

**MANUFACTURER**

Castle Products, Inc.  
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EMERGENCY (585) 275-3232

**MATERIAL SAFETY DATA SHEET**

Hazard: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme.  
Protection: A-Goggles, B-Goggles & gloves,  
C-Goggles, gloves, & protective wear.  
Other: NA-Not Applicable, ND-Not Determined,  
NE-Not Established.

**HAZARD RATING**

Health 1  
Fire 2  
Reactivity 0  
Protection B

**SECTION I DESCRIPTION**TRADE NAME: **Castle<sup>®</sup> Iron Man<sup>™</sup>**

PRODUCT TYPE: Chain &amp; Cable Lubricant

**SECTION II HAZARDOUS INGREDIENTS**

INGREDIENT	CAS #	PEL	TLV	STEL	%
Residual Oils, Petroleum Solvent Dewaxed	64742-62-7	5mg/m3	5mg/m3	NE	20
Mixture of Severely Hydrotreated Paraffinic Oils with Proprietary Additives	64742-52-5	10mg/m3	10mg/m3	10mg/m3	40
Mineral Spirits	64742-47-8	500ppm	100ppm	NE	20
Isobutane	75-28-5	1000ppm	1000ppm	NE	5
Propane	74-98-6	1000ppm	1000ppm	NE	10

**SECTION III PHYSICAL DATA**

BOILING POINT(C)(CONC):	159-192	SPECIFIC GRAVITY (H <sub>2</sub> O=1):	0.87-0.91
VAPOR PRESSURE(P SIG@20C):	40-50	PERCENT VOLATILE(w/w):	25
VAPOR DENSITY (air=1):	> 1	EVAPORATION RATE (Butyl Acetate=1):	< 1
SOLUBILITY IN WATER:	Negligible	APPEARANCE & ODOR:	Dark Gray-Green / Hydrocarbon

**SECTION IV FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT (TCC): 43C LOWER EXPLOSIVE LIMIT: 0.7 % UPPER EXPLOSIVE LIMIT: 9.6 %

EXTINGUISHING MEDIA: CO<sub>2</sub>, dry chemical, or water fog.

UNUSUAL FIRE & EXPLOSION HAZARDS: Avoid all sources of ignition, welding arcs, and open flames. Vapors can travel to source of ignition and flash back. "Empty" cans may retain product residue and can be hazardous. Do not pressurize, cut, weld, braze, solder, drill, or grind cans. Do not expose cans to heat, flame, sparks, static electricity, or other sources of ignition. Heated cans may build up pressure and explode; can cause injury or death.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus (MSHA / NIOSH approved or equivalent) and full protective gear.

**SECTION V HEALTH HAZARD DATA**

PRIMARY ROUTES OF ENTRY: Eye contact, skin contact, inhalation, and ingestion.

EFFECTS OF OVEREXPOSURE: Long-term exposure may cause damage to lungs, kidneys, and/or nervous system. • Eyes: may cause irritation, pain, tearing, reddening, swelling, and stinging. • Skin: defatting, drying, irritation, and rash. • Inhalation: difficulty in breathing, headaches, dizziness, nausea, decreased blood pressure, changes in heart rate, and cyanosis. • Ingestion: harmful or fatal. Corrosive: may cause severe, permanent damage to mouth, throat, and stomach.

EMERGENCY & FIRST AID PROCEDURES: • Eyes and skin: Flush immediately with plenty of water. Get immediate medical attention. Remove affected clothing and wash separately before reusing. • Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. • Ingestion: Do NOT induce vomiting. Give glass of water or milk. Call physician or poison control immediately. Never give food or drink to an unconscious person.

**SECTION VI REACTIVITY DATA**

STABILITY: Stable under normal conditions.

INCOMPATIBILITY (materials to avoid): Strong acids, alkalis, oxidizers, and amines.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and oxides of nitrogen; may produce forms of chloride, chlorine, and phosgene.

**SECTION VII SPILL OR LEAK PROCEDURES**

IF RELEASED OR SPILLED: Absorb spill with inert material (such as dry sand or earth). Dispose in chemical waste container.

WASTE DISPOSAL METHOD: Dispose in accordance with federal, state, and local regulations.

**SECTION VIII SPECIAL PROTECTION INFORMATION**

VENTILATION: LOCAL XXXXX MECHANICAL OTHER

RESPIRATORY PROTECTION: If airborne concentrations are expected to exceed exposure limits (listed above), a NIOSH / MSHA approved air-purifying respirator may be permissible. If potential for uncontrolled release, exposure levels are unknown, or if air-purifying respirators may not provide adequate protection, use self-contained, positive pressure air-supplied respirator.

EYE PROTECTION: Safety glasses with side shields (or safety goggles) and a face shield.

PROTECTIVE GLOVES: Where contact is likely, wear chemical resistant gloves.

OTHER PROTECTIVE EQUIPMENT: Where contact is likely, wear chemical suit and rubber boots. Follow standard industrial clothing standards.

**SECTION IX SPECIAL PRECAUTIONS**

HANDLING &amp; STORING PRECAUTIONS: Wash thoroughly after handling. Keep away from heat, sparks, or open flame. Store at temperature below 120°F.

Keep from freezing.

PREPARED: 05/15/96

UPDATED: 1/6/11

PRODUCT #: C0822, C1622