



SAFETY DATA SHEET - SIMIX CERAMIC FLOOR COATING

1 . IDENTIFICATION

Product Identifier: SIMIX - SMX 4400 SIMIX CERAMIC FLOOR COATING
Other Means of Identification: None
Recommended Use: All proper and legal purposes
Recommended restrictions: None known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Simix Solutions LLC
Address 9180 Prairie Village Drive
Kenosha, WI 53142 USA
Website simixusa.com
Telephone 262-705-2585
Email jeff@simixusa.com
Emergency number 262-705-2585

2 . HAZARDS IDENTIFICATION

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 Eye 1 - H318 Causes serious eye damage
Acute Toxicity 4 - H302 Harmful if swallowed
Skin Irritation 2 - H315 Causes skin irritation
STOT SE 3 - H335 May cause respiratory irritation.

Label Elements

OSHA HCS 2012

DANGER



Hazard statements

H302 Harmful if swallowed.
H315 Causes skin irritation
H318 Causes serious eye damage
H335 May cause respiratory irritation

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Precautionary statements	P103 Read label before use. P102 Keep out of reach of children.
Prevention	P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area
Response	P310 Immediately call a doctor or POISON CENTER. P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P330 Rinse mouth P302+P352 IF ON SKIN: Wash with plenty of water. P332+P313 If skin irritation occurs: Get medical advice/attention. P304+P340 IF INHALED: Remove victim to fresh air and place in comfortable position for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P362+P364 Take off contaminated clothing and wash it before reuse.
Storage/Disposal	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulation
Other hazards OSHA HCS 2012	Under United States Regulations (29 CFR 1910.1200 Hazard Communication Standard), this product is considered hazardous.

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Canada

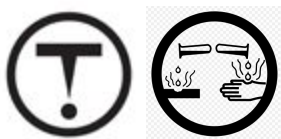
According to WHMIS

Classification of the substance or mixture

WHMIS D2B Other toxic effects
E Corrosive material

Label elements

WHMIS



D2B Other toxic effects: Skin Sensitization — Allergic skin reaction and Skin/Eye Irritation — Reversible damage
E Corrosive material: Can cause severe burns to skin and other human tissues such as the eye or lung, and can attack clothes and other materials.

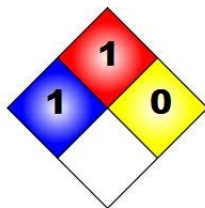
Other hazards

WHMIS

In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Other information

NFPA





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3. COMPOSITION / INFORMATION ON INGREDIENTS**Substances** Material does not meet the criteria of a substance.**Mixtures**

Chemical name	Identifiers	% weight	LD50/LC50	Classifications According to Regulation/Directive	Comments
Potassium silicate	CAS 1312-76-1	10-40%	Oral LD50 > 5000 mg/kg (rat)	OSHA HCS 2012: H318: Eye damage 1 H315: Skin Irritation 2 H335 STOT SE 3	NDA
Potassium methyl silicate	CAS 31795-24-1	1-10%	Oral LD50: > 2000 mg/kg (rat)	OSHA HCS 2012: H314: Skin burns, eye damage	NDA
Titanium dioxide	CAS 13463-67-7	<.1%	Oral, rat: LD50 > 10 g/kg	OSHA HCS 2012: Skin Irrit, 2, H317	NDA

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, with the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or to the environment, and hence require reporting in this section.

4. FIRST-AID MEASURES**Description of first-aid measures**

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek immediate medical attention.

Skin In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek immediate medical attention.

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Eye In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.

Ingestion If swallowed, do not induce vomiting. Give a glass of water. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

5 . FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide, dry chemical, foam and water fog.

Unsuitable Extinguishing Media: Avoid the use of streaming water, as this may spread the fire.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

Hazardous decomposition products include flammable hydrogen gas.

Hazardous Combustion Products: None known.

Special Protective Equipment and Precautions for Firefighters: When fighting a major fire wear self-contained breathing apparatus and protective equipment.

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6 . ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all nonessential personnel from affected area. Do not breathe vapors. Ensure adequate ventilation.

Emergency procedures:

In the event of a major spill, prevent spillage from entering drains or water courses.

Environmental precautions:

Avoid runoff to waterways and sewers.

Methods and Materials for Containment and Cleaning Up:

Containment/Clean-up Measures

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Use only non-sparking tools. Use vacuum equipment with HEPA filters or wet sweeping/dust suppressant if sweeping is required. Flush area with water.

7 . HANDLING AND STORAGE

Precautions for safe handling

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for safe storage, including any incompatibilities

Storage

Store in a cool, dry and well ventilated area. Keep in original container tightly closed when not in use. Do not store in aluminum, fiberglass, copper, brass, zinc, or galvanized containers. Keep from freezing.

Incompatible Materials or Ignition Sources

Avoid contact with acids.

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8 . EXPOSURE CONTROLS/PERSONAL PROTECTION

	ACGIH	Canada Ontario	Canada Quebec	NIOSH	OSHA
Titanium dioxide 13463-67-7	10 mg/m ³ TWA	10 mg/m ³	10 mg/m ³	5,000 mg/m ³	15 mg/m ³ TWA

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Exposure in the workplace limited and controlled

General protection and hygiene measures:

- Avoid contact with eyes and skin.
- Do not inhale vapors.
- Do not eat or drink when handling.
- Remove contaminated, soaked clothing immediately.
- Ensure adequate ventilation of the working area.

Exposure Controls

Engineering Measures

Distribution, Workplace and Household Settings: Ensure adequate ventilation

Product Manufacturing Plant (needed at Product-Producing Plant ONLY): Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction



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Personal Protective Equipment

Eye Protection

Distribution, Workplace and Household Settings: No special protective equipment required.

Product Manufacturing Plant (needed at Product-Producing Plant ONLY): Use appropriate eye protection

Hand Protection

Distribution, Workplace and Household Settings: For sensitive skin or prolonged use, wear gloves

Product Manufacturing Plant (needed at Product-Producing Plant ONLY): Protective gloves

Skin and Body Protection

Distribution, Workplace and Household Settings: No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY): Wear suitable protective clothing

Respiratory Protection

Distribution, Workplace and Household Settings: No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY): In case of insufficient ventilation wear suitable respiratory equipment

9 . PHYSICAL AND CHEMICAL PROPERTIES

Physical form: Liquid

Appearance/Description: Slightly hazy liquid

Colour: Slightly hazy

Odor: Mild

Odor threshold: Not determined

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Taste: Not relevant

Particulate size: Not determined

Aerosol type: Not relevant

General properties:

Initial Boiling Point/Boiling Range: Not determined

Melting point/Melting range: Not determined

Decomposition temperature: Data lacking

Heat of decomposition: Data lacking

pH-Value (1 g/l) : 11.2

Specific gravity: Data lacking

Relative density: Data lacking

Density: Not determined

Bulk density: Not determined

Water solubility: Soluble

Solvent solubility: Data lacking

Viscosity: Not relevant

Explosive properties: Classification criteria not met

Oxidizing properties: Classification criteria not met

Volatility

Vapour Pressure: Not applicable

Vapor density: Not applicable

Evaporation Rate: Not applicable

VOC: Not applicable

Volatiles: Data lacking

Flammability

Flash Point: Not applicable

UEL: Not applicable

LEL: Not applicable

Self-Accelerating Decomposition Temperature (SADT): Data lacking

Heat of Combustion (ΔH_c): Not applicable

Burning Time: Not applicable

Flame Duration: Not applicable

Flame height: Not applicable

Flame extension: Not applicable

Ignition distance: Not applicable

Flammability: Contact with combustible material may cause fire.

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Environmental

- Half-Life:** Data lacking
- Octanol/Water Partition:** Data lacking
- Coefficient of water/oil distribution:** Data lacking
- Bioaccumulation Factor:** Data lacking
- Bioconcentration Factor:** Data lacking
- Biochemical Oxygen Demand:** Data lacking
- Chemical Oxygen Demand:** Data lacking
- Persistence:** Data lacking
- Degradation:** Data lacking

10 . STABILITY AND REACTIVITY

Reactivity	No dangerous reaction known under conditions of normal use.
Chemical stability	Stable at ambient temperature and under normal conditions of use.
Possibility of hazardous reactions	Hazardous polymerisation will not occur.
Conditions to avoid	No further relevant information available.
Incompatible materials	Strong acids, aluminum, fiberglass, copper, brass, zinc
Hazardous decomposition products	Flammable hydrogen gas



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11 . TOXICOLOGICAL INFORMATION

Information on toxicological effects

Component name	CAS	Data
Potassium silicate	1312-76-1	Oral LD50 = 1300 mg/kg (rat)
Titanium dioxide	13463-67-7	Oral, rat: LD50 > 10 g/kg

GHS Properties	Classification
Acute toxicity	Classification criteria not met
Aspiration hazard	Classification criteria not met
Carcinogenicity	No data available
Germ Cell Mutagenicity	No data available
Respiratory sensitization	May cause respiratory irritation
Serious eye damage/Irritation	Causes serious eye damage
Skin corrosion/Irritation	May cause skin irritation
Skin sensitization	May cause skin irritation
STOT-RE	No data available
STOT-SE	May cause respiratory irritation
Toxicity for Reproduction	No data available

Route(s) of entry/exposure Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

Acute (Immediate) May cause irritation to mouth, throat and respiratory tract.

Chronic (Delayed) May cause delayed lung damage.

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Skin

Acute (Immediate)

Causes skin irritation.

Chronic (Delayed)

Repeated and prolonged exposure may cause dermatitis.

Eye

Acute (Immediate)

Causes eye irritation, pain, tearing, reddening and swelling and serious eye damage.

Chronic (Delayed)

No data available.

Ingestion

Acute (Immediate)

nausea,

Harmful if swallowed. May cause gastrointestinal irritation,

vomiting and diarrhea.

Chronic (Delayed)

No data available.

12 . ECOLOGICAL INFORMATION

Toxicity

Material data lacking.

Persistence and degradability

Material data lacking.

Bioaccumulative potential

Material data lacking.

Mobility in Soil

Material data lacking.

Other adverse effects

No studies have been found.

Other Information

No data is available on the adverse effects of this material on the environment.

13 . DISPOSAL CONSIDERATIONS

Waste treatment methods

Product waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

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14 . TRANSPORT INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	Not regulated	Not regulated	Not regulated	Not regulated	NDA
TDG	Not regulated	Not regulated	Not regulated	Not regulated	NDA
IMO/IMDG	Not regulated	Not regulated	Not regulated	Not regulated	NDA
IATA/ICAO	Not regulated	Not regulated	Not regulated	Not regulated	NDA

**Special precautions for user
Transport in bulk according
to Annex II of MARPOL 73/78
and the IBC Code**

None specified.
Product only provided in non-bulk containers.

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15 . REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

National and local regulations must be observed.

For information on labelling please refer to section 2 of this document.

State Right To Know

Component	CAS	MA	NJ	PA	CA
Potassium silicate	1312-76-1	No	No	No	No
Titanium oxide (TiO ₂)	13463-67-7	No	Yes	Yes	Yes

Component	CAS	Canada DSL	Canada NDSL	TSCA
Potassium silicate	1312-76-1	Yes	No	Yes
Titanium oxide (TiO ₂)	13463-67-7	Yes	No	No

Australian Inventory of Chemical Substances:

Substance	CAS
Silicic acid, potassium salt	1312-76-1
Titanium oxide (TiO ₂)	13463-67-7

Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

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South Korea (Republic of Korea) ECL (Existing Chemicals List):

This product is listed in, or complies with, the substance inventory.

Japan ENCS (Handbook of Existing and New Chemical Substances):

This product is listed in, or complies with, the substance inventory.

Australia AICS (Australian Inventory of Chemical Substances):

This product is listed in, or complies with, the substance inventory.

People's Republic of China ECSC (Inventory of Existing Chemical Substances in China):

This product is listed in, or complies with, the substance inventory.

Canada DSL (Domestic Substance List):

This product is listed in, or complies with, the substance inventory.

Philippines PICCS (Philippine Inventory of Chemicals and Chemical Substances):

This product is listed in, or complies with, the substance inventory.

USA TSCA (Toxic Substance Control Act Chemical Substance Inventory):

This product is listed in, or complies with, the substance inventory.

European Economic Area (EEA) REACH (Regulation (EC))

General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.

16. OTHER INFORMATION

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstance of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

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