SAFETY DATA SHEET
according to the OSHA Hazard Communication Standard

BUILDING TRUST

SikaFlow-649 Part C Formerly MFlow 649 GROUT

Version	Revision Date:	SDS Number:	Date of last issue: 09/02/2020
2.0	03/19/2024	000000259962	Date of first issue: 09/02/2020

SECTION 1. IDENTIFICATION

Product name : SikaFlow-649 Part C Formerly MFlow 649 GROUT

Product code : 000000000055360873

Manufacturer or supplier's details

Company name of supplier : Sika MBCC US LLC

Address : 201 POLITO AVE
Lyndhurst NJ 07071

Emergency telephone : ChemTel: +1-813-248-0585

Recommended use of the chemical and restrictions on use

Recommended use : Grouting applications

Restrictions on use : Reserved for industrial and professional use.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity (Inhalation) : Category 1A

Specific target organ toxicity - repeated exposure (Inhalation) : Category 1 (Lungs)

Specific target organ toxicity - repeated exposure (Inhalation) : Category 2 (Kidney, Immune system)

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H350 May cause cancer by inhalation.
H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.
H373 May cause damage to organs (Kidney, Immune system) through prolonged or repeated exposure if inhaled.

Precautionary Statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	CAS-No.	Concentration (% w/w)
crystalline silica	14808-60-7	>= 70 - < 90
Glass, oxide, chemicals	65997-17-3	>= 5 - < 10
Barium sulfate	7727-43-7	>= 5 - < 10

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : First aid personnel should pay attention to their own safety.
Immediately remove contaminated clothing.

If inhaled : After inhalation of dust.
Keep patient calm, remove to fresh air, seek medical attention.

In case of skin contact : After contact with skin, wash immediately with plenty of water and soap.
Under no circumstances should organic solvent be used.
If irritation develops, seek medical attention.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
Keep eye wide open while rinsing.
Remove contact lenses, if present.

Seek medical advice.

If swallowed : Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.
Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed : May cause cancer by inhalation.
Causes damage to organs through prolonged or repeated exposure if inhaled.
Prolonged or repeated inhalation of respirable crystalline silica (quartz) may result in silicosis.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Foam
Water spray
Dry powder
Carbon dioxide (CO2)

Unsuitable extinguishing media : water jet

Hazardous combustion products : harmful vapours
nitrogen oxides
fumes/smoke
carbon black
carbon oxides

Further information : The degree of risk is governed by the burning substance and the fire conditions.
If exposed to fire, keep containers cool by spraying with water.
Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.
Contaminated extinguishing water must be disposed of in accordance with official regulations.

Special protective equipment for fire-fighters : Wear a self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Do not breathe dust.
Wear appropriate respiratory protection.
Wear eye/face protection.
Use personal protective clothing.
Handle in accordance with good building materials hygiene and safety practice.

Environmental precautions : Contain contaminated water/firefighting water.

Do not discharge into drains/surface waters/groundwater.

Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal.
Avoid raising dust.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Avoid dust formation.
Dust can form an explosive mixture with air.
Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.
Keep away from sources of ignition - No smoking.

Advice on safe handling : Avoid dust formation.
Do NOT breathe dust because it is hazardous to respiratory system.
Wear suitable respiratory protection.
Avoid contact with skin and eyes.
Wear suitable protective clothing and eye/face protection.
Provide sufficient air exchange and/or exhaust in work rooms.

Conditions for safe storage : Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame.
Protect from direct sunlight.
Keep tightly closed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
crystalline silica	14808-60-7	TWA (Respirable dust)	0.05 mg/m3	OSHA Z-1
		TWA (respirable)	10 mg/m3 / %SiO2+2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO2+5	OSHA Z-3
		TWA (respirable dust fraction)	0.1 mg/m3	OSHA P0
		TWA (Respirable particulate matter)	0.025 mg/m3 (Silica)	ACGIH
		TWA (Respirable dust)	0.05 mg/m3 (Silica)	NIOSH REL
		PEL (respir-	0.05 mg/m3	OSHA CARC

		able)		
Glass, oxide, chemicals	65997-17-3	TWA (fibers)	1 fibres per cubic centimeter	ACGIH
		TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
		TWA (fibers)	1 fibres per cubic centimeter	ACGIH
		TWA (fibers)	1 fibres per cubic centimeter	ACGIH
Barium sulfate	7727-43-7	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH
		TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0

Engineering measures : Ensure adequate ventilation.

Personal protective equipment

Respiratory protection : Wear appropriate certified respirator when exposure limits may be exceeded.
Wear a NIOSH-certified (or equivalent) particulate respirator.

Hand protection

Remarks : Chemical resistant protective gloves. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection : Wear safety glasses with side shields or goggles.

Skin and body protection : Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

Protective measures : Do not inhale dust/fumes/aerosols.
Avoid contact with the skin, eyes and clothing.
Avoid exposure.
Handle in accordance with good building materials hygiene and safety practice.
Wearing of closed work clothing is recommended.

Hygiene measures	:	When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	granules
Color	:	gray
Odor	:	odorless
Odor Threshold	:	Not applicable
pH	:	neutral to slightly alkaline
Melting point/freezing point	:	No data available
Boiling point	:	Not applicable
Flash point	:	does not flash
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Not classified as a flammability hazard
Self-ignition	:	not self-igniting
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	No data available

Bulk density	:	1,800 - 2,400 kg/m3
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	not applicable for mixtures
Autoignition temperature	:	No data available
Decomposition temperature	:	No decomposition if stored and handled as prescribed/indicated.
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive
Oxidizing properties	:	Based on its structural properties the product is not classified as oxidizing.
Self-heating substances	:	No data available
Sublimation point	:	No data available
Molecular weight	:	Not applicable
Particle characteristics		
Particle size	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No hazardous reactions if stored and handled as prescribed/indicated.
Chemical stability	:	The product is stable if stored and handled as prescribed/indicated.
Possibility of hazardous reactions	:	The product is stable if stored and handled as prescribed/indicated.
Conditions to avoid	:	See SDS section 7 - Handling and storage.
Incompatible materials	:	Strong acids Strong bases

Strong oxidizing agents
Strong reducing agents

Hazardous decomposition products : No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified due to lack of data.

Skin corrosion/irritation
Not classified due to lack of data.

Serious eye damage/eye irritation
Not classified due to lack of data.

Respiratory or skin sensitization

Skin sensitization
Not classified due to lack of data.

Respiratory sensitization
Not classified due to lack of data.

Germ cell mutagenicity
Not classified due to lack of data.

Carcinogenicity
May cause cancer by inhalation.

IARC	Group 1: Carcinogenic to humans crystalline silica (Silica dust, crystalline)	 14808-60-7
OSHA	OSHA specifically regulated carcinogen crystalline silica (crystalline silica)	 14808-60-7
NTP	Known to be human carcinogen crystalline silica (Silica, Crystalline (Respirable Size))	 14808-60-7

Reproductive toxicity
Not classified due to lack of data.

STOT-single exposure
Not classified due to lack of data.

STOT-repeated exposure

Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.
May cause damage to organs (Kidney, Immune system) through prolonged or repeated exposure if inhaled.

Aspiration toxicity

Not classified due to lack of data.

Further information

Product:

Remarks : Health injuries are not known or expected under normal use. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Not classified based on available information.

Chronic aquatic toxicity : Not classified based on available information.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with national, state and local regulations.
Do not discharge into drains/surface waters/groundwater.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation

49 CFR
Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Barium sulfate	7727-43-7	1000	19027

US State Regulations

Pennsylvania Right To Know

crystalline silica	14808-60-7
Glass, oxide, chemicals	65997-17-3
Barium sulfate	7727-43-7

New Jersey Right To Know

crystalline silica	14808-60-7
Glass, oxide, chemicals	65997-17-3
Barium sulfate	7727-43-7

California Prop. 65

WARNING: This product can expose you to chemicals including crystalline silica, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

The ingredients of this product are reported in the following inventories:

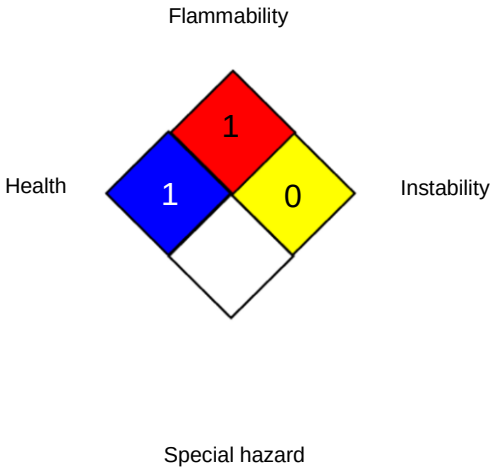
TSCA : All substances listed as active on the TSCA inventory

DSL	:	All components of this product are on the Canadian DSL

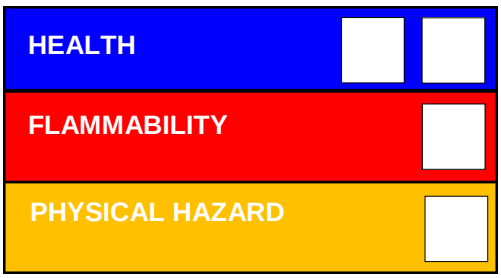
SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA CARC	:	OSHA Specifically Regulated Chemicals/Carcinogens
OSHA P0	:	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	:	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA CARC / PEL	:	Permissible exposure limit (PEL)
OSHA P0 / TWA	:	8-hour time weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average
OSHA Z-3 / TWA	:	8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely

Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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