

SAFETY DATA SHEET

SECTION 1 PRODUCT and COMPANY INFORMATION

TRADE NAME: **Castle® Fire One™**

PRODUCT TYPE: Starting Fluid
PRODUCT CODE: C1604

MANUFACTURED FOR: Castle Products, Inc.
424 St. Paul Street
Rochester, NY 14605
800-876-0222 • FAX 585-325-4514
EMERGENCY 585-275-3232

SECTION 2 HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: DANGER: Gases Under Pressure, Flammable, Irritant
POTENTIAL HEALTH EFFECTS: Eyes: Vapors cause irritation. Splashes cause severe irritation, possible eye damage.
Skin: May cause irritation with redness and pain.
Inhalation: Irritates the respiratory tract. Exposure to high concentrations causes dizziness, headache, and unconsciousness.
Ingestion: Can cause drowsiness, unconsciousness, and death. Gastrointestinal pain, cramps, nausea, vomiting, and diarrhea may also result.



SECTION 3 COMPOSITION INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	PEL	TLV	STEL	%
Diethyl Ether	60-29-7	400ppm	200ppm	NE	60%
Heptane	142-82-5	400ppm	200ppm	NE	35-40%
Carbon Dioxide	124-38-9	5000ppm	NE	NE	<10%
Upper Cylinder Lubricant	64741-89-5	NE	NE	NE	<1%

SECTION 4 FIRST AID MEASURES

First Aid Procedures:

- Eye contact: Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician if irritation persists.
- Skin contact: For skin contact flush with large amounts of water. Call a physician if irritation persists.
- Inhalation: Immediately remove from further exposure. Give supplemental oxygen, if breathing is difficult. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.
- Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by mouth to an unconscious person.

Note to physician: If the product is ingested, treat the affected person symptomatically.

SECTION 5 FIRE FIGHTING MEASURES

FLASH POINT: -49°F LOWER EXPLOSIVE LIMIT: 1.85 UPPER EXPLOSIVE LIMIT: 48.0
EXTINGUISHING MEDIA: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂). Appropriate for surrounding fire.
UNUSUAL FIRE & EXPLOSION HAZARDS: Extremely flammable. Contents under pressure. Do not store near heat or ignition sources. Containers may burst at temperatures above 130°F.
SPECIAL FIRE FIGHTING PROCEDURES: As in any fire, wear pressure-demand self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions: Isolate area. Keep unnecessary personnel away. Stay upwind. Keep out of low areas. Ventilate spaces before entering.
Environmental precautions: Prevent further leakage or spillage if safe to do so.
Methods for containment: Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up: Eliminate ignition sources including sources of electrical, static or frictional sparks. Wear appropriate protective equipment and clothing during clean-up.
Small Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for disposal.

Large Spills: Dike far ahead of liquid spill for later disposal. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

SECTION 7 HANDLING AND STORAGE

Handling: Product is extremely flammable. Keep away from sources of heat, sparks, or flames. Avoid breathing mist. Avoid contact with skin and eyes. Wear suitable protective clothing. Wash hands after handling.

Storage: Keep from freezing. Keep containers tightly closed. Store in a cool, dry place.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits: None Established.

Engineering controls: Use local exhaust ventilation.

Personal protective equipment:

General: Eye wash fountain and emergency showers are recommended.

Eye/face Protection: Wear safety glasses or goggles.

Skin Protection: Wear suitable protective clothing. Use impervious gloves.

Respiratory Protection: When respiratory protection is required, wear a NIOSH/MSHA approved self-contained breathing apparatus with full facepiece operated in a positive-pressure mode.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

BOILING POINT: 95-200°F (21°C)

VAPOR PRESSURE: 537mm Hg

VAPOR DENSITY (air=1) >1

SOLUBILITY IN WATER: Slight

pH: ND

SPECIFIC GRAVITY (H₂O=1): 0.7

PERCENT VOLATILE BY VOL %: 100

EVAPORATION RATE (Butyl Acetate=1): >1

APPEARANCE & ODOR: Clear, Colorless Liquid / Ether

SECTION 10 STABILITY and REACTIVITY DATA

STABILITY: Stable.

INCOMPATIBILITY (material to avoid): Strong oxidizing agents, nitric plus acetic acids, nitric plus sulfuric acid, amines.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide and carbon monoxide may form when heated to decomposition.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Components Test Results: None reported.

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

SECTION 12 ECOLOGICAL INFORMATION

Component Test Results: None reported.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal instructions: Dispose according to all applicable Federal, State, and Local regulations.

SECTION 14 TRANSPORT INFORMATION

Consumer commodity, ORM-D.

SECTION 15 REGULATORY INFORMATION

US federal regulations: All components are listed in the United States TSCA Regulations.

CERCLA (Superfund) reportable quantity: None

SARA (Superfund Amendments and Reauthorization Act of 1986):

313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Section 302 extremely hazardous substance: No

Section 311 hazardous chemical: No

Canada: This Product has been classified according to the hazard criteria of the CPR and the SDS contains all of the

information required by the CPR.

SECTION 16 OTHER INFORMATION

Further information: (HMIS® is a registered trade and service mark of the NPCA.)

HMIS® ratings Health: 2
 Flammability: 4
 Physical hazard: 0
 Personal protection: B
 Hazard: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.
 Protection: A-Goggles, B-Goggles & gloves, C-Goggles, gloves, & protective wear.

NFPA ratings Health: 2
 Flammability: 4
 Instability: 0

Other: NA-Not Applicable, ND-Not Determined, NE-Not Established.

Disclaimer Terms and Conditions. This SDS is designed only as guidance for the products to which it applies. To the greatest extent permitted by applicable law, nothing contained herein creates any legal obligation including contractual obligations, expressed or implied warranties, including any warranties of merchantability or fitness for particular purpose; or confers any intellectual property rights, including rights to use trademarks or a license to use patents, issued or pending. The information contained herein is based on the manufacturer's own study and the work of others, and is subject to change at any time without further notice. There is no warranty, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein, and neither the provider nor the manufacturer (nor the agents, directors, officers, contractors or employees of either) are liable to any party for any damages of any nature, including direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of any information in this SDS, or in any other way related (directly or indirectly) to this SDS. The receipt and use of this information constitutes consent to these terms and conditions.

PREPARED: 8/18/86

UPDATED: 12/9/16

PRODUCT #: C1604