SAFETY DATA SHEET

1. Identification

Product number	80-801
Product identifier	Ultra Cut Cutting Tool Coolant
Revision date	06-22-2016
Company information	KIMBALL MIDWEST 4800 ROBERTS RD COLUMBUS, OH 43228 United States
Company phone	General Assistance 800-233-1294
Emergency telephone US	1-800-424-9300
Version #	02
Supersedes date	06-22-2016
Recommended use	Coating
Recommended restrictions	None known.

2. Hazard(s) identification

Physical hazards	Gases under pressure	Compressed gas
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Germ cell mutagenicity	Category 2
	Carcinogenicity	Category 1
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger		
Hazard statement	Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing genetic defects. May cause cancer.		
Precautionary statement			
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.		
Response	If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.		
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place.		
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.		
Environmental hazards	Hazardous to the aquatic environment, acute Category 2 hazard		
	Hazardous to the aquatic environment, Category 2 long-term hazard		

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Perchloroethylene		127-18-4	40 - 60
Trichloroethylene		79-01-6	40 - 60
Carbon Dioxide		124-38-9	2.5 - 10
Other components below re	eportable levels		0.01 - 0.1

Other components below reportable levels

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Not likely, due to the form of the product. In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Contents under pressure. Pressurized container may explode when exposed to heat or flame.

6. Accidental release measures

Personal precautions, Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or protective equipment and confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing emergency procedures during clean-up. Avoid breathing mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so.
7. Handling and storage	
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage,	Level 1 Aerosol.
including any incompatibilities	Store locked up. Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in a well-ventilated place. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Stored containers should be periodically checked for general condition and leakage.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
Carbon Dioxide (CAS 124-38-9)	PEL	9000 mg/m3	
,		5000 ppm	
US. OSHA Table Z-2 (29 CFR 191	0.1000)		
Components	Туре	Value	
Perchloroethylene (CAS 127-18-4)	Ceiling	200 ppm	
	TWA	100 ppm	
Trichloroethylene (CAS 79-01-6)	Ceiling	200 ppm	
,	TWA	100 ppm	
US. ACGIH Threshold Limit Valu	es		
Components	Туре	Value	
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm	
	TWA	5000 ppm	
Perchloroethylene (CAS 127-18-4)	STEL	100 ppm	
,	TWA	25 ppm	
Trichloroethylene (CAS 79-01-6)	STEL	25 ppm	
,	TWA	10 ppm	

Store away from incompatible materials (see Section 10 of the SDS).

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Туре	Value	
Carbon Dioxide (CAS 124-38-9)	STEL	54000 mg/m3	
		30000 ppm	
	TWA	9000 mg/m3	
		5000 ppm	
Trichloroethylene (CAS 79-01-6)	TWA	25 ppm	

Biological limit values

Components	Value	Determinant	Specimen	Sampling Time
Perchloroethylene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethy lene	Blood	*
	3 ppm	Tetrachloroethy lene	End-exhaled air	*
Trichloroethylene (CAS 79-01-6)	15 mg/l	Trichloroacetic acid	Urine	*
	0.5 mg/l	Trichloroethano I, without hydrolysis	Blood	*

* - For sampling details, please see the source document.

Exposure guidelines

US - Minnesota Haz Subs: Skin designation applies

05 - Minnesola naz Subs. S	kin designation applies		
Perchloroethylene (CAS	127-18-4)	Skin designation applies.	
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.		
Individual protection measures,	such as personal protective e	quipment	
Eye/face protection	Chemical respirator with organic vapor cartridge and full facepiece.		
Skin protection			
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.		
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.		
Respiratory protection	Chemical respirator with organic vapor cartridge and full facepiece.		
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.		
General hygiene considerations	Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

9. Physical and chemical properties

Appearance

Physical state	Gas.
Form	Aerosol. Compressed gas.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.

Flammability (solid, gas)	Not applicable.	
Upper/lower flammability or explosive limits		
Flammability limit - lower (%)	8 % estimated	
Flammability limit - upper (%)	Not available.	
Explosive limit - lower (%)	Not available.	
Explosive limit - upper (%)	Not available.	
Vapor pressure	84.59 psig @70F estimated	
Vapor density	Not available.	
Relative density	Not available.	
Solubility(ies)		
Solubility (water)	Not available.	
Partition coefficient (n-octanol/water)	Not available.	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	
Viscosity	Not available.	
Other information		
Explosive properties	Not explosive.	
Oxidizing properties	Not oxidizing.	
Percent volatile	96.92 % estimated	
Specific gravity	1.542 estimated	

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Hydrogen chloride.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity	Narcotic effects.	
Components Species Test Results		Test Results
Perchloroethylene (CAS 127-18-4)		
<u>Acute</u>		
Inhalation		
LC50	Dog; Mouse; Rabbit; Rat	3000 ppm
Oral		
LD50	Cat; Dog; Mouse; Rabbit; Rat	> 1500 mg/kg

Components	Species	i	Test Results	
	Rat		3005 mg/kg	
richloroethylene (CAS 79-01-6)				
<u>Acute</u>				
Dermal				
LD50	Rat		19031 mg/kg	
Inhalation				
LC50	Dog; Mo	ouse; Rabbit; Rat	8450 ppm, 4 Hours	
	Rat		12500 ppm, 4 Hours	
			1044 mg/l/4h	
Oral				
LD50	Dog; Mo	ouse; Rat	2900 mg/kg	
* Estimatos for product may	he hased on a	additional component data not shown		
kin corrosion/irritation		additional component data not shown. in irritation.		
Serious eye damage/eye		rious eye irritation.		
rritation				
Respiratory or skin sensitizatio	on			
Respiratory sensitization	Not a resp	iratory sensitizer.		
Skin sensitization	This produ	This product is not expected to cause skin sensitization.		
Germ cell mutagenicity	Suspected	Suspected of causing genetic defects.		
arcinogenicity	May cause	May cause cancer.		
IARC Monographs. Overall	Evaluation of	of Carcinogenicity		
Perchloroethylene (CAS		2A Probably carcin		
Trichloroethylene (CAS	,		Commodity Carcinogenic to humans.	
Not regulated.	eu Substanc	es (29 CFR 1910.1001-1050)		
US. National Toxicology Pr	rogram (NTP) Report on Carcinogens		
Perchloroethylene (CAS	-		pated to be a Human Carcinogen.	
Trichloroethylene (CAS	79-01-6)	Reasonably Anticip	pated to be a Human Carcinogen.	
Reproductive toxicity	This produ	ict is not expected to cause reproductive	or developmental effects.	
Specific target organ toxicity - single exposure	May cause	e drowsiness and dizziness.		
Specific target organ toxicity -	Not classif	ïed.		
epeated exposure				
Aspiration hazard	-	biration hazard.		
Chronic effects	Prolonged	inhalation may be harmful. Prolonged e	xposure may cause chronic effects.	
12. Ecological informatio	n			
Ecotoxicity	Toxic to a	quatic life with long lasting effects.		
Components		Species	Test Results	
Perchloroethylene (CAS 127	-18-4)			
Aquatic				
Crustacea	EC50	Daphnia	7.55 mg/L, 48 Hours	
		Water flea (Daphnia magna)	6.1 - 9 mg/l, 48 hours	
Fich	1 0 5 0	Dainhaw traut danaldaan traut	4.92 mg/ 06 hours	

Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4.82 mg/l, 96 hours
Trichloroethylene (CA	S 79-01-6)		
Aquatic			
Crustacea	EC50	Daphnia	2.2 mg/L, 48 Hours
Fish	LC50	Fish	40.8933, 96 Hours

Components	Species	Test Results
	Flagfish (Jordanella floridae)	3.1 mg/l, 96 hours
* Estimates for product may b	e based on additional component data not shown.	
Persistence and degradability	No data is available on the degradability of this prod	uct.
Bioaccumulative potential		
Partition coefficient n-octan Perchloroethylene Trichloroethylene	ol / water (log Kow) 3.4 2.61	
Mobility in soil	No data available.	
Other adverse effects	No other adverse environmental effects (e.g. ozone of potential, endocrine disruption, global warming poter	
13. Disposal consideration	IS	
Disposal instructions	Collect and reclaim or dispose in sealed containers a under pressure. Do not puncture, incinerate or crush sewers/water supplies. Do not contaminate ponds, w container. Dispose of contents/container in accordan regulations.	. Do not allow this material to drain into vaterways or ditches with chemical or used
Local disposal regulations	Dispose in accordance with all applicable regulations	3.
Hazardous waste code	The waste code should be assigned in discussion be disposal company.	tween the user, the producer and the waste
Waste from residues / unused products	Dispose of in accordance with local regulations. Emp product residues. This material and its container mus Disposal instructions).	
Contaminated packaging	Since emptied containers may retain product residue emptied. Empty containers should be taken to an ap	

14. Transport information

DOT

Not regulated as dangerous goods.

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

ΙΑΤΑ

UN number	UN1950
UN proper shipping name	Aerosols, non-flammable
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Label(s)	2.2
Packing group	Not applicable.
Environmental hazards	Yes
ERG Code	2L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.
Packaging Exceptions	LTD QTY
IMDG	
UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Label(s)	2.2
Packing group	Not applicable.

disposal. Do not re-use empty containers.

Environmental hazardsMarine pollutantYesEmSNot available.Special precautions for userRead safety instructions, SDS and emergency procedures before handling.Packaging ExceptionsLTD QTYTransport in bulk according toNot applicable.Annex II of MARPOL 73/78 andHere is the isometry of the isom

IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulations	This product is a "Hazardous Standard, 29 CFR 1910.1200		by the OSHA Hazard Communication
TSCA Section 12(b) Export N	Notification (40 CFR 707, Sub	pt. D)	
Not regulated.			
CERCLA Hazardous Substa	nce List (40 CFR 302.4)		
Perchloroethylene (CAS 1	Perchloroethylene (CAS 127-18-4) Listed.		
Trichloroethylene (CAS 79	,	Listed.	
SARA 304 Emergency release	se notification		
Not regulated.			
OSHA Specifically Regulated	d Substances (29 CFR 1910.1	001-1050)	
Not regulated.			
Superfund Amendments and Rea	authorization Act of 1986 (SA	RA)	
Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - Yes Reactivity Hazard - No		
SARA 302 Extremely hazard	ous substance		
Not listed.			
SARA 311/312 Hazardous chemical	No		
SARA 313 (TRI reporting)			
Chemical name		CAS number	% by wt.
Perchloroethylene		127-18-4	40 - 60
Trichloroethylene		79-01-6	40 - 60

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Perchloroethylene (CAS 127-18-4) Trichloroethylene (CAS 79-01-6)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

- US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100) Not listed.
- US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.
- (a))

Perchloroethylene (CAS 127-18-4) Trichloroethylene (CAS 79-01-6)

US. Massachusetts RTK - Substance List

Carbon Dioxide (CAS 124-38-9) Perchloroethylene (CAS 127-18-4) Trichloroethylene (CAS 79-01-6)

US. New Jersey Worker and Community Right-to-Know Act

Carbon Dioxide (CAS 124-38-9) Perchloroethylene (CAS 127-18-4) Trichloroethylene (CAS 79-01-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Carbon Dioxide (CAS 124-38-9) Perchloroethylene (CAS 127-18-4) Trichloroethylene (CAS 79-01-6)

US. Rhode Island RTK

Perchloroethylene (CAS 127-18-4) Trichloroethylene (CAS 79-01-6)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Perchloroethylene (CAS 127-18-4)	Listed: April 1, 1988
Trichloroethylene (CAS 79-01-6)	Listed: April 1, 1988
US - California Proposition 65 - CRT: Listed d	ate/Developmental toxin
Trichloroethylene (CAS 79-01-6)	Listed: Jan 31, 2014
US - California Proposition 65 - CRT: Listed d	ate/Male reproductive toxin
Trichloroethylene (CAS 79-01-6)	Listed: Jan 31, 2014

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	06-22-2016
Revision date	06-22-2016
Version #	02
Disclaimer	We cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.