <1 (BA = 1)  
**Flammability:** Information not available.  
**Upper/lower flammability limits:** N/A  
**Vapor pressure:** <0.01 mm Hg  
**Vapor density:** >1 (Air = 1 )  
**Relative density:** 1.02 (water = 1)  
**Solubility:** Dispersible  
**Partition coefficient (n-octanol/water):** Informationa not

available.

**Auto-ignition temperature:** Information not available.  
**Decomposition temperature:** Information not available.  
**Viscosity:** 80,000 – 200,000 cPs @ 70°F

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## 10 - STABILITY AND REACTIVITY

**Chemical stability:** Material is stable under normal conditions.

**Possibility of hazardous reactions:** Hazardous polymerization will not occur.

**Conditions to avoid:** Protect from freezing temperatures.

**Incompatible materials:** Strong oxidizing agents.

**Hazardous decomposition products:** Material does not decompose at ambient temperatures. Combustion products may include and are not limited to oxides of: carbon, nitrogen, and phosphorus when water content has evaporated and residue is subjected to combustion.

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## 11 - TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure:

Inhalation: Yes  
Ingestion: Yes  
Skin: Yes  
Eye: Yes

### Potential Symptoms of exposure:

Inhalation: May cause irritation of respiratory tract. Avoid breathing vapors or mist of this product.  
Ingestion: Do not ingest. Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.  
Skin: Minimally toxic under normal use. May be mildly irritating with prolonged and/or repeated skin contact.  
Eye: Direct contact with eyes may cause irritation. Injuries not expected under normal use.

**Toxicological data:** Data not 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.

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## 12 - ECOLOGICAL INFORMATION

**Ecotoxicity:** May cause long-term adverse effects in the aquatic environment.

**Persistence and degradability:** Data not available.

**Bioaccumulative potential:** Has the potential to bioaccumulate.

**Mobility in soil:** Data not available.

**Other adverse effects:** None known.

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## 13 - DISPOSAL CONSIDERATIONS

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

Material Name: BEND-ALL 002

Revision Date: June 12, 2017

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## 14 - TRANSPORT INFORMATION

**DOT Shipping:** Not regulated by the U.S. Department of Transportation as a hazardous material.  
**DOT Hazard class:** Not Regulated.  
**UN/NA Number:** Not Regulated.

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## 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:

<b>ACCUTE (IMMEDIATE HEALTH HAZARD):</b>	NO	<b>FIRE HAZARD:</b>	NO
<b>CHRONIC (DELATED HEALTH HAZARD):</b>	NO	<b>REACTIVE HAZARD:</b>	NO
<b>SUDDEN PRESSURE RELEASE:</b>	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 NOT APPLY TO BEND-ALL 002

**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.

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## 16 - OTHER INFORMATION

**Preparation Date:** December 22, 2014

**Revision Date:** June 12, 2017

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*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.*