

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 4
Reactivity 0
Protection B

SECTION I DESCRIPTION

TRADE NAME: **Castle® Iron Man™**

PRODUCT TYPE: Chain & Cable Lubricant

SECTION II HAZARDOUS INGREDIENTS

INGREDIENT	CAS #	PEL	TLV	STEL	%
Propane / Isobutane / n-Butane	68476-86-8	800 ppm	800 ppm	NE	20.0 %

SECTION III PHYSICAL DATA

BOILING POINT:	-43°F	SPECIFIC GRAVITY (H ₂ O=1):	0.8191
VAPOR PRESSURE:	80-90	PERCENT VOLATILE BY VOL %:	NE
VAPOR DENSITY (air=1):	Heavier than air	EVAPORATION RATE (Butyl Acetate=1):	Faster than Butyl Acetate
SOLUBILITY IN WATER:	Negligible	APPEARANCE & ODOR:	Dark Gray-Green / Solvent

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (method used): -156 °F (TCC) LOWER EXPLOSIVE LIMIT: 1.8 % UPPER EXPLOSIVE LIMIT: 9.5 %
EXTINGUISHING MEDIA: CO₂, 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 & 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: 12/31/06

PRODUCT #: C0822, C1622