Safety Data Sheet

Issue date 15-Nov-2018 **Revision date** 12-Nov-2018 **Revision Number** 1

1. IDENTIFICATION

Product identification

Product identifier	Premium Grinding Wheel
Other means of identification	57546
Recommended use	Grinding, Cutting
Restrictions on use	Dangerous, improper use may cause wheel breakage and serious injury. Do not abuse, over speed or drop wheel. Safe to use only if mounted, guarded and operated according to ANSI B7.1 and OSHA Regulations. Read safety tips in package. Always use a guard

Supplier

Corporate Headquarters:
Lawson Products, Inc.
8770 W. Bryn Mawr Ave., Suite 900
Chicago, IL 60631
(866) 837-9908

Canadian Distribution Center:
Lawson Canada
7315 Rapistan Court
Mississauga, ON L5N 5Z4
(800) 323-5922

24 Hour Emergency Phone Number (888) 426-4851 (Prosar)

2. HAZARD(S) IDENTIFICATION

Hazard Classification While this material is not classified as hazardous under OSHA regulations, this SDS contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

Symbol Not applicable

Signal word Not applicable

Hazard statements Not applicable

Precautionary statements

Prevention Not applicable

Response Not applicable

Storage Not applicable

Disposal Not applicable

Hazard(s) Not Otherwise Classified (HNOC) Not applicable.

Physical Hazards Not Otherwise Classified (PHNOC) Not applicable.

Unknown acute toxicity None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical name	CAS-No	Weight %
Aluminum Oxide	1344-28-1	0-80
Silicon Carbide	409-21-2	0-75
Ziroconium Oxide	1314-23-4	0-75
Cured phenolic resin	N/A	10-30
Sodium aluminum fluoride	15096-52-3	0-15
Iron Disulfide	12068-85-8	0-20
Alkali aluminum fluorides	60304-36-1	0-15
Potassium Sulfate	7778-80-5	0-10
Potassium Fluoroborate	14075-53-7	0-10
Calcium Oxide	1305-78-8	0-10
Calcium Fluoride	7789-75-5	0-10
Calcium Carbonate	471-34-1	0-10
Barium Sulfate	7727-43-7	0-10
Graphite	7782-42-5	0-5
Borosilicate Glass	65997-17-3	0-5

The specific identity and/or exact percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Necessary first-aid measures

Inhalation Move to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Seek medical attention if irritation persists.

Ingestion Do NOT induce vomiting. Rinse mouth with water. If a large amount is swallowed, get immediate medical attention. Get medical advice/attention if you feel unwell.

Skin contact Wash area thoroughly with soap and water. Seek medical attention if irritation occurs.

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Most important symptoms (acute) Respiratory irritation. Eye irritation. Prolonged inhalation of high concentration of dust may cause adverse effects on the lungs.

Most important symptoms (over-exposure) Prolonged inhalation of titanium dioxide above safe exposure limits can cause 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.

Indication of any immediate medical attention and special treatment needed Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use an extinguishing agent suitable for the surrounding fire. Use as appropriate, dry powder.

Unsuitable extinguishing media

Do not use water on fires involving metal dusts.

Specific hazards

These products are not flammable or combustible; however, consideration must be given to the potential fire or explosion hazards from the base material being processed. Many materials create flammable or explosive dusts or turnings when machined or ground.

Special protective equipment for fire-fighters

Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Do not allow product to reach sewage system, soil, surface or ground water, or any water course. Notify proper authorities if entry occurs. Wear appropriate respirator and protective clothing as needed to avoid eye contact and inhalation of dust.

Methods and materials for containment and cleaning up

Collect the material in labeled containers and dispose of according to local and regional authority requirements. Avoid dust formation.

7. HANDLING AND STORAGE

Precautions for safe handling

Inspect wheel prior to mounting on machine for damage. Do not use at speeds greater than product maximum rates per minute (rpm) as indicated. Always use a guard. Avoid breathing dust. Avoid contact with eyes. 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 ground or cut. Product will produce sparks and debris when in use, never use this product near reactive or flammable substances. Refer to OSHA substance specific standards for additional work practice requirements where applicable. Handle and store in accordance with ANSI B7.1 1978 requirements. Never use product if it comes in contact with water.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Avoid excessive temperatures in storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Aluminum Oxide	15 mg/m³ TWA 5 mg/m³ TWA	1 mg/m³ TWA	-
Silicon Carbide	15 mg/m³ TWA 5 mg/m³ TWA	10 mg/m³ TWA 3 mg/m³ TWA 0.1 fiber/cm3 TWA	10 mg/m³ TWA 5 mg/m³ TWA
Ziroconium Oxide	5 mg/m³ TWA	10 mg/m³ STEL 5 mg/m³ TWA	10 mg/m³ STEL 5 mg/m³ TWA
Cured phenolic resin	-	-	-
Sodium aluminum fluoride	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA 2.5 mg/m³ TWA
Iron Disulfide	-	1 mg/m³ TWA	1 mg/m³ TWA
Alkali aluminum fluorides	2.5 mg/m³ TWA	2.5 mg/m³ TWA	-
Potassium Sulfate	-	-	-
Potassium Fluoroborate	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA
Calcium Oxide	5 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Calcium Fluoride	2.5 mg/m³ TWA	2.5 mg/m³ TWA	-
Calcium Carbonate	15 mg/m³ TWA 5 mg/m³ TWA	-	10 mg/m³ TWA 5 mg/m³ TWA 10 mg/m³ TWA 5 mg/m³ TWA
Barium Sulfate	15 mg/m³ TWA 5 mg/m³ TWA	5 mg/m³ TWA	10 mg/m³ TWA 5 mg/m³ TWA
Graphite	15 mg/m³ TWA 5 mg/m³ TWA	2 mg/m³ TWA	2.5 mg/m³ TWA
Borosilicate Glass	-	1 fiber/cm3 TWA 5 mg/m³ TWA	-

Appropriate engineering controls

Engineering controls are recommended. See ANSI Z43.1. Refer to OSHA 29 CFR 1910.94.

Individual protection measures, such as personal protective equipment

Eye protection

Protective eyewear such as safety goggles, safety glasses or face shield is recommended. Consult OSHA standard 1910.133.

Hearing Protection

Hearing protection such as earplugs or approved earmuffs. Refer to OSHA 29 CFR 1910.95.

Skin and body protection

Leather apron, fire retardant jacket, shirt or lab coat to shield from heavy spark showers in operation. Leather gloves.

Respiratory protection

Follow OSHA respirator regulations (29 CFR 1910.134) and if necessary, wear a MSHA/NIOSH approved respirator.

Hygiene measures

Wash face, hands and any exposed skin thoroughly after handling.

Canadian Province Occupational Exposure Limits

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundland & Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatchewan - OEL
Aluminum Oxide	10 mg/m³ TWA	1.0 mg/m³ TWA	1 mg/m³ TWA	10 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	10 mg/m³ TWAEV	20 mg/m³ STEL 10 mg/m³ TWA
Silicon Carbide	10 mg/m³ TWA 3 mg/m³ TWA 0.1 fibre/cm3 TWA	10 mg/m³ TWA 3 mg/m³ TWA 0.1 fibre/cm3 TWA	10 mg/m³ TWA 3 mg/m³ TWA 0.1 fiber/cm3 TWA	10 mg/m³ TWA	10 mg/m³ TWA 3 mg/m³ TWA 0.1 fiber/cm3 TWA	10 mg/m³ TWA 3 mg/m³ TWA 0.1 fiber/cm3 TWA	10 mg/m³ TWA 3 mg/m³ TWA 0.1 fibre/cm3 TWA	10 mg/m³ TWA 3 mg/m³ TWA 0.1 fiber/cm3 TWA	10 mg/m³ TWAEV	20 mg/m³ STEL 6 mg/m³ STEL 0.1 fibre/cm3 TWA 10 mg/m³ TWA 3 mg/m³ TWA
Ziroconium Oxide	10 mg/m³ STEL 5 mg/m³ TWA	10 mg/m³ STEL 5 mg/m³ TWA	5 mg/m³ TWA 10 mg/m³ STEL	10 mg/m³ STEL 5 mg/m³ TWA	10 mg/m³ STEL 5 mg/m³ TWA	10 mg/m³ STEL 5 mg/m³ TWA	10 mg/m³ STEL 5 mg/m³ TWA	10 mg/m³ STEL 5 mg/m³ TWA	10 mg/m³ STEV 5 mg/m³ TWAEV	10 mg/m³ STEL 5 mg/m³ TWA
Cured phenolic resin	-	-	-	-	-	-	-	-	-	-
Sodium aluminum fluoride	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWAEV	5 mg/m³ STEL

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundland & Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatchewan - OEL
										2.5 mg/m³ TWA
Iron Disulfide	1 mg/m³ TWA	2 mg/m³ STEL 1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	1 mg/m³ TWA	1.0 mg/m³ TWAEV	3 mg/m³ STEL 1 mg/m³ TWA
Alkali aluminum fluorides	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWAEV	5 mg/m³ STEL 2.5 mg/m³ TWA
Potassium Sulfate	-	-	-	-	-	-	-	-	-	-
Potassium Fluoroborate	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWAEV	5 mg/m³ STEL 2.5 mg/m³ TWA
Calcium Oxide	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWAEV	4 mg/m³ STEL 2 mg/m³ TWA
Calcium Fluoride	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWA	2.5 mg/m³ TWAEV	5 mg/m³ STEL 2.5 mg/m³ TWA
Calcium Carbonate	10 mg/m³ TWA	20 mg/m³ STEL 10 mg/m³ TWA 3 mg/m³ TWA	-	10 mg/m³ TWA	-	-	-	-	10 mg/m³ TWAEV 10 mg/m³ TWAEV	20 mg/m³ STEL 10 mg/m³ TWA 10 mg/m³ TWA
Barium Sulfate	10 mg/m³ TWA	10 mg/m³ TWA 3 mg/m³ TWA	5 mg/m³ TWA	10 mg/m³ TWA	5 mg/m³ TWA	5 mg/m³ TWA	5 mg/m³ TWA	5 mg/m³ TWA	10 mg/m³ TWAEV 5 mg/m³ TWAEV	20 mg/m³ STEL 10 mg/m³ TWA
Graphite	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWA	2 mg/m³ TWAEV	4 mg/m³ STEL 2 mg/m³ TWA
Borosilicate Glass	5 mg/m³ TWA 1 fibre/cm3 TWA	1 fibre/cm3 TWA 5 mg/m³ TWA	1 fiber/cm3 TWA 5 mg/m³ TWA	5 mg/m³ TWA 1 fibre/cm3 TWA	1 fiber/cm3 TWA 5 mg/m³ TWA	1 fiber/cm3 TWA 5 mg/m³ TWA	1 fibre/cm3 TWA 5 mg/m³ TWA	1 fiber/cm3 TWA 5 mg/m³ TWA	10 mg/m³ TWAEV	3 fibre/cm3 STEL 10 mg/m³ STEL 5 mg/m³ TWA 1 fibre/cm3 TWA

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state Solid

Odor None

Odor threshold Not applicable

pH Not applicable

Melting point/range °C Not available

Melting point/range °F Not available

Boiling point/range °C Not available

Boiling point/range °F	Not available
Flash point °C / °F	None
Evaporation rate	Not applicable
Flammability (Solid, Gas)	This product is not flammable
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	Not available
Solubility	Not available
Partition coefficient (n-octanol/water)	Not applicable
Autoignition temperature °C	Not available
Autoignition temperature °F	Not available
Decomposition temperature °C	425 °C
Decomposition temperature °F	800 °F
Viscosity	Not applicable

10. STABILITY AND REACTIVITY

Reactivity	The product is stable and not reactive under normal conditions of use, storage and transport.
Chemical stability	Stable.
Possibility of hazardous reactions	Hazardous polymerization does not occur. Danger of dust explosion. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Conditions to avoid	None known.
Incompatible materials	None known.
Hazardous decomposition products	None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	Dermal. Inhalation. Ingestion. Eyes.
Symptoms	May cause irritation of the nose and throat. May cause respiratory irritation. Causes skin irritation. May cause eye irritation. Ingestion may cause gastrointestinal disturbances or obstructions.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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

Numerical measures of toxicity

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
Aluminum Oxide	-	-	> 5000 mg/kg (Rat)
Silicon Carbide	-	-	-
Ziroconium Oxide	-	-	-
Cured phenolic resin	-	-	-
Sodium aluminum fluoride	-	> 2000 mg/kg (Rabbit)	> 5 g/kg (Rat)
Iron Disulfide	-	-	-
Alkali aluminum fluorides	-	-	= 2150 mg/kg (Rat) Oral LD50 Rat 2150 mg/kg (Source: IUCLID)
Potassium Sulfate	-	-	= 6600 mg/kg (Rat)
Potassium Fluoroborate	-	-	= 5854 mg/kg (Rat)
Calcium Oxide	-	-	= 500 mg/kg (Rat)
Calcium Fluoride	-	-	= 4250 mg/kg (Rat)
Calcium Carbonate	-	-	= 6450 mg/kg (Rat)
Barium Sulfate	-	-	= 307000 mg/kg (Rat)
Graphite	-	-	> 10000 mg/kg (Rat)
Borosilicate Glass	-	-	-

ATEmix (dermal) Not available

ATEmix (oral) Not available

ATEmix (inhalation-gas) Not available

ATEmix (inhalation-vapor) Not available

ATEmix (inhalation-dust/mist) Not available

Carcinogenicity

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA RTK Carcinogens	NTP
Aluminum Oxide	A4	-	-	-
Silicon Carbide	A2	Group 2A	Listed	-
Ziroconium Oxide	A4	-	-	-
Cured phenolic resin	-	-	-	-
Sodium aluminum fluoride	A4	Group 2A Group 3	Listed	-
Iron Disulfide	-	-	-	-
Alkali aluminum fluorides	-	-	-	-
Potassium Sulfate	-	-	-	-
Potassium Fluoroborate	A4	Group 3	-	-
Calcium Oxide	-	-	-	-
Calcium Fluoride	A4	Group 3	-	-
Calcium Carbonate	-	-	-	-

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA RTK Carcinogens	NTP
Barium Sulfate	-	-	-	-
Graphite	-	-	-	-
Borosilicate Glass	A4	Group 3	-	-

Canadian Province carcinogenicity limits

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
Aluminum Oxide	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Silicon Carbide	A2 - Suspected Human Carcinogen (fibrous, including whiskers)	ACGIH A2	ACGIH A2	ACGIH A4	ACGIH A2	-
Ziroconium Oxide	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Cured phenolic resin	-	-	-	-	-	-
Sodium aluminum fluoride	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Iron Disulfide	-	-	-	-	-	-
Alkali aluminum fluorides	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Potassium Sulfate	-	-	-	-	-	-
Potassium Fluoroborate	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Calcium Oxide	-	-	-	-	-	-
Calcium Fluoride	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Calcium Carbonate	-	-	-	-	-	-
Barium Sulfate	-	-	-	-	-	-
Graphite	-	-	-	-	-	-
Borosilicate Glass	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish
Aluminum Oxide	-	-
Silicon Carbide	-	-
Ziroconium Oxide	-	-
Cured phenolic resin	-	-
Sodium aluminum fluoride	-	-
Iron Disulfide	-	-
Alkali aluminum fluorides	-	-
Potassium Sulfate	2900: 72 h Desmodesmus subspicatus mg/L EC50	653: 96 h Lepomis macrochirus mg/L LC50 3550: 96 h Lepomis macrochirus mg/L LC50 static 510 - 880: 96 h Pimephales promelas mg/L LC50 static
Potassium Fluoroborate	95: 96 h Desmodesmus subspicatus mg/L EC50	-
Calcium Oxide	-	1070: 96 h Cyprinus carpio mg/L LC50 static
Calcium Fluoride	-	-
Calcium Carbonate	-	-
Barium Sulfate	-	-
Graphite	-	-
Borosilicate Glass	-	-

Persistence and degradability Not available.

Bioaccumulation

Chemical name	CAS-No	Partition coefficient (log Kow)
Aluminum Oxide 1344-28-1	1344-28-1	-
Silicon Carbide 409-21-2	409-21-2	-
Ziroconium Oxide 1314-23-4	1314-23-4	-
Cured phenolic resin N/A	N/A	-
Sodium aluminum fluoride 15096-52-3	15096-52-3	-
Iron Disulfide 12068-85-8	12068-85-8	-
Alkali aluminum fluorides 60304-36-1	60304-36-1	-
Potassium Sulfate 7778-80-5	7778-80-5	-
Potassium Fluoroborate 14075-53-7	14075-53-7	-
Calcium Oxide 1305-78-8	1305-78-8	-
Calcium Fluoride 7789-75-5	7789-75-5	-
Calcium Carbonate 471-34-1	471-34-1	-
Barium Sulfate 7727-43-7	7727-43-7	-
Graphite 7782-42-5	7782-42-5	-
Borosilicate Glass 65997-17-3	65997-17-3	-

Mobility in soil Not available.

Other adverse effects No adverse affects expected

13. DISPOSAL CONSIDERATIONS

Disposal information Dispose in accordance with local, state and federal regulations.

Contaminated packaging Dispose in accordance with local, state and federal regulations.

14. TRANSPORTATION INFORMATION

Shipping Descriptions

DOT

Proper shipping name Not regulated

TDG

Proper shipping name Not regulated

IATA

Proper shipping name Not regulated

IMDG/IMO

Proper shipping name Not regulated

Marine Pollutants

Chemical name	CAS-No	USDOT Marine Pollutant	Canada TDG Marine Pollutant	IMDG Marine Pollutant
Aluminum Oxide	1344-28-1	-	-	-
Silicon Carbide	409-21-2	-	-	-
Ziroconium Oxide	1314-23-4	-	-	-
Cured phenolic resin	N/A	-	-	-
Sodium aluminum fluoride	15096-52-3	-	-	-
Iron Disulfide	12068-85-8	-	-	-
Alkali aluminum fluorides	60304-36-1	-	-	-
Potassium Sulfate	7778-80-5	-	-	-
Potassium Fluoroborate	14075-53-7	-	-	-
Calcium Oxide	1305-78-8	-	-	-
Calcium Fluoride	7789-75-5	-	-	-
Calcium Carbonate	471-34-1	-	-	-
Barium Sulfate	7727-43-7	-	-	-
Graphite	7782-42-5	-	-	-
Borosilicate Glass	65997-17-3	-	-	-

Special Precautions Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. REGULATORY INFORMATION

State regulations

U.S. state Right-to-Know regulations

Chemical name	CAS-No	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK
Aluminum Oxide	1344-28-1	X	X	X
Silicon Carbide	409-21-2	X	X	X
Ziroconium Oxide	1314-23-4	X	-	-
Cured phenolic resin	N/A	-	-	-
Sodium aluminum fluoride	15096-52-3	-	X	-
Iron Disulfide	12068-85-8	-	-	-
Alkali aluminum fluorides	60304-36-1	-	X	-
Potassium Sulfate	7778-80-5	-	-	-
Potassium Fluoroborate	14075-53-7	-	X	-
Calcium Oxide	1305-78-8	X	X	X
Calcium Fluoride	7789-75-5	-	X	-
Calcium Carbonate	471-34-1	X	X	X
Barium Sulfate	7727-43-7	X	X	X
Graphite	7782-42-5	X	X	X
Borosilicate Glass	65997-17-3	-	-	-

California Prop. 65

Chemical name	CAS-No	California Prop. 65
Aluminum Oxide	1344-28-1	-
Silicon Carbide	409-21-2	-
Ziroconium Oxide	1314-23-4	-
Cured phenolic resin	N/A	-
Sodium aluminum fluoride	15096-52-3	-
Iron Disulfide	12068-85-8	-
Alkali aluminum fluorides	60304-36-1	-
Potassium Sulfate	7778-80-5	-
Potassium Fluoroborate	14075-53-7	-
Calcium Oxide	1305-78-8	-
Calcium Fluoride	7789-75-5	-
Calcium Carbonate	471-34-1	-
Barium Sulfate	7727-43-7	-
Graphite	7782-42-5	-
Borosilicate Glass	65997-17-3	-

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. Federal Regulations

US EPA SARA 313

Chemical name	CAS-No	CERCLA/SARA Hazardous Substances RQ	SARA 313 - Threshold Values
Aluminum Oxide	1344-28-1	-	1.0 %
Silicon Carbide	409-21-2	-	-
Ziroconium Oxide	1314-23-4	-	-
Cured phenolic resin	N/A	-	-
Sodium aluminum fluoride	15096-52-3	-	-
Iron Disulfide	12068-85-8	-	-
Alkali aluminum fluorides	60304-36-1	-	-
Potassium Sulfate	7778-80-5	-	-
Potassium Fluoroborate	14075-53-7	-	-
Calcium Oxide	1305-78-8	-	-
Calcium Fluoride	7789-75-5	-	-
Calcium Carbonate	471-34-1	-	-
Barium Sulfate	7727-43-7	-	1.0 %
Graphite	7782-42-5	-	-
Borosilicate Glass	65997-17-3	-	-

US EPA SARA 311/312 hazardous categorization Not applicable

Chemical name	DSL/NDSL	Inventory - United States - Section 8(b) Inventory (TSCA)	U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification
Aluminum Oxide	X	X	-
Silicon Carbide	X	X	-
Ziroconium Oxide	X	X	-
Cured phenolic resin	-	-	-
Sodium aluminum fluoride	X	X	-

Chemical name	DSL/NDSL	Inventory - United States - Section 8(b) Inventory (TSCA)	U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification
Iron Disulfide	X	X	-
Alkali aluminum fluorides	X	X	-
Potassium Sulfate	X	X	-
Potassium Fluoroborate	X	X	-
Calcium Oxide	X	X	-
Calcium Fluoride	X	X	-
Calcium Carbonate	X	X	-
Barium Sulfate	X	X	-
Graphite	X	X	-
Borosilicate Glass	X	X	-

Legend X - Listed

16. OTHER INFORMATION

NFPA

Health	Not available
Flammability	Not available
Instability	Not available

HMIS

Health	Not available
Flammability	Not available
Physical hazards	Not available

Notice: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

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Revision note

Key to abbreviations

ACGIH (American Conference of Governmental Industrial Hygienists)
ATE (Average Toxicity Estimate)
DSL/NDSL (Domestic Substance List/Non-Domestic Substance List)
HMIS (Hazardous Materials Identification System)
IARC (International Agency for Research on Cancer)
IATA (International Air Transport Association)
IMDG/IMO (International Maritime Dangerous Goods/International Maritime Orgnaization)
NFPA (National Fire Protection Association)
NTP (National Toxicology Program)
OEL (Occupational Exposure Level)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
TSCA (Toxic Substance Control Act)
USEPA (United States Environmental Protection Agency)

Disclaimer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

End of Safety Data Sheet