SAFETY DATA SHEET

SECTION 1 PRODUCT and COMPANY INFORMATION

TRADE NAME: Castle® Meta-Seal™

PRODUCT TYPE: Brake Silencer

PRODUCT CODE: C2093

MANUFACTURED FOR: Castle Products, Inc.

424 St. Paul Street Rochester, NY 14605 (800) 876-0222

EMERGENCY (585) 275-3232

SECTION 2 HAZARDS IDENTIFICATION

GHS CLASSIFICATION: DANGER: Causes skin irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Extremely Flammable Aerosol Contains gas under pressure; may explode if heated. Keep out of reach of children. Classification:

Skin corrosion/irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable aerosols	Category 1
Gasses under pressure	Compressed Gas

PRECAUTIONARY STATEMENTS: Wear protective gloves

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces-No smoking.

Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use

SECTION 3 COMPOSITION INFORMATION ON INGREDIENTS

INGREDIENTS	CAS#	%
Propane/isobutane/n-Butane	68476-86-8	50-60%
Petroleum Distillates	64742-47-8	20-30%
Heptane	64742-49-0	10-20%
Naphthenic Oil, Severely Hydrotreated	64742-52-5	10-20%
Aluminum Powder	7429-90-5	1-10%
Graphite	7782-42-5	1-10%

SECTION 4 FIRST AID MEASURES

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician if irritation persists.

If on skin: Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water. Call a physician if irritation persists.

If swallowed: Rinse mouth. Do not induce vomiting. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion. Call a physician if you feel unwell.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a physician if you feel unwell.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water fog. Dry chemical powder. Carbon dioxide (CO2). Appropriate for surrounding fire. SPECIFIC/UNUSUAL HAZARDS: Irritating gasses may be produced which will require SCBA or a fresh air source. SPECIAL FIRE FIGHTING EQUIPMENT and PRECAUTIONS for FIREFIGHTERS: As in any fire, wear pressure-demand self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and full protective gear.

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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: A large spill is not likely to occur.

SECTION 7 HANDLING AND STORAGE

Handling: Avoid inhaling vapors or mists. Harmful if inhaled. May cause respiratory irritation if inhaled. May cause drowsiness or dizziness. Avoid contact with skin, eyes, and clothing. Do not eat, drink, or smoke, when using this product. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces, and sources of ignition. Take precautionary measures against static discharges. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can.

Storage: Store locked up. Keep containers tightly closed in a cool, dry, and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Do not spray on hot surfaces. Keep in properly labeled containers. Keep out of the reach of children.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: NE

Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Propane/Isobutane/n-Butane	74-98-6: TWA: 1000 ppm 106-97-8: STEL: 1000 ppm 75-28-5: STEL: 1000 ppm	74-98-6:TWA: 1000 ppm TWA: 1800 mg/m₃	74-98-6:IDLH: 2100 ppm TWA: 1000 ppm 106-97-8:TWA: 800 ppm 75-28-5:TWA: 800 ppm
Heptane	TLV: 400 ppm STEL: 500 ppm	TWA: 500 ppm	
Aluminum Powder	TWA: 1 mg/m ³	(Dust-NA)	(Dust-NA)
Graphite	TWA: 2 mg/m ³	(Dust-NA)	(Dust-NA)

Appropriate Engineering Controls: Maintain adequate local exhaust ventilation.

Individual Protective Measures - Personal Protective Equipment:

Gloves: Wear impervious gloves.

Eye/Face Protection: Wear safety glasses or goggles.

Skin Protection: Wear clothing suited to the task being performed.

Respiratory Protection: Not normally required if good ventilation is maintained.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE: Opaque Aerosol

ODOR: Solvent Odor
ODOR THRESHOLD: ND

MELTING/FREEZING POINT: ND

BOILING POINT: ND BOILING RANGE: ND

FLASH POINT: -141°F (-96.4°C) Based on Propellant

LOWER EXPLOSIVE LIMIT: ND
UPPER EXPLOSIVE LIMIT: ND
FLAMMABILITY (solid, gas): NA
AUTOIGNITION TEMPERATURE: ND
EVAPORATION RATE (Butyl Acetate=1): ND

VAPOR PRESSURE: ND VAPOR DENSITY (air=1): ND RELATIVE DENSITY: (H₂O=1): 0.998 SOLUBILITY IN WATER: ND

PARTITION COEFFICIENT (n-octanol/water): ND

pH: NA

DECOMPOSITION TEMPERATURE: ND

VISCOSITY: ND

PERCENT VOLATILE BY VOL %: 83%

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SECTION 10 STABILITY and REACTIVITY DATA

CHEMICAL STABILITY: Stable under normal conditions.

POSSIBILITY of HAZARDOUS REACTIONS: Hazardous reactions are unlikely.

CONDITIONS TO AVOID: High temperatures, Direct Sunlight

INCOMPATIBLE MATERIALS: Strong acids, alkalis, or oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Hydrocarbon fumes and smoke.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

HEALTH EFFECTS: No data available.

Chemical Name	LD ₅₀ Oral	LD ₅₀ Dermal	LC ₅₀ Inhalation
Petroleum Distillates	>5000 mg/kg (Rat)	>2000 mg/kg (Rabbit	>5.2 mg/L 4 hr. (Rat)
Heptane	>5000 mg/kg (Rat)	>3160 mg/kg (Rabbit	73680 ppm 4 hr. (Rat)

LIKELY ROUTES of EXPOSURE: INHALATION: Yes

INGESTION: No SKIN CONTACT: No EYECONTACT: No

SYMPTOMS:

EFFECTS OF EXPOSURE: IMMEDIATE: ND

DELAYED: ND SHORT-TERM: ND LONG-TERM: ND

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

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY: No Data Available.

Chemical Name	Toxicity to Fish	Toxicity to Daphnia
Petroleum Distillates	45 mg/L LC ₅₀ Pimephales promelas 96h flow-through 2.2 mg/L LC ₅₀ Lepomis macrochirus 96h static 2.4 mg/L LC ₅₀ Oncorhynchus mykiss 96h static	
Naphthenic Oil, Severely Hydrotreated	5000 mg/L LC ₅₀ Oncorhynchus mykiss 96h	1000 mg/L EC50 Daphnia magna 48h

PERSISTANCE and DEGRADABILITY: ND BIOACCUMULATIVE POTENTIAL: ND

MOBILITY in SOIL: ND

OTHER ADVERSE EFFECTS: None Known.

SECTION 13 DISPOSAL CONSIDERATIONS

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

SECTION 14 TRANSPORT INFORMATION

UN Number: UN1950

UN Proper Shipping Name: Aerosols, Flammable, LTD. QTY.

Transport Hazard Class(es): 2.1

Packing Group: NA Marine Pollutant: No

Special Precautions: None Required

DOT Classification: Consumer Commodity ORM-D, or Limited Quantity.

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 contain a chemical component with a known CAS numbers that exceeds the

threshold (De Minimis) reporting levels established by SARA Title III. Section 313.

threshold (De Minimis) reporting levels established by OARA Title III, decilor 515.			
Chemical Name	CAS No.	Weight %	SARA 313 Threshold Value %
Aluminum Powder	7429-90-5	2.35 %	1.0%

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SECTION 15 REGULATORY INFORMATION, continued

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.

California Proposition 65: This product does not contain any known California Proposition 65 chemicals.

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: 1

NFPA ratings Health: 2

Flammability: 4 Instability: 0

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

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