

SAFETY DATA SHEET

1. Identification

Product number
1000006785

Product identifier
18 OZ U-135 ELECTRO-SOL

Company information
UNIVERSAL
PO Box 15127
St. Louis MO 63110 United States

Company phone
General Assistance 800-325-4859
1-800-255-3924 Chem-Tel

Emergency telephone US
Emergency telephone outside US

Version #
01

Recommended use
CLEANER

Recommended restrictions
None known.

2. Hazard(s) identification

Physical hazards
Gases under pressure

Health hazards
Skin corrosion/irritation

Environmental hazards
Serious eye damage/eye irritation

OSHA defined hazards
Germ cell mutagenicity

Specific target organ toxicity, single exposure
Carcinogenicity

Category 1
Category 2

Category 2A
Category 2

Category 3 narcotic effects
Liquefied gas

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 gas. 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. Specific treatment (see this label). 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. None known.

Supplemental information

None.



3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Trichloroethylene		79-01-6	90 - 100
Carbon Dioxide		124-38-9	1 - 2.5
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.
Wash off with soap and water. Get medical attention if irritation develops and persists.
Rinse with water. Get medical attention if irritation develops and persists.
Rinse mouth. Get medical attention if symptoms occur.
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.
Eye contact
Rinse with water. Get medical attention if irritation develops and persists.
Skin contact
Wash off with soap and water. Get medical attention if irritation develops and persists.
Ingestion
Most important symptoms/effects, acute and delayed
Indication of immediate medical attention and special treatment needed
General information
If exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media
Water fog. Dry chemical powder. Carbon dioxide (CO2). Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media
None known.
Specific hazards arising from the chemical
Contents under pressure.
Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting 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
Cool containers exposed to flames with water until well after the fire is out.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. 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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. 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. Prevent product from entering drains. Following product recovery, flush area with water. 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. Avoid discharge into drains, water courses or onto the ground.

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. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Level 1 Aerosol.

Conditions for safe storage, 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. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	PEL	9000 mg/m ³

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	Ceiling	200 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	5000 ppm

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	STEL	25 ppm

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	10 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Carbon Dioxide (CAS 124-38-9)	STEL	54000 mg/m ³

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	30000 ppm

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	9000 mg/m ³

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	5000 ppm

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	25 ppm

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	54000 mg/m ³

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	30000 ppm

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	9000 mg/m ³

Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	5000 ppm

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Components	Type	Value
Trichloroethylene (CAS 79-01-6)	TWA	25 ppm

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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.

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

Determinant	Specimen	Sampling Time
Trichloroacetic acid	Urine	*
Trichloroethano l, without hydrolysis	Blood	*

Appropriate engineering controls

Product name: 18 OZ U-135 ELECTRO-SOL LB 12PK
 Product #: 1000006785 Version #: 01 Issue date: 09-04-2015
 SDS US 3 / 9

10. Stability and reactivity

Reactivity
 Chemical stability: The product is stable and non-reactive under normal conditions of use, storage and transport.
 Possibility of hazardous reactions: Material is stable under normal conditions. Hazardous polymerization does not occur.
 Conditions to avoid: Contact with incompatible materials.
 Incompatible materials: Strong oxidizing agents.

9. Physical and chemical properties

Appearance
 Physical state: Gas.
 Form: Aerosol. Liquefied gas.
 Color: Not available.
 Odor: Not available.
 Odor threshold: Not available.
 pH: 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 available.
 Upper/lower flammability or explosive limits: 52 % estimated
 Flammability limit - lower (%): Not available.
 Flammability limit - upper (%): Not available.
 Vapor pressure: 55 - 75 psig @70F estimated
 Vapor density: Not available.
 Relative density: Not available.
 Solubility(ies): Not available.
 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: Specific gravity: 1.454 estimated

Individual protection measures, such as personal protective equipment

Eye/face protection
 Wear safety glasses with side shields (or goggles).
Hand protection
 Wear appropriate chemical resistant gloves.
Skin protection
 Other: Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Skin protection
Respiratory protection
 If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.
Thermal hazards
 Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations
 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.

Crustacea	EC50	Daphnia	2.2 mg/L, 48 Hours
Aquatic Trichloroethylene (CAS 79-01-6)			

Components	Species	Test Results
12. Ecological information		
Ecotoxicity		Harmful to aquatic life with long lasting effects.
Chronic effects		Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.
Aspiration hazard		Not likely, due to the form of the product.
Repeated exposure		Not classified.
Specific target organ toxicity - repeated exposure		Not classified.
Specific target organ toxicity - single exposure		May cause drowsiness and dizziness.
Reproductive toxicity		This product is not expected to cause reproductive or developmental effects.
US. National Toxicology Program (NTP) Report on Carcinogens		Reasonably Anticipated to be a Human Carcinogen.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		Not listed.
IARC Monographs. Overall Evaluation of Carcinogenicity		Trichloroethylene (CAS 79-01-6) If <1L: Consumer Commodity Carcinogenic to humans.
Carcinogenicity		May cause cancer.
Germ cell mutagenicity		Hazardous by WHMIS criteria. Suspected of causing genetic defects.
Skin sensitization		This product is not expected to cause skin sensitization.
Respiratory sensitization		Not available.
Respiratory or skin sensitization		Not available.

Components	Species	Test Results
11. Toxicological information		
Information on likely routes of exposure		
Ingestion		Expected to be a low ingestion hazard.
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.
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		In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Narcotic effects.
Acute toxicity		
Trichloroethylene (CAS 79-01-6)		
Acute		
Dermal	Rat	19031 mg/kg
LD50		
Inhalation		
LC50	Rat	12500 ppm, 4 Hours
		1044 mg/l/4h

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Hazardous decomposition products
No hazardous decomposition products are known.

Components

Fish	LC50	Fish	40.8933, 96 Hours
		Flagfish (Jordanella floridae)	3.1 mg/l, 96 hours

Test Results

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow) Trichloroethylene
2.61

Mobility in soil No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

US RCRA Hazardous Waste U List: Reference

Trichloroethylene (CAS 79-01-6)
U228

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport information

DOT

UN number UN1950
UN proper shipping name Aerosols, non-flammable, (each not exceeding 1 L capacity)

Transport hazard class(es)

Class 2.2

Subsidiary risk -

Label(s) 2.2

Packing group Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging exceptions 306

Packaging non bulk None

Packaging bulk None

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.

IATA

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 No.

ERG Code 2L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.