

SAFETY DATA SHEET (SDS)

SECTION 1: IDENTIFICATION

- 1.1. Product identifier: Crimson-Fire™ High Performance Ceramic Grinding Discs
87-1700, 87-1701, 87-1702, 87-1703, 87-1704, 87-1705, 87-1706, 87-1707, 87-1708, 87-1709
- 1.2. Recommended use: Grinding and/or Finishing
- 1.3. Restrictions on use: Dangerous, improper use may cause serious injury. For safe operation and use please refer to ANSI B7.7-2003 (R2011) and OSHA Regulations.
- 1.4. Supplier's details: Kimball Midwest
4800 Roberts Road
Columbus, OH 43228
Business: 800-233-1294
Emergency Telephone: 800-424-9300 (Chemtrec)

SECTION 2: HAZARD(S) IDENTIFICATION

- 2.1. Hazard classification Not classified as hazardous according to OSHA Hazard Communication Standards
- 2.2. Label elements
Single word: Not applicable
Symbols: Not applicable
Pictograms: Not applicable
- 2.3. Hazards not otherwise classified None

SECTION 3 - COMPOSITION

Chemical Name	Formula	CAS#	MAX % WT. **
Aluminum Oxide (Non-Fibrous)	Al ₂ O ₃	1344-28-1	25 - 50
Silicon Carbide	SiC	409-21-2	25 - 50
Zirconium Oxide	ZrO ₂	1314-23-4	25 - 50
Cured Phenol Formaldehyde Resin	N/A	9003-35-4	5 - 10
Epoxy Resin	N/A	25068-38-6	5 - 20
Calcium Carbonate, Natural	CaCO ₃	1317-655-3	0 - 10
Cryolite	N/A	15096-52-3	5 - 20
Potassium Fluoborate	KBF ₄	14075-53-7	25 - 50
Fibre Backing	N/A	None	40 - 65
Cloth Backing	N/A	Mixture	10 - 30
Paper Backing	N/A	Mixture	5 - 10
Fiberglass Backing	N/A	65997-17-3	30 - 60

KIMBALL MIDWEST

Specializing in Materials Management

Metal Attachments	N/A	Mixture	0 - 5
Nylon Attachments	N/A	Mixture	0 - 5

**The exact percentage (concentration) of the composition has been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES

- 4.1. Required treatment:
Inhalation: Move to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Seek medical attention if irritation or other symptoms persist.
Skin contact: Wash skin with soap and water. If irritation or other symptoms develop, seek medical attention.
Eye contact: Remove contact lenses if present. Flush eyes thoroughly with large amounts of water, holding eyelids open. If irritation persists, seek medical attention.
Ingestion: Do not induce vomiting. Rinse mouth with water. Seek medical attention if large amount is swallowed or if you feel unwell.
- 4.2. Symptoms and effects, both acute and delayed:
 Dust may cause eye and respiratory irritation. Prolonged inhalation of high concentration of dust may cause adverse effects on the lungs. Prolonged overexposure to respirable dust may increase the risk of lung cancer. Risk of cancer depends on duration and level of exposure. Exposure to dust generated from processing the base material or coatings may present additional health hazards.
- 4.3. Indication of any immediate medical attention and special treatment required:
 Not applicable

SECTION 5: FIRE-FIGHTING MEASURES

- 5.1. Extinguishing techniques, including equipment:
 Use any media that is suitable for extinguishing the fire, such as water, foam and/or powders. Do not use water on fires involving metal dusts. Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.
- 5.2. Chemical hazards arising from the substance, mixture or fire:
 These products are not flammable or combustible; however, consideration must be given to the potential fire/explosion hazards from the base material being processed. Many materials create flammable/explosive dusts or turnings when machined or ground.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1. Emergency procedures:
 Environmental: Avoid contamination of water supplies and environmental releases. Report spills as required by authorities.
- 6.2. Protective equipment:
 Wear appropriate respirator and protective clothing as needed to avoid eye contact and inhalation of dust.

6.3. Methods of containment and clean-up:

Collect dry material, avoiding creating airborne dust. Place in a suitable container for disposal.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Inspect product prior mounting on tool for damage. Do not use at speeds greater than product maximum rates per minute (rpm) as indicated. Use with adequate ventilation. Avoid breathing dust. Avoid eye and skin contact with grinding dust. Wear suitable eye protection, gloves and appropriate protective clothing. Wash thoroughly after handling. Consider potential exposure to components of the base materials or coatings being worked. Refer to OSHA substance specific standards for additional work practice requirements where applicable.

7.2. Conditions for safe storage:

No special storage required. Suggested environments would fall in a temperature range of 60-80 F and 35-50% relative humidity.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure controls:

Chemical Name	OSHA PEL Respirable	OSHA PEL Total Dust	ACGIH TLV
Aluminum Oxide (Non-Fibrous)	5 mg/m ³	15 mg/m ³	10 mg/m ³
Silicon Carbide	5 mg/m ³	15mg/m ³	3 mg/m ³
Zirconium Oxide	5 mg/m ³	Not Established	10 mg/m ³
Ceramic Aluminum Oxide (Non-Fibrous)	5 mg/m ³	15 mg/m ³	10 mg/m ³
Cured Phenol Formaldehyde Polymer	Not Established	Not Established	Not Established
Epoxy Resin	Not Established	Not Established	Not Established
Calcium Carbonate, Natural	5 mg/m ³	15 mg/m ³	10 mg/m ³
Cryolite	2.5 mg/m ³	Not Established	2.5 mg/m ³
Potassium Fluoborate	15 mg/m ³	Not Established	10 mg/m ³
Fibre Backing	Not Established	Not Established	Not Established
Cloth Backing	Not Established	Not Established	Not Established
Paper Backing	Not Established	Not Established	Not Established
Fiberglass Backing	5 mg/m ³	15 mg/m ³	5 mg/m ³
Metal Attachments	Not Established	Not Established	Not Established
Plastic Attachments	Not Established	Not Established	Not Established

8.2. Personal protection:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Basic physical and chemical properties:

General physical form:	Solid abrasive products
Odor:	N/A
Flammability or Explosive Limits:	N/A
Vapor Pressure:	N/A
Odor Threshold:	N/A
Vapor Density:	N/A
pH:	N/A
Relative Density:	N/A
Melting Point/Freezing Point:	N/A
Solubility in water:	N/A
Ventilation:	Engineering controls recommended. See ANSI Z43.1. Refer to OSHA 29 CFR 1910.94.
Respiratory:	OSHA/NIOSH approved respirator. See OSHA 29 CFR 1910.134
Eye protection:	Protective eyewear such as safety goggles, safety glasses or face shield is recommended. See OSHA 29 CF1910.133.
Protective gloves:	Leather gloves.
Hearing protection:	Hearing protection such as earplugs or approved earmuffs. Refer to OSHA 29 CFR 1910.95.
Body/Skin protection:	Leather apron, fire retardant jacket/shirt/lab coat to shield from heavy spark showers in operation.
Other protections and precautions:	Visually inspect all wheels before mounting for possible damage. Do not operate above maximum operating speed. Always use a guard were applicable. Refer to ANSI B7.7 for proper safety and usage protocols.

KIMBALL MIDWEST

Specializing in Materials Management

Epoxy Resin	Oral	>15,600 mg/kg (rat)
Calcium Carbonate, Natural	Oral	>5,000 mg/kg (rat)

Boiling Point:	N/A
Flash Point:	N/A
Evaporation Rate:	N/A
Flammability (solid, gas):	Not classified
Auto-ignition Temperature:	N/A
Decomposition Temperature:	N/A
Viscosity:	N/A

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:	Not reactive under normal conditions of use and storage.
10.2. Chemical stability:	Stable.
10.3. Possibility of hazardous reactions:	Hazardous polymerization will not occur.
10.4. Conditions to avoid:	None known.
10.5. Incompatible materials:	None known.
10.6. Hazardous decomposition products:	None known.
10.7. Other:	Dust from grinding and cutting could contain potentially hazardous components of the base material being ground or coatings applied to the base material.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1.

Chemical Name	Route of Exposure	Acute LD50 (Species)
Aluminum Oxide (Non-Fibrous)	Oral	>5,000 mg/kg (rat)
Silicon Carbide	Oral	>2,000 mg/kg (rat)
Zirconium Oxide	Oral	>5,000 mg/kg (rat)
Ceramic Aluminum Oxide (Non-Fibrous)	Oral	>5,000 mg/kg (rat)
Cured Phenol Formaldehyde Polymer	N/A	No acute toxicity data available

KIMBALL MIDWEST

Specializing in Materials Management

Cryolite	Oral	>5,000 mg/kg (rat)
Potassium Fluoborate	Oral	>5,000 mg/kg (rat)
Fibre Backing	N/A	No acute toxicity data available
Cloth Backing	N/A	No acute toxicity data available
Paper Backing	N/A	No acute toxicity data available
Fiberglass	N/A	No acute toxicity data available
Metal Attachments	N/A	No acute toxicity data available
Plastic Attachments	N/A	No acute toxicity data available

Routes of Exposure: Inhalation, skin contact, eye contact and ingestion.

Related Symptoms: Breathing in dust may cause irritation to the nose, throat and upper respiratory tract. May cause abrasive skin irritation. May cause eye irritation and injury. Not toxic if ingested. Swallowing may cause gastrointestinal disturbances or obstructions.

Acute and Chronic Effects: Prolonged inhalation of respirable dust may cause adverse lung effects, including cancer. Smoking may aggravate chronic effects. Prolonged exposure to elevated noise levels during operations may affect hearing. In most cases, the greater hazard is the exposure to the dust/fumes from the material (paint/coatings) being cut and ground. Most of dust is generated during grinding and cutting of the base material and the potential hazard from this exposure must be evaluated.

Carcinogenicity: Unknown

Mutagenicity: Unknown

Reproductive Effects: Unknown

11.2. Toxicological effects, signs and symptoms of exposure :

SECTION 12: ECOLOGICAL INFORMATION*

12.1. Data from Toxicity Tests: No adverse effects on aquatic organisms are expected.

SECTION 13: DISPOSAL CONSIDERATIONS*

13.1. Proper Disposal Practices: Disposal practices are in accordance with local, state and national regulations.



SECTION 14: TRANSPORT INFORMATION*

14.1. Proper Transport of Hazard Material: Not regulated as a hazardous material for transport.

SECTION 15: REGULATORY INFORMATION*

15.1. Safety, Health and Environmental Regulations: No Data Available

*Non-Mandatory

SECTION 16: OTHER INFORMATION

16.1. Date SDS Prepared: April 30, 2015 (Initial SDS Declaration Form)

16.2. Last Revision Completed: April 30, 2015

16.3. Statement of Accuracy: The above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Kimball Midwest shall not be held liable for any damage resulting from handling or from contact with the above products. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.