# MATERIAL SAFETY DATA SHEET

**Total Solutions** P.O. Box 240014 Milwaukee, WI 53224 TOTAL

GENERAL INFORMATION NUMBER: (414) 354-6417 REVISION DATE: February 10, 2012 DATE OF ISSUE: February 13, 2012

CHEMTREC: (800) 424-9300

# I - Product Identification

# **Engine Starter**

**PRODUCT CODE: 8550** 

CHEMICAL FORMULATION: Pressurized engine starter.

HMIS HAZARD IDENTIFICATION SYSTEM: HEALTH: 3 **FLAMMABILITY:** 4 **REACTIVITY:** 1 **HAZARD RATING:** 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 - Insignificant

# **II - Hazardous Ingredients**

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	Values reported as TWA unless noted.						
	APPROX	OSHA	ACGIH	EPA 40 CFR:			
SUBSTANCE	<u>%</u>	<b>PEL</b>	$\underline{\mathbf{TLV}}$	<u>302</u>	<u>355</u>	<u>372</u>	CAS#
Carbon Dioxide	5.0-10.0	5000 ppm	5000 ppm	N	N	N	124-38-9
Diethyl Ether	40.0-50.0	400 ppm	400 ppm	Y	N	N	60-29-7
Heptane	40.0-50.0	500 ppm	500 ppm	N	N	N	64742-49-0
Hydrotreated Naphthenic Distillates	< 1.0	N/E	N/E	N	N	N	64742-52-5

Key: **PEL**: Permissible Exposure Limit **TLV:** Threshold Limit Value C: Ceiling level **STEL**: Short Term Exposure Limit N/E: Not Established Y: Yes N: No

N/A: Not Applicable N/D: Not Determined

302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4). 355: SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).

372: SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

## **III - Physical Data**

**BOILING POINT (°F):** N/A **SPECIFIC GRAVITY (WATER = 1):** Less than 1

**VOC CONTENT (% by weight):** Approx 95 VAPOR PRESSURE (psig): Approx 80 @ 70°F

**EVAPORATION RATE** (**BuAce** = 1): Greater than 1 **VAPOR DENSITY** (**AIR** = 1): Greater than 1

**SOLUBILITY IN WATER:** Negligible **pH:** N/A

APPEARANCE AND ODOR: Clear liquid, strong ethereal odor.

## IV - Fire and Explosion Hazard Data

FLASH POINT (°F): N/A (TEST METHOD):. NFPA 30B Rating: 3

FLAMMABLE LIMITS IN AIR (VOLUME %) **UPPER:** N/D LOWER: N/D

**EXTINGUISHING MEDIA:** Foam, carbon dioxide, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Avoid possible accumulations of vapors at floor level, as vapor is heavier than air. Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

UNUSUAL FIRE AND EXPLOSION HAZARD: Avoid possible bursting of aerosol can. Do not store where temperature may exceed 120oF. Do not puncture or incinerate.

#### V - Reactivity Data

STABILITY: Unstable explosive peroxides may be formed and concentrate by evaporation to hazardous levels. Generally stable in sealed metal containers.

**INCOMPATIBILITY:** Strong acids and oxidizers.

**CONDITIONS TO AVOID:** Contact with open flame, sparks, or heat which can cause thermal decomposition.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide may form on combustion.

HAZARDOUS POLYMERIZATION: Will not occur.

#### VI - Health Hazard Data

ROUTES OF ENTRY INHALATION: X EYE CONTACT: SKIN CONTACT: X **INGESTION:** INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS: None

EFFECTS OF OVEREXPOSURE **IF IN EYES:** Severe irritation.

**IF ON SKIN:** Mild irritation upon prolonged contact, defatting of skin.

**IF SWALLOWED:** Low to moderately toxic, harmful or fatal if swallowed.

IF INHALED: Dizziness, strong anesthesia, intoxication, unconsciousness.

EMERGENCY AND FIRST AID PROCEDURES

IF IN EYES: Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.

IF ON SKIN: Flush skin with water while removing contaminated clothing. Launder clothing separately before reuse. Wash skin with soap and water. If irritation persists, obtain medical attention.

IF SWALLOWED: Contact physician or poison control center immediately. Do not induce vomiting unless instructed by a physician or poison control center. Proper treatment is dependent upon condition of patient and amount ingested.

IF INHALED: Remove person to fresh air. If breathing has stopped, administer artificial respiration. Obtain medical attention.

## VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area. Remove all sources of ignition. CO<sub>2</sub> may be used as a precautionary blanket. Contain spill. Soak up material with inert absorbent material and place in a labeled closed container for disposal.

WASTE DISPOSAL METHOD: Consult local environmental authorities. Dispose of cans in non-incinerated trash only.

## **VIII - Special Protection Information**

**RESPIRATORY PROTECTION:** Use with adequate ventilation. Do not breathe vapors or mists. If recommended Exposure Limits are exceeded, wear a NIOSH approved respirator, following manufacturer's recommendations.

LOCAL: Recommended VENTILATION **MECHANICAL:** Not required

**PROTECTIVE GLOVES:** None needed for normal use. Solvent-resistant type may be used for prolonged exposure.

EYE PROTECTION: Safety glasses or goggles. **OTHER PROTECTIVE EQUIPMENT:** None.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Store in a cool, dry place away from heat, sparks or open

flame. Wash hands before eating or smoking. Do not store at temperatures above 120 F.

**OTHER PRECAUTIONS:** Keep out of reach of children. Do not puncture or incinerate container.

## IX - Transportation Information (ground transportation only)

**DOT ID NUMBER:** None **DOT PROPER SHIPPING NAME:** Consumer Commodity

**DOT PACKING GROUP: None DOT CLASS: ORM-D** 

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

REVISION DATE: February 10, 2012 Prepared by: Technical Dept. DATE OF ISSUE: February 13, 2012

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