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Version 2

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier****Product Name** Terand Start-Er-Up**Other means of identification****Product Code** 5160**Recommended use of the chemical and restrictions on use****Recommended use** Aids gas/diesel engine start-up  
**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**

Flammable Aerosol	Category 1
Liquefied Gas	
Skin Irritant	Category 2
Eye Irritant	Category 2A
Reproductive Toxicity	Category 2
Specific Target Organ Toxicity (Single Exposure)	Category 3
Aspiration Hazard	Category 1

**Label elements****Emergency Overview****DANGER****Hazard statements**

Extremely Flammable Aerosol Contains gas under pressure; May explode if heated. Causes eye and skin irritation. Suspected of damaging fertility or the unborn child. May cause drowsiness and dizziness. May be fatal if swallowed and enters airways.

**Appearance:** Clear, Colorless to Pale Yellow Liquid**Physical state:** Liquefied Gas**Odor:** Aliphatic solvent odor

**Precautionary Statements - Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, and hot surfaces. –No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing fumes, vapors and spray. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Wear protective gloves and eye 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. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor. If exposed or concerned: Get medical advice or attention.

**Precautionary Statements - Storage**

Store locked up. 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

11.8 % of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CHEMICAL NAME	CAS NO.	WEIGHT - %	TRADE SECRET
Heptane	142-82-5	40-50%	*
Ethyl Ether	60-29-7	10-30%	*
Propane	74-98-6	10-30%	*
Isobutane	75-28-5	10-15%	*
Carbon Dioxide	124-38-9	3-7%	*
Hydrotreated Heavy Naphthenic Petroleum Distillate	64742-52-5	1-5%	*

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

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

Wash thoroughly with soap and water for 15 minutes. Remove contaminated clothing and shoes immediately. Seek medical attention if irritation persists.

**Eye Contact**

Remove contact lenses. Flush with water for at least 15 minutes. See a physician if irritation persists.

**Inhalation**

Move to fresh air. If breathing is difficult, administer oxygen. If not breathing administer artificial respiration or at any sign of loss of consciousness seek immediate medical attention.

**Ingestion**

Rinse mouth with water. Do not induce vomiting unless directed by medical authority. Seek medical attention if irritation persists.

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

ACUTE HEALTH HAZARDS: Eyes: redness, tearing, blurred vision. Skin: defatting and dermatitis. Inhalation: Anesthetic, irritation, Central Nervous System depression. Oral: abdominal irritation, nausea, vomiting, diarrhea, aspiration risk, death

CHRONIC HEALTH HAZARDS: Skin disorders, drying and irritation of the skin.

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

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Dry chemical, carbon dioxide, and alcohol foam.

**Unsuitable extinguishing media:** Water spray/stream.

**Unusual fire and explosion hazards**

Contents under pressure. Exposure to temperatures above 120°F may cause bursting. Combustible liquid. Keep away from heat, sparks, open flames and other sources of ignition.

**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.

**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 with non-combustible material like vermiculite, sand or earth. If many cans are opened remove ignition sources. Prevent spill from entering sewers, storm drains, and natural waterways. Dispose of in accordance with federal, state, and local regulations. Do not flame cut, braze, or weld. Empty container very hazardous!

**RCRA status**

Waste likely considered hazardous 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 reach of children and do not store near food, drink, or animal food.

**Conditions for safe storage, including any incompatibilities****Storage Conditions**

Store in a cool, dry area, keep containers tightly closed and dry.

**Incompatible Materials**

Strong oxidizers

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

CHEMICAL NAME	OSHA PEL	ACGIH TLV
Heptane	400 ppm	400 ppm
Ethyl Ether	400 ppm	400 ppm
Propane	1000 ppm	1000 ppm
Isobutane	Not Established	1000 ppm
Carbon Dioxide	5000 ppm	5000 ppm
Hydrotreated Heavy Naphthenic Petroleum Distillate	400 ppm	Not Established

### Appropriate engineering controls

#### Engineering Controls

Use only outdoors or in a well-ventilated area.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Safety glasses

#### Skin and body protection

Chemical resistant gloves

#### Respiratory protection

Wear NIOSH/MSHA approved organic vapor respiratory protection if exposure limits are exceeded.

#### Additional Measures

Do not touch eyes when using this product. Wash hands thoroughly with soap and water after use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical State	Liquefied Gas
Appearance	Clear, Colorless to Pale Yellow Liquid
Color	Clear, Colorless to Pale Yellow
Odor	Aliphatic solvent odor
Odor Threshold	N/D

### Property

### Values

pH	N/A
Boiling Point	-43.6°F (-42°C)
Freezing Point	N/D
Flammability	Extremely Flammable Aerosol
Flash Point	-10°F (-23°C)
Autoignition Temperature	356°F (180°C)
Lower Flammability Limit	1.2%
Upper Flammability Limit	6.7%
Vapor Pressure (mm Hg)	N/D
Vapor Density (Air=1)	N/D
Evaporation Rate	N/D
Specific Gravity ((H2O=1)	N/D
Solids (%)	N/D
Solubility In Water	Immiscible
Partition Coefficient	n-OCTANOL/WATER (KOW): N/D
Volatility Including Water (%)	100 %
Volatile Organic Compounds (Voc)	75%
Dielectric Strength (Volts)	N/D
Decomposition Temperature	N/D
Viscosity	N/D

## 10. STABILITY AND REACTIVITY

### Reactivity

If exposed to strong oxidizers, presents explosion hazard.

### Chemical Stability

Stable

### Possibility of Hazardous Reactions

Will not occur

### Conditions to Avoid

Temperatures greater than 120°F and sources of ignition.

### Incompatible Materials

Strong oxidizers

### Hazardous Decomposition Products

Oxides of carbon

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure Eyes, Ingestion, Inhalation, Skin

#### Product Information

<b>Skin Contact</b>	Causes irritation, redness, dryness with repeated or prolonged exposure.
<b>Eye Contact</b>	Causes irritation, redness, tearing, pain.
<b>Inhalation</b>	Causes dizziness, headaches, nausea, central nervous system depression, excessive or prolonged exposure may cause unconsciousness.
<b>Ingestion</b>	May cause gastrointestinal irritation, headaches, nausea, diarrhea, vomiting, dizziness, drowsiness, signs of intoxication, in-coordination, and death.

### Toxicological Information

Not Established

### Information on toxicological effects

#### Symptoms

MEDICAL CONDITION AGGRAVATED: Pre-existing conditions of the skin, liver, CNS, and kidneys.

ACUTE HEALTH HAZARDS: Eyes: redness, tearing, blurred vision. Skin: defatting and dermatitis. Inhalation: Anesthetic, irritation, Central Nervous System depression. Oral: abdominal irritation, nausea, vomiting, diarrhea, aspiration risk, death.

CHRONIC HEALTH HAZARDS: Skin disorders, drying and irritation of the skin.

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

Carcinogenicity                      OSHA: No                      ACGIH: No                      NTP: No                      IARC: No                      OTHER: N/A

*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**

Not Established

**Soil Mobility**

This product is mobile in soil.

**Persistence and Degradability**

Component or components of this product are not biodegradable.

**Bioaccumulation**

Components in this mixture can bioaccumulate in aquatic organisms.

**Other Ecological Hazards**

This material is toxic to aquatic life.

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

Dispose of in accordance with federal, state, and local regulations. Do not flame cut, braze, or weld. Empty container very hazardous!

**RCRA status**

Waste likely considered hazardous 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.

**DOT**

UN/ID No.	UN 1950
Proper Shipping Name	Aerosols, Ltd. Qty.
Hazard Class	2.1
Packing Group	N/A

**AIR SHIPMENT**

UN/ID No.	UN 1950
Proper Shipping Name	Aerosols, Ltd. Qty.
Hazard Class	2.1

**SHIPPING BY WATER: VESSEL (IMO/IMDG)**

UN/ID No.	UN 1950
Proper Shipping Name	Aerosols, Ltd. Qty.
Hazard Class	2.1
Environmental Hazards Water	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**

None

**SARA 311/312 Hazard Categories**

Acute Health Fire Hazard

**CERCLA**

None

**US State Regulations****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	ME	MA	MN	NJ	PA	NY	RI	WA	CT	FL	IL	TN	LA
Heptane (142-82-5)	X				X	X	X	X		X		X		X		

**International Regulations**

All components are listed or exempted.

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards	2	Flammability	4	Reactivity	2	Other	B
<b>HMIS</b>	Health hazards	2	Flammability	4	Reactivity	2	Personal protection	NONE

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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**