

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier**Product Name** Terand Brake Revive**Other means of identification****Product Code** TB-52600000-00**Recommended use of the chemical and restrictions on use****Recommended use** Brake Cleaner
Uses Advised Against For industrial and institutional use only.**Details of the supplier of the safety data sheet****Company Name** CHEM-MASTER ACQUISITIONS, LLC
PO Box 220908
St. Louis, MO 63122
800-592-5080**Emergency telephone number****Emergency Telephone** CHEMTEL 1-800-255-3924

2. HAZARDS IDENTIFICATION

Classification

Gases Under Pressure	Compressed Gas
Skin Irritant	Category 2
Carcinogenicity	Category 2
Skin Sensitization	Category 1
Specific Target Organ Toxicity (Single Exposure)	Category 3

Label elements**Emergency Overview****WARNING****Hazard statements**

Contains gas under pressure; may explode if heated. Causes skin irritation. Suspected of causing cancer. May cause an allergic skin reaction. May cause drowsiness or dizziness.

**Appearance:** Clear, colorless to slight tint spray**Physical state:** Compressed Gas**Odor:** Chlorinated solvent.**Precautionary Statements - Prevention**

Keep away from heat, sparks, open flames, and hot surfaces. -No smoking. Pressurized container: Do not pierce or burn, even after use. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. Contaminated work clothing must not be allowed out of the workplace. Avoid breathing dust/fume/gas/ mist/vapors/spray. Use only outdoors or in a well-ventilated area. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/ doctor if you feel unwell. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If exposed or concerned: Get medical advice or attention

Precautionary Statements - Storage

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.

Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, state, and national regulations.

Hazards not otherwise classified (HNOC)**Other Information**

• N/A

Unknown Acute Toxicity

N/A

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO.	WEIGHT - %	TRADE SECRET
Tetrachloroethylene	127-18-4	80-100%	*
Carbon dioxide	124-38-9	1-5%	*

***The exact percentage (concentration) of composition has been withheld as a trade secret.**

4. FIRST AID MEASURES**First aid measures****Skin Contact**

Immediately wash with water for 15 minutes. Remove contaminated clothing and shoes immediately. Seek medical attention if irritation persists.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Inhalation

Move to fresh air. If breathing is difficult, administer oxygen. If not breathing administer artificial respiration. Seek immediate medical attention.

Ingestion

Rinse mouth out with water. Do not induce vomiting unless directed by medical authority. Seek medical attention if irritation persists. Never give anything by mouth to an unconscious person.

Most important symptoms and effect, both acute and delayed**Symptoms**

ACUTE HEALTH HAZARDS: Inhalation of vapors may be narcotic or anesthetic. Ingestion of liquid will cause gastrointestinal distress, irritation, and possibly nausea. Liquid or vapors may be irritating to skin and eyes.

CHRONIC HEALTH HAZARDS: Possible cancer-causing agent. Overexposure may cause dermatitis, dizziness, headache, nausea, mental confusion, and visual disturbances and may damage kidneys, liver, lungs, blood or central nervous system.

Indication of any immediate medical attention and special treatment needed**Note to physicians**

Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning. This product contains ingredients that may be anticipated to be a carcinogen.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, carbon dioxide, alcohol foam, and water spray.

Unsuitable extinguishing media: Water jets or streams.

Unusual fire and explosion hazards

Keep away from sparks, open flames and hot surfaces. No smoking. Do not spray on an open flame or other ignition source.

Hazardous combustion products

Oxides of carbon, chlorine, hydrogen chloride and phosgene.

Special fire fighting procedures

Wear NIOSH approved Self Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires. Shut off all sources of ignition. Use water spray to disperse vapor and cool fire exposed containers. Prevent run off from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Refer to section 8 for proper Personal Protective Equipment.

Methods and material for containment and cleaning up

Methods for containment & cleaning up

Clean up using cloth or absorbent material. Dispose of product-containing wiping cloth or absorbent paper in suitable manner. Place waste in proper containers for disposal. Dispose of in accordance with local, state and federal regulations. Do not dump in sewers. Wrap container and place in trash collection. Do not puncture, incinerate, or reuse container.

RCRA status

Waste solvent likely considered U210 (Tetrachloroethylene) under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Keep out of the reach of children. Read and follow the directions on the product label. They are the best guide to using the product in the most effective manner. The label also gives you the necessary safety precautions to protect your health. Wear proper personal protective equipment when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Avoid contact with skin, eyes and clothing. Do not inhale mist or vapor. Store in a cool, dry area. Do not use or store with strong oxidizers. Protect from sunlight. Store in a well ventilated area. Do not expose to temperatures exceeding 50°C/122°F. Pressurized container: Do not pierce or burn, even after use. Wash contaminated clothing and shoes thoroughly before reuse. Wash hands thoroughly after handling.

Incompatible Materials

Strong oxidizers, alkalis, and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

CHEMICAL NAME	OSHA PEL	ACGIH TLV
Tetrachloroethylene	100 ppm	25 ppm
Carbon dioxide	5000 ppm	5000 ppm

Appropriate engineering controls

Engineering Controls Use only outdoors or in a well-ventilated area. General ventilation and local exhaust recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses/goggles.

Skin and body protection Chemical resistant gloves.

Respiratory protection Use only in well-ventilated areas. If exposure levels are exceeded, then organic vapor cartridge respirator or SCBA will be needed.

Additional Measures Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing spray. Wear protective clothing to prevent repeated or prolonged contact with product. Contaminated work clothing must not be allowed out of the workplace. If clothing becomes contaminated, immediately remove and wash. Wash hands thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Compressed Gas
Appearance	Clear, colorless to slight tint spray.
Color	Clear, colorless to slight tint
Odor	Chlorinated solvent.
Odor Threshold	N/D

Property**Values**

pH	N/A
Melting Point/Freezing Point	N/D
Initial Boiling Point And Boiling Range	250°F (121.1 °C)
Flash Point	N/D
Evaporation Rate	N/D
Flammability (Solid/Gas)	Not considered a flammable aerosol or an extremely flammable aerosol by OSHA (29CFR 1910.1200).
Upper/Lower Flammability Or Explosive Limits	
Lower Flammability Limit	N/D
Upper Flammability Limit	N/D
Explosive Limit Lower(%)	N/D
Explosive Limit Upper(%)	N/D
Vapor Pressure (mm Hg)	N/D
Vapor Density (AIR=1)	N/D
Relative Density (H2O=1)	1.61 - 1.65 @ 77°F (25°C)
Solubility (IES)	Negligible.
Partition Coefficient	n-OCTANOL/WATER (Kow): NID
Autoignition Temperature	N/D
Decomposition Temperature	N/D
Viscosity	N/D

10. STABILITY AND REACTIVITY

Reactivity

None known.

Chemical Stability

Stable

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Temperatures greater than 122°F and sources of ignition. Avoid incompatible materials.

Incompatible Materials

Strong oxidizers, alkalis, and strong acids.

Hazardous Decomposition Products

Oxides of carbon, chlorine, hydrogen chloride and phosgene.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure Eyes, Inhalation, Skin**Product Information**

Skin Contact	Irritation likely, redness and pain. May cause localized defatting, blistering with prolonged skin contact. May be absorbed through the skin.
Eye Contact	May cause burning, irritation, redness, tearing.
Inhalation	Causes respiratory tract irritation, dizziness, headache, nausea, depression of central nervous system (CNS). Prolonged exposure may cause unconsciousness, heart effects, liver effects, kidney effects and death.
Ingestion	Not a likely route of exposure under normal product handling conditions. Causes gastrointestinal irritation, headaches, nausea, diarrhea, vomiting, abdominal cramps.

CHEMICAL NAME	ORAL LD50	DERMAL LD50	INHALATION LC50
Tetrachloroethylene (Perchloroethylene) (127-18-4)	(Oral, Rat) 2629 mg/kg		(Inhalation, Mouse, 8hr) 34200 mg/m3
Carbon dioxide (124-38-9)			(Inhalation, Rat, 30m) 470,000 ppm.

Information on toxicological effects**Symptoms**

MEDICAL CONDITION AGGRAVATED: Excessive exposure will aggravate pre-existing disorders of eyes, skin, respiratory, liver, kidney, cardiovascular system, pulmonary illnesses, or central nervous system (CNS).

ACUTE HEALTH HAZARDS: Inhalation of vapors may be narcotic or anesthetic. Ingestion of liquid will cause gastrointestinal distress, irritation, and possibly nausea. Liquid or vapors may be irritating to skin and eyes.

CHRONIC HEALTH HAZARDS: Possible cancer-causing agent. Overexposure may cause dermatitis, dizziness, headache, nausea, mental confusion, and visual disturbances and may damage kidneys, liver, lungs, blood or central nervous system.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity OSHA: No ACGIH: A3 -Animal Carcinogen NTP: 2 - Anticipated IARC: 2A - Probable OTHER: CA Prop 65

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 -Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects. **Tetrachloroethylene (Perchloroethylene) (127-18-4):** LC₅₀ (*Pimephales promelas*, 96h) 18.4 mg/L; LC₅₀ (*Oncorhynchus mykiss*, 96hr) 5 mg/L; LC₅₀ (*Lepomis macrochirus*, 96hr) 12.9 mg/L; LC₅₀ (*Cyprinodon variegatus*, 96h) 29.4 - 52.2 mg/L; LC₅₀ (Mysid shrimp, 96h) 10.2 mg/L; EC₅₀ (*Daphnia magna*, 48h) 18 mg/L.

Soil Mobility

This product is mobile in soil.

Persistence and Degradability

Component or components of this product are not biodegradable.

Bioaccumulation

This product is not expected to bioaccumulate.

Other Adverse Effects

None known.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes	Dispose of in accordance with local, state and federal regulations. Do not dump in sewers. Wrap container and place in trash collection. Do not puncture, incinerate, or reuse container.
RCRA status	Waste solvent likely considered U210 (Tetrachloroethylene) under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

<u>DOT</u>		<u>AIR SHIPMENT</u>	
UN/ID No.	UN 1950	UN/ID No.	UN 1950
Proper Shipping Name	Aerosols, Ltd. Qty.	Proper Shipping Name	Aerosols, non-flammable.
Hazard Class	2.2	Hazard Class	2.2
Packing Group	N/A	Packing Group	N/A

SHIPPING BY WATER: VESSEL (IMO/IMDG)

UN/ID No.	UN 1950
Proper Shipping Name	Aerosols
Hazard Class	2.2
Environmental Hazards Water	Marine Pollutant.
Packing Group	N/A

15. REGULATORY INFORMATION

International Inventories

TSCA All Chemicals are listed or exempt.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations**SARA 313**

Tetrachloroethylene (Perchloroethylene) (127-18-4).

SARA 311/312 Hazard Categories

Gas under pressure. Skin corrosion or irritation. Respiratory or skin sensitization. Carcinogenicity. Specific target organ toxicity (single or repeated exposure).

CERCLA

Tetrachloroethylene (Perchloroethylene) (127-18-4) Reportable Quantity= 100 pounds.

CWA (Clean Water Act)

Tetrachloroethylene (Perchloroethylene) (127-18-4) is a priority pollutant and a toxic pollutant.

US State Regulations

California Proposition 65: **WARNING: This product can expose you to chemicals including Tetrachloroethylene (Perchloroethylene), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.**

U.S. State Right-to-Know Regulations

Included on State Hazardous Substances Inventories, Right-to-Know lists and/or Air Quality or Air Pollutants lists for the following states:

Chemical Name	CA	DE	ID	MI	MA	MN	NJ	PA	NY	RI	WA	CT	FL	IL	TN	LA
Tetrachloroethylene (Perchloroethylene) (127-18-4)				X	X	X	X	X	X	X		X	X	X	X	X

International Regulations

Listed or exempt from listing/notification on the following chemical inventories: Australian Inventory of Industrial Chemicals (AIIC, Australia). Domestic Substances List (DSL, Canada). Inventory of Existing Chemical Substances in China (IECSC, China). Existing and New Chemical Substances (ENCS, Japan). New Zealand Inventory of Chemicals (NZIoC, New Zealand). Philippine Inventory of Chemicals and Chemical Substances (PICCS, Philippines). Korea Existing Chemicals Inventory (KECI, South Korea).

Volatile Organic Compounds (VOC)

0%

16. OTHER INFORMATION

NFPA	Health hazards	2	Flammability	0	Reactivity	0	Other	None
HMIS	Health hazards	2	Flammability	0	Reactivity	0	Personal protection	B

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Revision Note

N/A = Not Applicable; N/D = Not Determined

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet