



MATERIAL SAFETY DATA SHEET	
SECTION 1 - PRODUCT SOURCE AND IDENTITY	
Supplier identity and address	Product description: Date: Jan. 8, 2007
Fronius USA, LLC 10421 Citation Drive Suite 1100 Brighton, MI 48116	Name: TransCut Liquid Purpose: Operating agent for Fronius plasma cutting system. Part No. 40,0009,0092 MSDS code: Fronius TCL
	Emergency phone: 810-220-4414 Product information: 810-220-4414

## SECTION 2 - SHIPPING CLASSIFICATION

Proper Shipping Name, Hazard Class, UN/NA Number Packing Group, Emergency Response Guide Number

Aerosols, flammable, 2.1, UN1950 (Ethyl alcohol)  
ERG 128

Labels required per 49 CFR 172.101: 2.1

Size for "Limited quantity" per 49 CFR 173.150-4, ORM-D 173.306(h): Gross weight of package 66# max.

Aerosol container must not exceed 1 quart., pressure must not exceed 170 psig @70°F

See 173.306(h) for ORM-D details.

Reportable Quantity ("RQ") per 49 CFR172.101: None, or not possible in one non bulk container

## SECTION 3- SAFETY RATINGS AND HAZARDOUS INGREDIENT INFORMATION

Reporting required by Title III Sec 313, 40 CFR 372, 29 CFR 1910.1200				Exposure Limit Values		
CAS#	313, dm	Material or Component	%	RQ#	TWA	STEL
64-17-5	No	Ethanol	10-25	None	1000 ppm	
78-93-3	Yes,1	Methyl ethyl ketone (MEK)	<1	5000	200 ppm	300 ppm
dm = "de minimis", the lowest percent in discharge which must be reported.						

Other than those listed, there are no ingredients with ACGIH exposure limits present at 1% or more, and no known carcinogens present at 0.1% or more. Components listed in Title III, Sec. 313 (EPCRA) are indicated by "Yes".

Note: The purpose of this MSDS is to provide safe handling, shipping and disposal information for users of the product. It is not intended to, nor does it, provide complete or extensive toxicological data on the product or its components. Users who require this information are referred to primary suppliers of the ingredients of interest.

Emergency overview: Keep out of eyes and off of skin. Can irritate eyes and may irritate skin with extended or repeated exposure. Flammable. Can form explosive vapors. Contents under pressure. Keep away from direct sun exposures and temperatures above 122°F (50°C).

Hazard Categories:	Health	Fire	Pressure	Reactivity	Reference 49 CFR 171.8, OSHA 29 CFR 1910.1200 and SARA 302/311/312/313.
Immediate	Yes	Yes	No	No	
Delayed	No	XXX	XXX	XXX	

HMIS Hazard ratings: Health 1 Fire 3\* Instability 0 Other None \*= subject to adjustment.

NFPA 704 Hazard Ratings: Health 1 Flammability 3\* Reactivity 0 Special NA

Hazard Ratings: Least: 0 Slight: 1 Moderate: 2 High: 3 Extreme: 4

Note: HMIS and NFPA ratings are subjective evaluations of hazards and can differ between preparers. They are intended and useful only as a rapid approximation of the hazards rated.

Threshold limit value: Not established on product.

TOSCA Status: All ingredients listed CERCLA RQ: See Sec 2.

California Prop. 65: Ethanol Ingredients on cancer lists: None

Reproductive implications: None

## SECTION 4 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Water white liquid	Flash point deg. F (PMCT):	To be determined
Odor:	Slight, alcoholic	Initial boiling point deg. C:	Not determined
Specific gravity:	0.96 approx. for liquid portion.	Vapor pressure 20 deg C:	Not determined
pH reaction:	7.8	Freezing point deg. C:	Not determined
% phosphorous:	None	Solubility in water:	Liquid Yes; Gas No.
VOC Content:	240 g/l approx.		
California Rule 102 (66):	Contains no photo chemically active materials.		

**SECTION 5 - SAFE HANDLING AND STORAGE**

General	Neutral water based solution. Store containers in upright position. Keep away from children. Warm vapors may be ignitable or explosive. Use according to directions. Keep out of eyes and off of skin. Do not store in direct sunlight or above 122°F (50°C). Do not discard into fire, even when empty.
Protective equipment	
Eyes	Safety glasses or goggles should be worn if there is possibility of eye contact.
Skin	Impermeable gloves such as rubber, PVC or neoprene are recommended.
Respiratory protection	None normally required.
Ventilation	Avoid accumulating vapors. Keep away from ignition sources.
Other	Local ventilation may be necessary for safe use.

**SECTION 6- HEALTH SAFETY DATA**

## Effects of acute or chronic over exposure

Eyes	Solution is irritating to eyes. No chronic effects known.
Skin	Can cause irritation from repeated exposure.
Inhalation	Over exposure can cause dizziness and symptoms of intoxication.
Ingestion	Not safe to drink. Cannot be made harmless. Causes toxic reaction and intoxication.

**SECTION 7 PHYSICAL STABILITY AND REACTIVITY DATA**

Explosive limits		Flash point: See Sec 4
Lower	Not det.	Upper Not determined.
Chemical stability	Stable	Hazardous decomposition products: None.
Hazardous polymerization	Cannot occur	Incompatibility: None known.

**SECTION 8- EMERGENCY RESPONSE PROCEDURES**

Fire	Extinguishing media	Dry powder, fog, water mist may help.
	Special procedures	Contents are under pressure and the containers may leak or explode if heated in a fire.
	Unusual hazards	Flammable vapors formed on heating.
First Aid	Eyes	Flush with water for at least 15 min. Seek medical attention if pain persists.
	Skin	Wash exposed skin with soap and water until gone. Remove affected clothes rinse off product and wash clothes before reuse.
	Inhalation	If affected, remove individual to fresh air.
	Ingestion	Dilute by giving large amounts of milk or water. Get medical attention immediately. Do not induce vomiting.
Spills	Small / large spill	Remove unnecessary personnel from spill area.
		Eliminate all sources of ignition. Vacuum or mop up as much as possible. Use spark proof equipment. Small amounts may be flushed to drain. Comply with federal, state and local regulations on reporting spills.
		Keep out of waterways and storm sewers.

Product as made has the characteristic of ignitability, like " Unlisted Hazardous Waste D001", RQ 100#.

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