670HS Karna-Sil Ultra

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.
Issue date: 12/31/2021 Revision date: 07-24-2024 Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : 670HS Karna-Sil Ultra

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Building and construction work

1.3. Supplier

Manufacturer
Karnak Corporation
330 Central Avenue
Clark, New Jersey 07066 - USA
T +1-800-526-4236
karnakcorp.com

1.4. Emergency telephone number

24 Hour Emergency Number

VelocityEHS (US Transportation): (800) 255-3924
Outside U.S., Canada, Puerto Rico, U.S. Virgin Islands 1-813-248-0585

Australia 1-300-954-583; Brazil 0-800-591-6042; China 400-120-0751; India 000-800-100-4086; Mexico 800-099-0731

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flam. Liq. 3	Flammable liquid and vapor
Skin Sens. 1	May cause an allergic skin reaction
Repr. 2	Suspected of damaging fertility or the unborn child

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Warning
Hazard statements (GHS US) : Flammable liquid and vapor
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child

Precautionary statements (GHS US) : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If exposed or concerned: Get medical advice/attention.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Octamethylcyclotetrasiloxane	CAS-No.: 556-67-2	5 – 10
Titanium Dioxide	CAS-No.: 13463-67-7	5 – 10
2-Butanone, O,O',O''-(methylsilylidyne)trioxime	CAS-No.: 22984-54-9	1 – 5
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine	CAS-No.: 1760-24-3	< 1
MOS Dimer	CAS-No.: Trade Secret	< 1

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash clothing before re-using. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause an allergic skin reaction.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms : Suspected of damaging fertility or the unborn child

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry chemical. Carbon dioxide (CO2). Water.

Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor. Products of combustion may include, and are not limited to: oxides of carbon. Nitrogen oxides. Hydrocarbons.

Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Cool closed containers exposed to fire with water spray.

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Remove all sources of ignition. Use only non-sparking tools.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Remove ignition sources. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling	:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Handle and open container with care. When using do not eat, drink or smoke. Use non-sparking tools.
Hygiene measures	:	Take off immediately all contaminated clothing and wash it before reuse. Wash hands, forearms and face thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Proper grounding procedures to avoid static electricity should be followed.
Storage conditions	:	Keep out of the reach of children. Store tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Keep away from sources of ignition. Avoid condensation. Store locked up.
Storage temperature	:	Avoid storage above 100˚F.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

670HS Karna-Sil Ultra

No additional information available

Titanium Dioxide (13463-67-7)

USA - ACGIH - Occupational Exposure Limits

Local name	Titanium dioxide
ACGIH OEL TWA	10 mg/m³
Remark (ACGIH)	TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2020

USA - OSHA - Occupational Exposure Limits

Local name	Titanium dioxide (Total dust)
OSHA PEL (TWA) [1]	15 mg/m³ (total dust)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Octamethylcyclotetrasiloxane (556-67-2)

No additional information available

2-Butanone, O,O',O''-(methylsilylidyne)trioxime (22984-54-9)

No additional information available

N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine (1760-24-3)

No additional information available

MOS Dimer (Trade Secret)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	:	Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Wear suitable gloves resistant to chemical penetration
Eye protection:
Safety glasses or goggles are recommended when using product.
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	No data available
Odor	:	No data available
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	342 – 385 °F
Flash point	:	134 °F (min)
Relative evaporation rate (butyl acetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Flammability (solid, gas)	:	Flammable liquid and vapor.
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Sources of ignition. Direct sunlight. Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents. Nitric acid. Sulfuric acid. Halogens. molten sulfur.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Nitrogen oxides. Hydrocarbons. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Titanium Dioxide (13463-67-7)	
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)
LC50 inhalation rat	5.09 mg/l/4h

Octamethylcyclotetrasiloxane (556-67-2)	
LD50 oral rat	1540 mg/kg
LD50 dermal rat	> 2375 mg/kg
LC50 inhalation rat	36 mg/l/4h

2-Butanone, O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
LD50 dermal rat	> 2000 mg/kg

N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine (1760-24-3)	
LD50 oral rat	2413 mg/kg
LD50 dermal rabbit	> 2009 mg/kg
LC50 inhalation rat	1.49 – 2.44 mg/l air Animal: rat, Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity), Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Suspected of damaging fertility or the unborn child.
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified

N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine (1760-24-3)	
NOAEL (oral,rat,90 days)	≥ 500 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (dermal,rat/rabbit,90 days)	≥ 1545 mg/kg body weight Animal: rat
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

MOS Dimer (Trade Secret)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	:	Not classified
Viscosity, kinematic	:	No data available
Symptoms/effects after inhalation	:	May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	:	May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause an allergic skin reaction.
Symptoms/effects after eye contact	:	May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion	:	May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	:	Suspected of damaging fertility or the unborn child
Other information	:	Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Titanium Dioxide (13463-67-7)	
LC50 - Fish [1]	155 mg/l Test organisms (species): other:Japanese Medaka
EC50 - Crustacea [1]	19.3 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	> 100 mg/l Test organisms (species):
EC50 - Crustacea [2]	27.8 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	5 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 2.92 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Octamethylcyclotetrasiloxane (556-67-2)	
LC50 - Fish [1]	> 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
EC50 - Crustacea [1]	> 15 µg/l Test organisms (species): Daphnia magna
LC50 - Fish [2]	> 1000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

2-Butanone, O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
EC50 - Crustacea [1]	> 120 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	> 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

2-Butanone, O,O',O''-(methylsilylidyne)trioxime (22984-54-9)	
NOEC chronic fish	≥ 100 mg/l Test organisms (species): Oryzias latipes Duration: '14 d'

N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine (1760-24-3)	
LC50 - Fish [1]	597 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	81 mg/l Test organisms (species): Daphnia magna

12.2. Persistence and degradability

670HS Karna-Sil Ultra	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

670HS Karna-Sil Ultra	
Bioaccumulative potential	Not established.

Octamethylcyclotetrasiloxane (556-67-2)	
BCF - Fish [1]	12400
Partition coefficient n-octanol/water	5.1

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information : Handle empty containers with care because residual vapors are flammable.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No : Not regulated (if shipped in NON BULK packaging by ground transport) per DOT Exemption 173.150(1)(f)

UN-No. (TDG) : Not regulated (if shipped in NON BULK packaging by ground transport) per TDG Exemption 1.33

UN-No. (IMDG) : 1993

UN-No. (IATA) : 1993

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated (if shipped in NON BULK packaging by ground transport) per DOT Exemption 173.150(1)(f)

Proper Shipping Name (TDG) : Not regulated (if shipped in NON BULK packaging by ground transport) per TDG Exemption 1.33

Proper Shipping Name (IMDG) : FLAMMABLE LIQUIDS, N.O.S. (Octamethylcyclotetrasiloxane)

Proper Shipping Name (IATA) : FLAMMABLE LIQUIDS, N.O.S. (Octamethylcyclotetrasiloxane)

*Flammable for Air and Vessel transportation to non-US territories.

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not regulated

Hazard labels (DOT) : Not regulated

TDG

Transport hazard class(es) (TDG) : Not regulated

Hazard labels (TDG) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : 3

Hazard labels (IMDG) : 3

IATA

Transport hazard class(es) (IATA) : 3

Hazard labels (IATA) : 3

14.4. Packing group

Packing group (DOT) : Not regulated

Packing group (TDG) : Not regulated

Packing group (IMDG) : III

Packing group (IATA) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

Marine pollutant : Product is not a marine pollutant

Emergency Response Guidebook No. : 128

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport per UN1993 FLAMMABLE LIQUIDS, N.O.S. (Octamethylcyclotetrasiloxane)

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:	
Nepheline syenite	CAS-No. 37244-96-5

15.2. International regulations

No additional information available

15.3. US State regulations

⚠ WARNING: This product can expose you to Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Issue date : 12/31/2021

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Other information : None.

Prepared by : Nexreg Compliance Inc.
www.Nexreg.com

Indication of changes:
Transport information

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