



Safety Data Sheet

May be used to comply with

OSHA's Hazard Communication Standard 29 CFR 1910.1200.

This standard must be consulted for specific requirements.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Grinding Wheel
(Vitrified Bonded Abrasive Product)

Drawing Number: 58-97-1120
Issue Date: March 2015
Supersedes Date: July 2011

Milwaukee Electric Tool Corporation
13135 West Lisbon Road
Brookfield, Wisconsin 53005
www.milwaukeetool.com

Company Phone Number: 262-781-3600 or
1-800-729-3878
Emergency Contact Number: 1-800-424-9300
Chemtrec: United States only

Recommended use of product surface conditioning is abrasive material for mechanical industry

SECTION 2: HAZARDS IDENTIFICATION

Health	Environmental	Physical
Eye Irritation: No classified hazards	Acute Toxicity: No classified hazards	Flammable liquid: No classified hazards
Skin Irritation: No classified hazards	Chronic Toxicity: No classified hazards	
Acute Toxicity, Oral: No classified hazards		
Acute Toxicity, Inhalation: No classified hazards		

GHS Label

No applicable labeling

Hazard Statements	Precautionary Statements
May cause eye irritation	IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. IF eye irritation persists: get medical attention/advice.
May cause mild skin irritation	Wash skin/hands thoroughly after handling. IF skin irritation occurs: get medical attention/advice.
May be harmful if swallowed	IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.
May be harmful if inhaled	IF INHALED: call a POISON CENTER or doctor/physician if you feel unwell.
	Use personal protective equipment as required.

Some dust generated from intended use may cause some irritation to eyes, skin and respiratory.
Fiberglass content is a possible carcinogen when dust is inhaled.

Classified Hazards

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200. This SDS contains valuable information for the safe handling and proper use of this product. Save this SDS for future reference.

Other Hazards

None known

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Components listed in this section may contribute to the potential hazards associated with the dust that has been generated from the base material being ground, cut or sanded.

Chemical Name	CAS #	Concentration
Silicon carbide	409-21-2	40-85
Zirconium dioxide	7440-67-7	0-25
Iron Disulfide	1309-36-0	0-15
Sodium Aluminum Fluoride	15096-52-3	5-15
Phenol Formaldehyde	9003-35-4	10-20
Carbon Black	1333-86-4	0-5
Calcium Oxide	1305-78-8	0-5
Iron Oxide	1309-37-1	0-5
Titanium Dioxide	13463-67-7	0-5
Fiberglass Amorphous	65997-17-3	<15
Note: This product has been evaluated and does not require any hazard warning label under the OSHA Hazard Communication Standard.		

SECTION 4: FIRST AID MEASURES

EYE CONTACT:

Dust generated by grinding, sanding and cutting may cause eye irritation. Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. If symptoms persist, contact a physician.

SKIN CONTACT:

Remove product from the skin by washing with a mild soap and water. If irritation persists seek medical attention.

INHALATION:

Excessive dust inhalation may affect breathing function. Use recommended OSHA or NIOSH approved respirator as required. If inhaled remove to fresh air. Seek medical help if symptoms persist.

INGESTION:

Ingestion is not anticipated. Seek medical help if symptoms persist.

CARCINOGENICITY:

Fiberglass content is a possible carcinogen when dust is inhaled.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

No further data known.

SECTION 5: FIRE FIGHTING MEASURES

NFPA 704 Hazard Class

No data

HMIS



0 (Minimal)
1 (Slight)
2 (Moderate)
3 (Serious)
4 (Severe)

EXTINGUISHING MEDIA:

Use an extinguishing agent suitable for the surrounding fire.

UNUSUAL FIRE & EXPLOSION HAZARDS:

No further data known.

FIRE-FIGHTING PROCEDURES AND EQUIPMENT:

Emergency responders in the danger area should wear bunker gear and self-contained breathing apparatus for fires beyond the incipient stage. See Section 8 of the MSDS for other PPE to be worn as conditions warrant.

See Section 9 for Flammable Properties including Flash Point and Flammable (explosive) limits.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Clean-Up Measures:

Use normal clean up procedures. Dispose of waste in accordance with local, state and Federal regulations.

SECTION 7: HANDLING AND STORAGE

HANDLING:

Normal handling and storage methods should be used with caution not to drop or crush. Cotton fiber abrasive products should be stored in a dry area in rooms not subject to extreme temperature changes, since excessive humidity and dampness may affect some bonds. Never expose cotton fiber products to water or solvents.

Do not operate above maximum operating speed marked on the wheel.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA's Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I. The following information may be used to assist in PPE selection.

Chemical Name	OSHA PEL	ACGIH TLV	California Prop 65 Reg. Y/N	IARC/NTP Y/N
Silicon carbide	TWA 15mg/m ³ *	TWA 10mg/m ³ *		N
Zirconium dioxide	5 mg/m ³	5 mg/m ³		N
Iron Disulfide	NAIF	NAIF		N
Sodium Aluminum Fluoride	2.5mg/m ³	2.5mg/m ³		N
Phenol Formaldehyde	15mg/m ³	10mg/m ³		N

Carbon Black	3.5mg/m ³	3.5mg/m ³		N
Calcium Oxide	5 mg/m ³	2 mg/m ³		N
Iron Oxide	10 mg/m ³	5 mg/m ³		N
Titanium Dioxide	15 mg/m ³	10 mg/m ³		N
Fiberglass Amorphous	15 mg/m ³	10 mg/m ³		N

EYE PROTECTION

Wear eye protection appropriate to prevent eye exposure. Most of the dust that is generated is from the material being ground, sanded or cut and may cause eye irritation.

SKIN PROTECTION:

Protective gloves should be worn. Long sleeved shirts should be worn during grinding.

RESPIRATORY PROTECTION:

A respirator may be worn to reduce the exposure to dust. Select a NIOSH/MSHA approved respirator appropriate for the type and physical character of the airborne material. A self-contained breathing apparatus is recommended in all situations where airborne contaminant concentration has not been confirmed to be below safe levels. Respirator use should comply with the OSHA Respirator Protection Standard found in CFR 1910.134.

ENGINEERING CONTROLS:

Normal general ventilation is expected to be adequate. It is recommended that ventilation be designed in all instances to maintain airborne concentrations at lowest practicable levels. Ventilation should at a minimum, prevent airborne concentrations from exceeding any exposure limits listed in Section 2 of this MSDS.

The user may wish to refer to 29 CFR 1910.1000 (d) (2) and the ACGIH "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices" (Appendix C) for the determination of exposure limits of mixtures. An industrial hygienist or similar professional may be consulted to confirm that the calculated exposure limits apply.

OTHER PRECAUTIONS:

Wear ear plugs or muffs while grinding.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Data represent typical values and are not intended to be specifications. NA=Not Applicable; ND=Not Determined

Physical state:	Solid	Flammability (solid, gas):	NA
Colour:	Various Colors	Upper Explosive Limits (vol % in air):	NA
Odor:	Odorless	Lower Explosive Limits (vol % in air):	NA
Odor Threshold:	ND	Vapor pressure:	NA
pH:	ND	Vapor density:	NA
Melting/Freezing Point:	NA	Relative density:	ND
VOC Content:	ND	Solubility:	Insoluble
Boiling Point:	NA	Partition Coefficient:	ND
Flash Point:	NA	Auto-ignition Temperature:	ND
Evaporation Rate:	NA	Decomposition Temperature:	ND
Specific Gravity:	>1	Viscosity:	ND

SECTION 10: STABILITY AND REACTIVITY

INCOMPATIBLE MATERIALS:

This product is incompatible with strong acids.

DECOMPOSITION PRODUCTS MAY INCLUDE:

This product will not decompose. Dusts are generated while in use, which will consist of degradation products from the wheel and from the work piece.

CONDITIONS TO AVOID:

Avoid contact with incompatible materials and exposure to extreme temperatures.

POLYMERIZATION:

This product is not expected to polymerize.

CHEMICAL STABILITY:

This product is stable.

REACTIVITY:

Stable under normal ambient and anticipated conditions of use.

SECTION 11: TOXICOLOGY INFORMATION

LIKELY ROUTES OF EXPOSURE: Inhalation, Eye and Skin contact

ACUTE SYMPTOMS AND EFFECTS:

Inhalation:	No further toxicological data known
Eye contact:	No further toxicological data known
Skin contact:	No further toxicological data known
Ingestion:	No further toxicological data known

OTHER:

No further data known.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

This product has not been evaluated for ecotoxicity. As with any industrial chemical, exposure to the environment should be prevented and minimized wherever possible.

TOXICITY:

No data available

PERSISTENCE AND DEGRADABILITY (BIOPERSISTENCY & BIODEGRADABILITY):

The degree of biodegradability and persistence of this product has not been determined.

POTENTIAL OF BIOACCUMULATION:

No data available

MOBILITY IN SOIL:

No data available

OTHER ADVERSE EFFECTS:

No data available

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Dispose in accordance with the local, state and Federal regulations.

SECTION 14: TRANSPORT INFORMATION

DOT HAZARDOUS MATERIAL INFORMATION:

Not otherwise DOT regulated.

SECTION 15: REGULATORY INFORMATION

FEDERAL REGULATIONS:

SARA 313:

This product contains NONE of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Clean Water Act / Oil Pollution Act:

This product contains mineral oil and is subject to regulation by Section 311 of the Clean Water Act and the Oil Pollution Act. Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.

CERCLA Reportable Quantity:

Any components listed below have been assigned a reportable quantity (RQ) by the Federal EPA. Releases of the product into the environment that exceed the RQ for a particular component must be reported to the National Response Center at 1-800-424-8802.

Toxic Substance Control Act:

The components of this product are listed on the TSCA Inventory.

Ozone Depleting Substances:

This product contains no ozone depleting substances as defined by the Clean Air Act.

Hazardous Air Pollutants:

Any components listed below are defined by the Federal EPA as hazardous air pollutants.

STATE REGULATIONS:

This product contains mineral oil, and as used, may be regulated by the state used oil regulations. Check with the appropriate state agency to determine whether such a regulation exists.

No further data known.

SECTION 16: OTHER INFORMATION

ABBREVIATIONS:

TSCA Toxic Substance Control Act
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous
OSHA Occupational Safety and Health
IARC/NTP International Agency for Research on Cancer/National Toxicology Program

SARA.....Superfund Amendments and Reauthorization Act of 1986
ACGIHAmerican Conference of Governmental Industrial Hygienists
NIOSH/MSHANational Institute for Occupational Safety Health/
Mine Safety and Health Administration
WHMISWorkplace Hazardous Materials Information System

Prepared by: Milwaukee Electric Tool Corporation

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