



Hazard Ratings  
4 = Extreme  
3 = High  
2 = Moderate  
1 = Slight  
0 = Insignificant

# Material Safety Data Sheet

(Essentially Similar to U.S. Department of Labor Suggested  
Form For Hazard Communication Compliance)

## I. Product Identification

**Product Type** - COOLANT

**Product Name** - TORCH COOLANT ESAB P/N 156F05 (1 Gal Container)

**Website:** [www.esabna.com](http://www.esabna.com)

**Classification** - Ethylene Glycol & Distilled Water

**Manufacturer** - THE ESAB GROUP, INC.

**Telephone No.** - 1-843-669-4411

**Address** - P. O. Box 100545  
Florence, SC 29501-0545

**Emergency No.** - 1-843-669-4411  
(CHEMTREC) 1-800-424-9300

## II. Hazardous Ingredients\*

**IMPORTANT:** This section covers the materials from which this product is manufactured. The fumes and gases produced during normal use of these products are covered in Section V. A double asterisk (\*\*) before a material indicates that this chemical is considered toxic by and is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Material	(CAS No.)	Weight%	ACGIH TLV TWA (mg/m <sup>3</sup> )	OSHA PEL-TWA (Revoked)	OSHA PEL-TWA
** Ethylene Glycol	(107-21-1)	50	100 (mg/m <sup>3</sup> ) Ceiling	50 PPM Ceiling	None Listed
Deionized Water	(7732-18-5)	50	None Listed	None Listed	None Listed

\* The term "hazardous" should be interpreted as a term required and defined in the OSHA Hazard Communications Standard (29CFR 1910.1200) and does not necessarily imply the existence of any hazard.

**THE ESAB GROUP** requests the users of these products to study this Material Safety Data Sheet (MSDS) and the product labels and become fully aware of the product hazards and safety information. To promote the safe use of these products a user should (1) notify and train its employees, agents and contractors concerning the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for these products, and (3) request that such customers notify and train their employees and customers, for these products, of the same product hazards and safety information.

### III. Physical and Chemical Characteristics

<b>Boiling Point:</b> (°F @ 760 mm Hg):	229°F (109°C)	<b>Freezing Point:</b>	-36°F (-38°C)
<b>Specific Gravity @20° C:</b>	1.0701	<b>Vapor Pressure 20°C:</b>	13 mm Hg
<b>Vapor Density (air=1):</b>	Not known.	<b>Solubility in Water % by wt:</b>	Complete.
<b>Percent Volatiles by Volume:</b>	None.	<b>Self-Pressurized Container Maximum Pressure @ °C:</b>	Not applicable.
<b>Evaporation Rate:</b> (butyl acetate = 1)	<1		
<b>Odor and Appearance:</b>	Colorless, characteristic odor.		

### IV. Fire & Explosion Hazard

Non-flammable. Welding arc and sparks can ignite combustible and flammable products. See ANSI Z49.1 "Safety in Welding and Cutting" (referenced in Section VII) for fire prevention and protection information.

	Method	Open Cup	Closed Cup
Flash Point:	°F - °C	No flash to boiling 229°F (109°C)	No flash to boiling 229°F (109°C)
Flammable Limits in Air % by Volume:		LOWER Not determined.	UPPER Not determined.
Auto-ignition Temperature °C:		Not determined.	
Extinguishing Small Fires:		Use CO <sub>2</sub> or dry chemical. Large Fires: Use alcohol type foam.	
Media Note:		Water fog may cause frothing.	
Special Fire Fighting Procedures:		None.	
Unusual Fire and Explosion Hazards:		See below.	

**WARNING: Hot organic chemical vapors or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below those published in the literature as "auto-ignition" or "ignition" temperatures. Ignition temperatures decrease with increasing vapor volume and vapor/air contact time and are influenced by pressure changes.**

Ignition may occur at typical elevated-temperature process conditions, especially in process operating under vacuum if subjected to sudden ingress of air, or outside process equipment operating under elevated pressure if sudden escape of vapors or mists to the atmosphere occurs. Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

### V. Reactivity Data

**Stability:** Stable.

**Conditions to Avoid:** Do not burn in an uncontrolled manner.

**Incompatibility (materials to avoid):** None known.

**Hazardous Combustion or Decomposition Products:** Burning may produce carbon dioxide and/or carbon monoxide.

**Hazardous Polymerization:** Will not occur.

### VI. Physical and Health Hazard Data

#### Effects of Acute Overexposure:

- **Swallowing** – May cause abdominal discomfort and pain, dizziness, malaise, lumbar pain, oliguria, uremia, and central nervous system depression. Severe kidney damage accompanies gross overexposure.  
If conscious, give two glasses of water and induce vomiting. Call a physician immediately.
- **Skin Absorption** – None currently known.
- **Inhalation** – May cause headache and irritation of the throat. High vapor concentrations, caused for example, by heating the material in an enclosed and poorly ventilated workspace, may produce nausea, vomiting, headache, and dizziness.

- **Skin Contact** – None currently known.
- **Eye Contact** – Liquid, vapors, and particularly mists may be irritating to the eyes.

**Effect of Chronic Overexposure:**

- Inhalation of mists may produce signs of central nervous system effects, particularly dizziness and nystagmus.

**Emergency and First Aid Procedures:**

- **Eyes** – Flush with water.
- **Skin** – Remove contaminated clothing and flush skin with water.
- **Inhalation** – Remove to fresh air. Call a physician if discomfort persists.
- **Swallowing** – If conscious, give two glasses of water and induce vomiting. Call a physician immediately.
- **Carcinogenic Assessment** – Not shown as known or suspected carcinogen by IARC, NTP or OSHA.
- **Notes to Physician:** The principal toxic effect of this material, when swallowed, will be due to the ethylene glycol content, which causes kidney damage. Early administration of ethanol may block the formation of nephro toxic metabolites of ethylene glycol in the liver. Ethanol should be given intravenously, as a 5% solution in sodium bicarbonate, at a rate of about 10 ml of ethanol per hour. Hemodialysis may be required.

## VII. Precautions for Safe Handling and Use/Applicable Control Measures

Read and understand the manufacturer's instructions and the precautionary label on this product. See American National Standard Z-49.1, "Safety in Welding and Cutting," published by the American Welding Society, P. O. Box 351040, Miami, FL 33135, and OSHA Publication 2206 (29 C.F.R. 1910), U.S. Government Printing Office, Washington, D.C. 20402; and ESAB's publications 52-529 and 2035 for more details on many of the following:

**Respiratory Protection (specify type):** None required in normal use. For spill cleanup, use NIOSH/MSHA approved gas mask for organic vapors up to 2% (20,000 ppm). Do not use in atmospheres containing less than 19.5% oxygen.

**Ventilation:** General dilution ventilation is acceptable for controlling work place vapor concentrations to within the recommended TLV. (Local exhaust ventilation may be necessary at emission sources to maintain concentrations within the TLV.)

**Protective Gloves:** Rubber, neoprene, PVC.

**Eye Protection:** Chemical safety goggles or face shield.

**Other Protective Equipment:** Eye wash.

**Precautions to be taken in handling and storing:**

- Avoid eye contact.
- Avoid prolonged or repeated breathing of vapors and/or mists.
- Wash hands thoroughly after handling. This recommendation is intended for good personal hygiene and to prevent accidental ingestion or eye contact, not because of any known toxicity due to skin contact.

**Other Precautions:** Use a NIOSH/MSHA approved mist respirator with a full facepiece where excessive concentrations of mist are present or likely to be present. DO NOT use a mist respirator for protection against vapors.

## VIII. Special Precautions

**Precautions to be taken in handling and storing:** Keep container closed. FOR INDUSTRIAL USE ONLY.

**Other Precautions:** None.

### **SECTION 313 Supplier Notification:**

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

CAS #	Chemical Name	Percent by Weight
107-21-1	1, 2-ETHANEDIOL	52.7%

## STATE RIGHT-TO-KNOW

### **CALIFORNIA Proposition 65**

This product contains the following substances whose levels the State of California has found to cause birth defects or other reproductive harm, which requires a warning under the statute:

None.

### **MASSACHUSETTS Right-to-Know Substance List (MSL)**

This product contains the following substances on the MSL:

Hazardous Substances: Ethylene Glycol

Extremely Hazardous Substances: None

### **NEW JERSEY Right-to-Know Substance List (NJHSL)**

This product contains the following substances on the NJHSL:

Hazardous Substances: Ethylene Glycol

Environmental Hazardous Substances: None

### **PENNSYLVANIA Right-to-Know Substance List (MSL)**

This product contains the following substances whose level requires reporting:

Hazardous Substances: None

Special Hazardous Substances: Ethylene Glycol

Environmental Hazardous Substances: None

The opinions expressed in this MSDS are those of qualified experts within **THE ESAB GROUP**. We believe that the information contained herein is current as of the date of this MSDS. Since the use of this information and these opinions and the conditions of use of these products are not within the control of **THE ESAB GROUP**, it is the user's obligation to determine the conditions of safe use of these products.