

# MATERIAL SAFETY DATA SHEET

## Klean-Strip Rust Converter Aerosol

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### 1. Product and Company Identification

**Product Code:** A1402.2  
**Product Name:** Klean-Strip Rust Converter Aerosol  
**Manufacturer Information**  
**Company Name:** W. M. Barr  
2105 Channel Avenue  
Memphis, TN 38113  
**Phone Number:** (901)775-0100  
**Emergency Contact:** 3E 24 Hour Emergency Contact (800)451-8346  
**Information:** W.M. Barr Customer Service (800)398-3892  
**Web site address:** www.wmbarr.com  
**Preparer Name:** W.M. Barr EHS Dept (901)775-0100  
**Intended Use:** Turns rust to black primer and inhibits further corrosion.  
**Synonyms**  
ERC22

### 2. Hazards Identification

#### Emergency Overview

Danger! Extremely Flammable. Harmful or fatal if swallowed. Vapor harmful. Skin and eye irritant.

Vapors may cause flash fire or explosion.

Do not use this product near any source of heat or open flame, furnace areas, pilot lights, stoves, etc.

Do not use in small enclosed spaces, such as basements and bathrooms. Vapors can accumulate and explode if ignited.

#### OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

#### Health Hazards (Acute and Chronic)

##### SKIN CONTACT:

Moderately irritating to the skin. Prolonged or repeated contact can result in defatting, drying, and cracking of the skin which may result in skin irritation, inflammation, and dermatitis (rash).

##### EYE CONTACT:

May cause moderate to severe irritation. Symptoms may include: eye irritation, burning sensation, pain, watering, and/or change of vision.

##### INHALATION:

High concentrations may lead to central nervous system (CNS) effects (drowsiness, dizziness, nausea, headaches, uncoordinated or strange behavior, paralysis and loss of consciousness and even death) Other symptoms might include nasal discharge, hoarseness, coughing, chest pain, and breathing difficulty. High vapor concentrations are irritating to the eyes, nose, throat, and lungs.

##### INGESTION:

Product may be harmful or fatal if swallowed. Pulmonary aspiration hazard. After ingestion, may enter lungs and

produce damage. May produce central nervous system effects, which may include dizziness, loss of balance and coordination, nausea, headache, unconsciousness, coma and even death.

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Intentional misuse by deliberately concentrating and inhaling solvents may be harmful or fatal.

**TARGET ORGANS / SYSTEMS:**

eye, skin, respiratory system, central nervous system, blood, kidneys, liver

ROUTES OF EXPOSURE: inhalation, skin contact, ingestion

**Signs and Symptoms Of Exposure**

See Potential Health Effects.

**Medical Conditions Generally Aggravated By Exposure**

May adversely affect people with acute or chronic disease of the: skin, eye, lung (asthma-like conditions), central nervous system

**3. Composition/Information on Ingredients**

Hazardous Components (Chemical Name)	CAS #	Concentration
1. Acetone {2-Propanone}	67-64-1	30.0 -60.0 %
2. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	15.0 -40.0 %
3. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	7.0 -13.0 %
4. Formic acid {Hydrogenecarboxylic acid; Methanoic acid}	64-18-6	Trade Secret
5. Methyl ether {Dimethyl ether}	115-10-6	60.0 -100.0 %

**4. First Aid Measures**

**Emergency and First Aid Procedures**

**INHALATION:**

If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.

**SKIN CONTACT:**

Immediately wash with soap and large quantities of water. Seek medical attention if irritation from contact persists.

**EYE CONTACT:**

Immediately flush with water, remove any contact lens, continue flushing with water for at least 15 minutes, then get medical attention immediately.

**INGESTION:**

Do not induce vomiting, unless directed to by medical personnel. Call your poison control center, hospital, emergency room, or physician immediately for instructions. Do not give anything by mouth to an unconscious person.

**Note to Physician**

Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

## 5. Fire Fighting Measures

**Flammability Classification:** Level 3 Aerosol  
**Flash Pt:** < 20.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)  
**Explosive Limits:** LEL: n/d UEL: n/d  
**Autoignition Pt:** NA

### Special Fire Fighting Procedures

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame. Water runoff can cause environmental damage. Dike and collect water used to fight fire.

### Unusual Fire and Explosion Hazards

FLASHPOINT OF LIQUID CONCENTRATE: <20 F

FLASHPOINT OF PROPELLANT: -42 F

### Hazardous Combustion Products

carbon monoxide, carbon dioxide, and toxic fumes

### Suitable Extinguishing Media

Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.

### Unsuitable Extinguishing Media

None known.

## 6. Accidental Release Measures

### Steps To Be Taken In Case Material Is Released Or Spilled

Vapors may cause flash fire or ignite explosively.

Clean up: Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources; keep flares, smoking or flames out of hazard area. Use non-sparking tools. Use proper bonding and grounding methods for all equipment and processes. Keep out of waterways and bodies of water. Be cautious of vapors collecting in small enclosed spaces, sewers, low lying areas, confined spaces, etc.

Small spills: Take up with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.

Large spills: Dike far ahead of spill for later disposal.

Waste Disposal: Dispose in accordance with applicable local, state and federal regulations.

## 7. Handling and Storage

### Precautions To Be Taken in Handling

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

Do not use this product near any source of heat or open flame, furnace areas, pilot lights, stoves, etc.

Do not use in small enclosed spaces, such as basements and bathrooms. Vapors can accumulate and explode if ignited.

Do not puncture or incinerate.

Avoid breathing of vapors or mist and contact with skin, eyes and clothing. Do not take internally.

**Precautions To Be Taken in Storing**

Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

**8. Exposure Controls/Personal Protection**

<b>Hazardous Components (Chemical Name)</b>	<b>CAS #</b>	<b>OSHA PEL</b>	<b>ACGIH TWA</b>	<b>Other Limits</b>
1. Acetone {2-Propanone}	67-64-1	1000 ppm	500 ppm	No data.
2. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	200 ppm	200 ppm	No data.
3. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	50 ppm	20 ppm	No data.
4. Formic acid {Hydrogenecarboxylic acid; Methanoic acid}	64-18-6	5 ppm	5 ppm	No data.
5. Methyl ether {Dimethyl ether}	115-10-6	No data.	No data.	No data.

**Respiratory Equipment (Specify Type)**

Use only with adequate ventilation to prevent buildup of vapors. Do not use this product if the work area is not well ventilated.

For respirator use, wear a properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors.

For OSHA controlled work places and other regular users - Use only with adequate ventilation under engineered air control systems designed to prevent exceeding the appropriate TLV.

A dust mask does not provide protection against vapors.

**Eye Protection**

Wear chemical splash goggles to prevent contact with the eyes.

**Protective Gloves**

For use as directed, wear gloves with as much resistance to the chemical ingredients as possible. Laminate film gloves offer the best protection. Other glove materials such as nitrile, supported PVA, and rubber may provide protection. Glove selection should be based on chemicals being used and conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.

Hand protection during spill cleanup or emergency conditions will need to be evaluated based on conditions of use.

**Other Protective Clothing**

Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure.

**Ventilation**

Use only with adequate ventilation to prevent buildup of vapors. Do not use this product if the work area is not well ventilated.

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Use only with adequate ventilation to prevent buildup of vapors. Do not use in areas where vapors can accumulate and concentrate, such as basements, bathrooms or small enclosed areas. Whenever possible, use outdoors in an open air area. If using indoors open all windows and doors and maintain a cross ventilation of moving fresh air

across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering -- STOP -- ventilation is inadequate. Leave area immediately and move to fresh air.

**Work/Hygienic/Maintenance Practices**

Wash hands thoroughly after use and before eating, drinking, or smoking.

Do not eat, drink, or smoke in the work area.

Discard any clothing or other protective equipment that cannot be decontaminated.

Facilities storing or handling this material should be equipped with an emergency eyewash and safety shower.

**9. Physical and Chemical Properties**

**Physical States:**  Gas  Liquid  Solid  
**Melting Point:** NA  
**Boiling Point:** NA  
**Autoignition Pt:** NA  
**Flash Pt:** < 20.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)  
**Explosive Limits:** LEL: n/d UEL: n/d  
**Specific Gravity (Water = 1):** 7.06  
**Density:** 7.05 LB/GA  
**Bulk density:** No data.  
**Vapor Pressure (vs. Air or mm Hg):** NA  
**Vapor Density (vs. Air = 1):** NA  
**Evaporation Rate (vs Butyl Acetate=1):** NA  
**Solubility in Water:** NA  
**Percent Volatile:** 93.0 % by weight.  
**VOC / Volume:** 64.0000 % WT  
**HAP / Volume:** NA 0.0000  
**Heat Value:** No data.  
**Particle Size:** No data.  
**Corrosion Rate:** No data.  
**pH:** NA

**Appearance and Odor**

Clear to slight haze.

**Additional Physical Information**

MRI: 0.91

**10. Stability and Reactivity**

**Stability:** Unstable  Stable

**Conditions To Avoid - Instability**

No data available.

**Incompatibility - Materials To Avoid**

Strong acids and oxidizers, strong alkalis, strong inorganic acids, amines, copper or copper alloys, or pyridines.

Acetone may form explosive mixtures with chromic anhydride, chromyl alcohol, hexachloromelamine, hydrogen peroxide, permonosulfuric acid, potassium tertbutoxide, and thioglycol.

### Hazardous Decomposition Or Byproducts

Oxides of carbon, aldehydes, ketones, organic liquids.

Carbon monoxide and carbon dioxide/pyrolysis will produce pyrogallol acid, a poison.

**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]

### Conditions To Avoid - Hazardous Reactions

No data available.

## 11. Toxicological Information

This product has not been tested as a whole. Information below will be for individual ingredients.

Acetone:

LD50 Rat oral 10.7 mL/kg (=8450 mg/kg bw); acetone given by gastric intubation to groups of five non-fasted Carworth-Wistar female rats  
LD50 Rat oral 9800 mg/kg/ bw  
LD50 Rabbit oral 5340 mg/kg bw  
LC50 Rat inhalation exposure 76 mg/L/4 hr  
LD50 Rabbit dermal 20 mg/kg bw

Methyl Ethyl Ketone:

LC50 Rat inhalation >5000 ppm/6 hr  
LD50 Rat oral 3400 mg/kg bw  
LD50 Rat oral 2900 (95% C.I. 2300-3500) mg/kg /From table/  
LC50 (45 min) Mouse (male) inhalation 205,000 + or - 32,500 mg/cu m (69,500 + or - 11,000 ppm) /From table/  
LC50 (4 hr) Rat (male) inhalation 34,500 mg/cu m (11,700 ppm) /From table/  
LD50 (14 days) Rabbit (male) dermal >8000 mg/kg /From table; 24-hr occluded exposure duration/

2-Butoxyethanol:

LD50 Rat oral 1.48 g/kg  
LD50 Rabbit oral 0.32 g/kg  
LD50 Rabbit dermal 400 mg/kg  
LC50 Rat (male) inhalation 486 ppm/4 hr /from table/  
LC50 Mouse inhalation 700 ppm/7 hr /from table/

### Chronic Toxicological Effects

See Section 2.

### Carcinogenicity/Other Information

No data available.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Acetone {2-Propanone}	67-64-1	n.a.	n.a.	A4	n.a.
2. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	n.a.	n.a.	n.a.	n.a.
3. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	Possible	2B	A3	No
4. Formic acid {Hydrogenocarcboxylic acid; Methanoic acid}	64-18-6	n.a.	n.a.	n.a.	n.a.
5. Methyl ether {Dimethyl ether}	115-10-6	n.a.	n.a.	n.a.	n.a.

## 12. Ecological Information

No information available for this product as a whole.

Acetone:

Toxicity:

LC50 /Oncorhynchus mykiss/ (Rainbow trout, weight 1.0 g) 5,540 mg/L/96 hr at 12 deg C (95% confidence limit

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4,740-6,330 mg/L), /static bioassay/

LC50; Species: *Oncorhynchus mykiss* (Rainbow trout, fingerling, length 9.4 cm, weight 10.8 g); Conditions: freshwater, flow through, 10 deg C, pH 8.0; Concentration: 6100 mg/L for 24 hr

LC50 *Pimephales promelas* (Fathead minnow, age 33 days, length 22.6 mm, weight 0.159 g) 8,120 mg/L/96 h (95% confidence limit: 7,530-8,760 mg/L); flow through, 25.0 deg C, dissolved oxygen 6.7 mg/L, hardness 48.5 mg/L CaCO<sub>3</sub>, alkalinity 45.8 mg/L CaCO<sub>3</sub>, pH 7.58 /99% pure/

Persistence and Degradability: Biodegradation of this compound is expected, but volatilization has been shown to be the primary removal mechanism of acetone in water(5-7).

Bioaccumulative Potential: Potential for bioconcentration in aquatic organisms is low.

Mobility In Soil: High mobility in soil.

Methyl Ethyl Ketone:

Toxicity:

LC50 *Daphnia magna* (water flea) <520 mg/L 48-hr

LC50 *Lepomis macrochirus* (bluegill) 5,640-1,690 mg/L 24 to 96-hr

Has shown low toxicity to fish and aquatic invertebrates.

At above 100 ppm it may inhibit the growth of blue-green algae but such concentrations are unlikely to be reached except for short periods following accidental discharge.

Persistence and Degradability: MEK is readily biodegradable.

Bioaccumulative Potential: Data suggests that MEK is unlikely to concentrate in aquatic species.

Mobility in Soil: MEK is expected to have very high mobility based upon Koc values of 29 and 34 obtained in silt loams.

2-Butoxyethanol:

Toxicity: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in most sensitive species tested).

LC50, rainbow trout, 96 hr, 1,700 mg/L

LC50, water flea, 835 mg/L

LC50, bacteria, >1,000 mg/L

Persistence and Degradability: Material is readily biodegradable.

Bioaccumulative Potential: Bioconcentration potential is low (BCF <100 or LOG POW <3).

Mobility in Soil: Potential for mobility in soil is high (KOC between 50 and 150).

### 13. Disposal Considerations

#### Waste Disposal Method

Dispose in accordance with applicable local, state, and federal regulations.

### 14. Transport Information

#### LAND TRANSPORT (US DOT)

**DOT Proper Shipping Name** Aerosols, flammable, LTD. QTY.

For domestic ground transportation, this product MAY be shipped as a Consumer Commodity, ORM-D.

**DOT Hazard Label:** FLAMMABLE GAS

**UN/NA Number:** 1950

**DOT Hazard Class:** 2.1

**Additional Transport Information**

For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

The shipper/supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

**15. Regulatory Information**

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Acetone {2-Propanone}	67-64-1	No	Yes 5000 LB	No	Yes
2. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	No	Yes 5000 LB	No	Yes
3. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	No	No	Yes-Cat. N230	No
4. Formic acid {Hydrogenecarboxylic acid; Methanoic acid}	64-18-6	No	Yes 5000 LB	Yes	No
5. Methyl ether {Dimethyl ether}	115-10-6	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. Acetone {2-Propanone}	67-64-1	HAP, ODC ()	No	Inventory	No
2. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	ODC ()	No	Inventory	No
3. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	HAP, ODC ()	No	Inventory	No
4. Formic acid {Hydrogenecarboxylic acid; Methanoic acid}	64-18-6	HAP, ODC ()	No	Inventory	No
5. Methyl ether {Dimethyl ether}	115-10-6	HAP, ODC ()	No	Inventory	No

**SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:**

- Sec.302:** EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. \* indicates 10000 LB TPQ if not volatile.
- Sec.304:** EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. \*\* indicates statutory RQ.
- Sec.313:** EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
- Sec.110:** EPA SARA 110 Superfund Site Priority Contaminant List

**TSCA (Toxic Substances Control Act) Lists:**

- Inventory:** Chemical Listed in the TSCA Inventory.
- 5A(2):** Chemical Subject to Significant New Rules (SNURS)
- 6A:** Commercial Chemical Control Rules
- 8A:** Toxic Substances Subject To Information Rules on Production
- 8A CAIR:** Comprehensive Assessment Information Rules - (CAIR)
- 8A PAIR:** Preliminary Assessment Information Rules - (PAIR)
- 8C:** Records of Allegations of Significant Adverse Reactions
- 8D:** Health and Safety Data Reporting Rules
- 8D TERM:** Health and Safety Data Reporting Rule Terminations
- 12(b):** Notice of Export

**Other Important Lists:**

- CWA NPDES:** EPA Clean Water Act NPDES Permit Chemical
- CAA HAP:** EPA Clean Air Act Hazardous Air Pollutant

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CAA ODC:

EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)

CA PROP 65:

California Proposition 65

### International Regulatory Lists:

### EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- Yes  No Acute (immediate) Health Hazard
- Yes  No Chronic (delayed) Health Hazard
- Yes  No Fire Hazard
- Yes  No Sudden Release of Pressure Hazard
- Yes  No Reactive Hazard

## 16. Other Information

n/d: not determined

NA: not available

### Company Policy or Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.