



MATERIAL SAFETY DATA SHEET

SECTION 1 IDENTITY

NAME OF PRODUCT:

Sunnen CRG, VR, VSF, VSR, CSG and VSA Grinding Wheel (Example CRG-803 or VR-601).

MANUFACTURER'S NAME AND ADDRESS:

SUNNEN PRODUCTS COMPANY
7910 MANCHESTER
ST. LOUIS, MO 63143

CONTACT:

CHUCK KORN

DATE:

NOVEMBER 28, 1996

EMERGENCY TELEPHONE NUMBER:

314-781-2105

SECTION 2 INGREDIENTS/IDENTITY (PER 29 CFR 1910.1200(g))

CHEMICAL AND (COMMON) NAME OF COMPONENTS	MAX Wt%	CAS NO.	OSHA TWA Z-1A mg/cu m	OSHA STEL Z-1A	ACGIH TWA	CARCINOGENIC
aluminum oxide (alundum) N	96 (1)	1344-28-1	5 respirable	NONE	10 (nuisance dust)	
silicon carbide (crystolon)	96 (2)	409-21-2	10 total dust 5 respirable	NONE	10 (nuisance dust)	N
silica, fused (glass) N(3)	4	65997-17-3	10 total dust 10 (table Z3)	NONE	0.1 respirable(silica fused)	

(1) All except VR-605, VR-606 & VR-607. (2) VR-605, VR-606 & VR-607 only. (3) Respirable airborne particles of crystalline silica are known to the state of California to cause cancer. FOR FURTHER SAFETY AND HEALTH INFORMATION REGARDING THE COMPOSITION OF THIS MATERIAL CONTACT SUNNEN PRODUCTS.

These mixture ingredients are cited on the following lists:

Name	CAS	Citations
ALUMINUM OXIDE	1344-28-1	2,4,8,9,13,16,17
SILICON CARBIDE	409-21-2	2,4,9,13,16,17,22
SILICA, FUSED	66599-17-3	2,4,12,13,16,17,22

1=IARC 2=OSHA 3=NTP 4=ACGIH 5=NFP449 6=NFP4325M 7=DOT HMT 49CFR172.101 8=EPA 9=RTECS 10=MA RTK 11=AK RTK 12=CA RTK 13=FL RTK 14=IL RTK 15=ME RTK 16=MN RTK 17=NH RTK 18=NJ RTK 19=Cincinnati, OH RTK 20=Norwood, OH RTK 21=PA RTK 22=RI RTK 23=WV RTK

SECTION 3 PHYSICAL & CHEMICAL CHARACTERISTICS

SPECIFIC GRAVITY (WATER=1)3 (APPROX)
PERCENT VOLATILE BY WEIGHT.....NOT VOLATILE
MELTING POINT.....NO APPLICABLE INFORMATION FOUND.
VAPOR PRESSURE (mm Hg).....NOT VOLATILE
VAPOR DENSITY (Air=1).....NOT VOLATILE
EVAPORATION RATENOT VOLATILE
SOLUBILITY IN WATER.....SLIGHT
REACTIVITY IN WATER.....NOT REACTIVE
APPEARANCE AND ODOR.....SOLID MATERIAL. MAY GIVE OFF ODOR IN USE

SECTION 4 SPECIAL PRECAUTIONS

HANDLING AND STORAGE: NONE Refer to Section 7.

SECTION 5 CORROSIVELY AND REACTIVITY DATA

STABILITY: MATERIAL IS STABLE UNDER NORMAL CONDITIONS OF TRANSPORT AND STORAGE.
POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR. INCOMPATIBILITY (MATERIALS TO AVOID): Avoid acids of all types with a PH \leq 4.0. HAZARDOUS DECOMPOSITION PRODUCTS: In use, dusts are generated. In most cases, the material removed from the work piece will be significantly greater than the grinding wheel components. Coolants may produce other decomposition products.

SECTION 6 HEALTH, FIRST AID AND MEDICAL DATA

ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE

USING THE GRINDING WHEEL IN ITS INTENDED MANNER MAY PRODUCE POTENTIALLY HAZARDOUS DUST OR FUMES WHICH CAN BE INHALED, SWALLOWED, OR COME IN CONTACT WITH THE SKIN OR EYES. THE INFORMATION PRESENTED AND CONCLUSIONS DRAWN ARE FROM OTHER THAN DIRECT TEST DATA. PRIMARY ROUTE(S) OF ENTRY ARE: INHALATION, INGESTION, AND SKIN ABSORPTION.

ACUTE:

Dust or fume may leave a metallic taste in the mouth, result in metal fume fever or produce flu-like symptoms. Dust may cause irritation to the eyes, skin, nose, or throat. Inhalation of dust during grinding may produce coughing and shortness of breath. Symptoms may be aggravated for sensitive individuals with respiratory conditions such as emphysema. Persons with light skin, sensitive skin or large amounts of body hair may experience increased sensitivity to skin disorders from contact with metal fines. Grinding may create elevated sound levels which may affect hearing. **CHRONIC:** Breathing dust can cause temporary or permanent breathing disease leading to disability or death. Crystalline silica is known to the State of California to cause cancer. Prolonged exposure to excessive noise can cause permanent hearing loss.

EMERGENCY FIRST AID

INHALATION: Remove to fresh air. If not breathing, begin mouth to mouth resuscitation. Seek medical attention.
EYE CONTACT: Remove contact lenses (if wearing) and flush eyes with water to remove particulates. Seek medical attention to check for possible irritation. SKIN CONTACT: Brush off excess dust. Wash hands with mild non-abrasive soap and water. INGESTION: Seek medical attention.

SECTION 7 HANDLING, STORAGE AND USE PROCEDURES

NORMAL STORAGE AND HANDLING: SEE ANSI STANDARD B7.1. NORMAL USE: Read instructions before using. HANDLE WITH ADEQUATE VENTILATION. SEE OSHA 29 CFR 1910.94 (VENTILATION) AND 29 CFR 1910.1000 (AIR CONTAMINATES). STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS: Normal cleanup procedures. WASTE DISPOSAL METHODS: Dispose of in accordance with applicable federal, state and local laws, regulations, rules, orders and ordinances.

SECTION 8 PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: None required under normal conditions of use with adequate ventilation. If dust levels approach TLV use a NIOSH approved respirator or forced ventilation to maintain dust levels below ACGIH/OSHA TLV/PEL levels. See OSHA 29 CFR 1910.134. VENTILATION LOCAL: Recommended. MECHANICAL: Recommended. SKIN PROTECTION: Not required. EYE PROTECTION: Always wear NIOSH approved safety glasses when operating machinery. See OSHA 29 CFR 1910.133. OTHER EQUIPMENT: Hearing protection if noise levels exceed NIOSH/OSHA TLV/PEL levels. See OSHA 29 CFR 1910.215

SECTION 9 FIRE AND EXPLOSION HAZARD DATA

No hazard. Not combustible in air.

NOTICE

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