

**MANUFACTURER**

Castle Products, Inc.  
424 St. Paul Street  
Rochester, NY 14605  
1-800-876-0222  
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 2  
Fire 4  
Reactivity 0  
Protection B

**SECTION I DESCRIPTION**

TRADE NAME: **Castle® Copperhead™**

PRODUCT TYPE: Copper Gasket Adhesive

**SECTION II HAZARDOUS INGREDIENTS**

INGREDIENT	CAS #	PEL	TLV	STEL	%
2-Propanone	67-64-1	750 ppm	750 ppm	1000 ppm	55.0 %
Propane/Isobutane/N-Butane	68476-86-8	800 ppm	800 ppm	NE	30.0 %
Adhesive	MIXTURE	10 ppm	10 ppm	15 ppm	5.0 %
Copper Powder	7440-50-8	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>	NE	5.0 %
Ethyl Acetic Ester	141-78-6	400 ppm	400 ppm	NE	5.0 %
N-Hexane	110-54-3	50 ppm	50 ppm	NE	5.0 %
Triethylene Glycol Ester Hydrogenated	68648-53-3	NE	NE	NE	NE

**SECTION III PHYSICAL DATA**

BOILING POINT:	-43°F -350°F	SPECIFIC GRAVITY (H <sub>2</sub> O=1):	0.7526
VAPOR PRESSURE:	45-55	PERCENT VOLATILE BY VOL %:	NA
VAPOR DENSITY:	Heavier than air	EVAPORATION RATE:	Faster than Butyl Acetate
SOLUBILITY IN WATER:	Slight	APPEARANCE & ODOR:	Copper/Solvent

**SECTION IV FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT (method used): -156°F (Pensky-Martens CC) LOWER EXPLOSIVE LIMIT: 1.0% UPPER EXPLOSIVE LIMIT: 13.0%

EXTINGUISHING MEDIA: Alcohol foam, CO<sub>2</sub>, dry chemical, foam, 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.

EFFECT 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. 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 (material to avoid): Strong acids, alkalis, oxidizers, and amines.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

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

**SECTION VII SPILL OR LEAK PROCEDURES**

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

WASTE DISPOSAL METHOD: Dispose as hazardous waste 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 Threshold Limit Values (TLV), 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: Wear safety glasses with side shields (or 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, and flame. Store at temperatures below 120°F. Keep from freezing.

PREPARED: 11/29/93

UPDATED: 12/31/06

PRODUCT #: C1613