SECTION 1. IDENTIFICATION

GHS product identifier	UltraSiC LP (SC-51) Fired Ceramic
Other means of identification	Fired SC-51, fired liquid phase sintered silicon carbide
Product type	Solid
RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST	
Identified uses	Wear resistant, corrosion resistant, temperature resistant products
Supplier's details	CoorsTek, Inc. 14143 Denver West Parkway, Suite 400 Golden, CO 80401 Phone: +1 303 271 7100 Fax: +1 303 271 7009 Email: coorsteksds@coorstek.com Website: www.coorstek.com
Emergency telephone number (with hours of operation)	+1 303 271 7100 7am-5pm MDT (M-F)

SECTION 2. HAZARDS IDENTIFICATION

OSHA/HCS status	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	Not classified
GHS LABEL ELEMENTS	
Signal word	No signal word
Hazard statements	No known significant effects or critical hazards
PRECAUTIONARY STATEMENTS	
Prevention	Not applicable
Response	Not applicable
Storage	Not applicable
Disposal	Not applicable
Hazards not otherwise classified	None known

Conforms to HCS 2012 - United States

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture Mixture

Other means of identification Fired SC-51, fired liquid phase sintered silicon carbide

CAS NUMBER/OTHER IDENTIFIERS

CAS number Not applicable

Product code Not available

INGREDIENT NAME	%	CAS NUMBER
Silicon carbide	85 - 95	409-21-2
Yttrium oxide	2.5 - 7.5	1314-36-9
Aluminium oxide	2.5 - 7.5	1344-28-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation. There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

DESCRIPTION OF NECESSARY FIRST AID MEASURES

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.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.

Ingestion Not a likely route of exposure. However if ingestion occurs, seek medical attention.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

Potential acute health effects

Eye contact No known significant effects or critical hazards

Inhalation No known significant effects or critical hazards

Skin contact No known significant effects or critical hazards

Ingestion No known significant effects or critical hazards

Over-exposure signs/symptoms

Eye contact No known significant effects or critical hazards

Inhalation No known significant effects or critical hazards

Skin contact No known significant effects or critical hazards

Ingestion No known significant effects or critical hazards

SECTION 4. FIRST AID MEASURES CONTINUED

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. See toxicological information (Section 11).

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known
Specific hazards arising from the chemical	No specific fire or explosion hazard
Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide, carbon monoxide, metal oxide/oxides
Special protective actions for firefighters	No special protection is required.
Special protective equipment for firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

For non-emergency personnel	No special protection is required. Do not touch or walk through spilled material.
For emergency responders	No special protection is required.
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Spill	Prevent entry into sewers, water courses, basements, or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, `including any incompatibilities	Store in accordance with local regulations. Keep container tightly closed and sealed until ready for use.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

Occupational exposure limits	None
Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

INDIVIDUAL PROTECTION MEASURES

Hygiene measures	Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory, and at the end of the working period.
Eye/face protection	If cutting, grinding, or crushing this article, wear safely glasses and/or a face shield and employ good management practices consistent with safe machinery operation procedures.

SKIN PROTECTION

Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	Not required under normal conditions of use
Other skin protection	Not required under normal conditions of use
Respiratory protection	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Physical state	Solid [Opaque]
Color	Gray
Odor	None
Odor threshold	Not applicable
pH	Not applicable
Melting point	Not available
Boiling point	Not available
Flash point	Not available
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable
Lower and upper explosive (flammable) limits	Not applicable
Vapor pressure	Not available
Vapor density	Not applicable
Relative density	3.18 to 3.3
Solubility	Insoluble in the following materials: cold water and hot water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	No specific data
Incompatible materials	None known
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity There is no data available

Irritation/Corrosion There is no data available.

Sensitization There is no data available.

Mutagenicity There is no data available.

CARCINOGENICITY

Classification

PRODUCT/INGREDIENT NAME	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Silicon carbide	-	2A	-	A2	-	-
Aluminium oxide	-	-	-	A4	-	-

Reproductive toxicity There is no data available.

Teratogenicity There is no data available.

Specific target organ toxicity (single exposure) There is no data available.

Specific target organ toxicity (repeated exposure) There is no data available.

Aspiration hazard There is no data available.

Information on the likely routes of exposure Dermal contact

POTENTIAL ACUTE HEALTH EFFECTS

Eye contact No known significant effects or critical hazards

Inhalation No known significant effects or critical hazards

Skin contact No known significant effects or critical hazards

Ingestion No known significant effects or critical hazards

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Eye contact No known significant effects or critical hazards

Inhalation No known significant effects or critical hazards

Skin contact No known significant effects or critical hazards

Ingestion No known significant effects or critical hazards

SECTION 11. TOXICOLOGICAL INFORMATION CONTINUED

DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT AND LONG TERM EXPOSURE

Short term exposure

Potential immediate effects	No known significant effects or critical hazards
Potential delayed effects	No known significant effects or critical hazards

Long term exposure

Potential immediate effects	No known significant effects or critical hazards
Potential delayed effects	No known significant effects or critical hazards

Potential chronic health effects

General	No known significant effects or critical hazards
Carcinogenicity	No known significant effects or critical hazards
Mutagenicity	No known significant effects or critical hazards
Teratogenicity	No known significant effects or critical hazards
Developmental effects	No known significant effects or critical hazards
Fertility effects	No known significant effects or critical hazards

NUMERICAL MEASURES OF TOXICITY

Acute toxicity estimates	There is no data available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity	There is no data available.
Persistence and degradability	There is no data available.
Bioaccumulative potential	There is no data available.

MOBILITY IN SOIL

Soil/water partition coefficient (K_{OC})	Not available
Other adverse effects	No known significant effects or critical hazards

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions, and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

SECTION 14. TRANSPORT INFORMATION

	DOT CLASSIFICATION	IMDG	IATA
UN number	Not regulated	Not regulated	Not regulated
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No	No	No
Additional information	-	-	-

AERG : Not applicable

Special precautions for user Transport within user's premises: 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.

SECTION 15. REGULATORY INFORMATION

U.S. Federal regulations	TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are listed or exempted.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	Not listed
Clean Air Act Section 602 Class I Substances	Not listed
Clean Air Act Section 602 Class II Substances	Not listed
DEA List I Chemicals (Precursor Chemicals)	Not listed
DEA List II Chemicals (Essential Chemicals)	Not listed
SARA 302/304	
Composition/information on ingredients	No products were found.
SARA 304 RQ	Not applicable
SARA 311/312	
Classification	Not applicable
SARA 313	There is no data available.
STATE REGULATIONS	
Massachusetts	The following components are listed: Silicon carbide; Aluminium oxide
New York	None of the components are listed.
New Jersey	The following components are listed: Silicon carbide; Aluminium oxide
Pennsylvania	The following components are listed: Silicon carbide; Aluminium oxide
California Prop. 65	No products were found.

SECTION 16. OTHER INFORMATION

Procedure used to derive the classification

CLASSIFICATION	JUSTIFICATION
Not classified	-

HISTORY

Date of issue mm/dd/yyyy	06/15/2017
Version	1
Prepared by	KMK Regulatory Services Inc.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.