

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: E+ 308, 320, 340, 508, 520, 540, 560, 580, 710, 715

Product. No:

Version: 2.3/ EN

Print date:

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: E+ 308, 320, 340, 508, 520, 540, 560, 580, 710, 715

Substances

Substance name: Methylsilsesquioxane

CAS No.: 68554-70-1

REACH Registration No: 01-2119517436-40-0010

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Industrial Ingredient

Uses advised against: No data available

1.3 Details of the supplier of the safety data sheet:

Supplier:

Name ABC NanoTech Co., Ltd.

Address 551, Yongsan, Yuseong Daejeon, 305-500, KOREA

Information contact Tel : +82-42-936-9001

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E-Mail (competent person) sales@abcnanotech.com

1.3 EMERGENCY TELEPHONE NUMBER: Tel : +82-42-936-9001

2. HAZARDS IDENTIFICATION

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2.1.1 Classification of the substance or mixture:

Regulation (EC) No 1272/2008 [CLP]		
Hazard classes/Hazard categories	SCL and/or M-factor	Classification procedure
None.		

67/548/EEC or 1999/45/EC		Classification procedure
Hazards characteristics	SCL and/or M-factor	
None.		

Signal Words	Pictogram
None.	

2.1.2 Additional information:

Route of Entry: Possible eye, ingestion, skin or dust inhalation.

Inhalation : Use respiratory protection unless adequate local exhaust ventilation is provided.
Prolonged inhalation may cause respiratory irritation.

Eye : May cause eye irritation.

2.2 Other hazards

Adverse physicochemical effects : None Known.

Adverse human health effects and symptoms : None Known.

Adverse environmental effects : None Known.

Other adverse hazards : None Known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance related informations

CAS No : 68554-70-1
EC No : 614-610-5
INDEX No : None Known.
REACH Registration No : 01-2119517436-40-0010
Purity : 100%
Synonyms : SILSESQUIOXANES, ME
Stabilisers : Stable.
Hazard impurities : None Known.

3.2 Additional hints:

The transition period according REACH regulation, article 23 is still not expired.

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3.3 Preparation / mixture related informations

Description : None Known.

3.4 Hazard ingredients:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.(CALIFORNIA PROPOSITION 65)

4. FIRST AID MEASURES

4.1 General informations : No data available

4.2 In case of inhalation : Remove victim to fresh air.
Seek medical attention if respiratory irritation or distress occurs.

4.3 In case of skin contact : Wash off with soap and water.
Get medical attention if symptoms persist.

4.4 In case of eye contact : Flush eyes with water for at least 15 minutes.
Consult physician if irritation persists

4.5 In case of ingestion : Call a physician immediately.
Do not induce vomiting without medical advice.

4.6 Most important symptoms and effects, both acute and delayed:

Symptoms : No data available

Effects : No data available

4.7 Indication of any immediate medical attention and special treatment needed

Notes for the doctor : No data available

Special treatment : No data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : All standard extinguishing agents are suitable.
Water, CO₂, dry chemical, foam

Unsuitable extinguishing media : No data available

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products :None.

5.3 Advice for fire-fighters:

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Firefighters must wear NIOSH/MSHA approved positive pressure self- contained breathing apparatus with full face mask and full protective clothing.

5.4 Additional information :

The product itself does not burn.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

If fine dust is formed from this product, avoid dispersion of dust in air to reduce fire and explosion Hazard.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions : Use personal protective equipment.

6.2 Environmental precautions : No special environmental precaution required.

6.3 Methods for cleaning up: Wipe, scrape or soak up in an inert material and put in a container for disposal.

6.4 Additional information : No data available

7. HANDLING AND STORAGE

7.1 Handling

Advices on safe handling : Avoid dust formation. Avoid contact with eyes.
Use only in well-ventilated areas.

Protective measures : Wear suitable protective equipment

Technical measures : In section 8, see

Measures to prevent aerosol and dust generation : No data available

Measures required to protect the environment : No data available

Specific requirements or handling rules : None.

Precautions against fire and explosion : None.

Further informations : None.

7.2 Storage

Technical measures and storage conditions : Keep container closed.
Store away from heat, source of ignition,
and incompatibles.

Packaging materials: Inside : vinyl Bag (LDPE)
outside: Plastic bucket (HDPE) / Paper Box(cardboard packaging)

Requirements for storage rooms and vessels : None.

Hints on storage assembly : None.

Storage class : None.

Further information on storage conditions : None.

7.3 Specific uses : None.

Recommendations : None.

Industrial sector specific solutions : None.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Exposure limit values : No data available.
- 8.1.1 Components with occupational exposure limits resp. biological occupational exposure limits requiring monitoring : No data available.
- 8.1.1.1 Occupational exposure limits : No data available.
- Air limit values : No data available.
- Biological limit values : No data available.
- 8.1.1.2 Additional exposure limits under the conditions of use : No data available.
- 8.1.1.3 DNEL/DMEL and PNEC-values : No data available.
- 8.2 Exposure controls
- 8.2.1 Occupational exposure controls:
- Product related measures to prevent exposure:
- Instructual measures to prevent exposure:
- Organisational measures to prevent exposure:
- Technical measures to prevent exposure:
- Personal protection equipment:
- Respiratory protection : Respirator with a particle filter (EN 143)
- Hand protection : There is no risk to health due to contact with the chemical.
Use hand protection to prevent mechanically injuries.
- Eye protection : Safety glasses with side-shields conforming to EN166
- Body protection : Wear suitable protective clothing.
- 8.2.2 Environmental exposure controls : No data available.
- Product related measures to prevent exposure : No data available.
- Instructual measures to prevent exposure : No data available.
- Organisational measures to prevent exposure : No data available.
- Technical measures to prevent exposure : No data available.
- 8.2.3 Consumer exposure control : No data available.
- Measures related to consumer uses of the substance (as such or in preparations): No data available.
- Measures related to the service life of the substance in articles : No data available.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Appearance
- Physical state : Powder Colour : White Odour : Odourless

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9.2 Important health, safety and environmental information

9.2.1 Safety relevant basic data

Boiling Point (°C)	: Not applicable.
Vapor Pressure	: Not applicable.
Vapor Density (Air=1)	: Negligible.
Melting point	: > 999°C; 1830°F
Flammability (solid, gas)	: Not available
Flash Point (°C)	: Not applicable.
Evaporation Rate (Butyl acetate=1)	: Not applicable.
Specific Gravity	: ca. 1.32
Density(Bulk)	: ca. 0.34 g/cm ³
Acid / Alkalinity (Meq/g)	: Not applicable.
pH	: ca. 5 ~ 9
Solubility	: Insoluble powder

9.2.2 Substance group relevant properties : Not applicable.

Explosives
Flammable gases
Flammable aerosols
Oxidising gases
Gases under pressure
Flammable liquids
Flammable solids
Self-reactive substances and mixtures
Pyrophoric liquids
Pyrophoric solids
Self-heating substances and mixtures
Substances or mixtures which, in contact with water emit flammable gases
Oxidising liquids
Oxidising solids
Organic peroxides
Metal corrosion

9.3 Other informations

Minimum ignition energy : estimated >1,000 mJ

10. STABILITY AND REACTIVITY

10.1 Reactivity	: Stable under recommended storage conditions.
10.2 Chemical stability	: Stable
10.3 Possibility of hazardous reactions	: Hazardous polymerisation does not occur.
10.4 Conditions to avoid	: Avoid combustion sources when dust is present. Use with adequate ventilation.
10.5 Incompatible materials	: None known.

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10.6 Hazardous decomposition products : possible oxides of and carbon

11. TOXICOLOGICAL INFORMATION

11.1 Toxicokinetics, metabolism and distribution

Non-human toxicological data	: No data available.
Method	: No data available.
Dosis	: No data available.
Routes of administration	: No data available.
Results	: No data available.
Absorption	: No data available.
Distribution	: No data available.
Metabolism	: No data available.
Excretion	: No data available.
Human toxikological data	: No data available.

11.2 Acute Effects (toxicity tests)

Acute Oral	: LD50; Species: Rabbit; > 6,000 mg/kg;
Acute Dermal	: No data available.
Acute Inhalation	: No data available.
Specific Target Organ Toxicity (STOT)	: No data available.
Specific symptoms in animal studies	: No data available.
Sensitisation	: No data available.
Repeated Dose Toxicity	: No data available.
Skin irritation	: No data available.
Eye irritation	: No data available.
Mutagenicity	: No data available.

11.3 General remarks:

EUROPEAN FOOD CONTACT: SCF_List: 3

Residual monomer in methylsilsesquioxane:

< 1 mg methyltrimethoxysilane/kg of methylsilsesquioxane

12. ECOLOGICAL INFORMATION

12.1 Aquatic and terrestrial ecotoxicity

Fish	: LC50 5657.301 mg/l 96 hr
Shellfish	: LC50 9765.489 mg/l 48 hr
* Ecological Structure Activity Relationships(ECOSAR)	

12.2 Persistence and degradability

Persistence	: log Kow -3.04
Degradability	: No data available.
* Ecological Structure Activity Relationships(ECOSAR)	

12.3 Bioaccumulative potential

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condensability : BCF 3.162
Biodegradable : No data available.
* Quantitative Structure Activity Relation(QSAR)

12.4 Mobility in soil : No data available.

12.5 Other adverse effects : No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Appropriate disposal / Product : Dispose of in accordance with local regulations.

13.2 Waste codes / waste designations according to EWC / AVV : No data available.

13.3 Appropriate packaging : No data available.

13.4 Additional information : No data available.

14. TRANSPORT INFORMATION

14.1 Land transport (ADR/RID/GGVSE)
: The product is not covered by international regulation on the transport of dangerous goods.

14.2 Sea transport (IMDG-Code/GGVSee)
: The product is not covered by international regulation on the transport of dangerous goods.

14.3 Air transport (ICAO-IATA/DGR):
:The product is not covered by international regulation on the transport of dangerous goods.

14.4 Further information
: This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.
Keep away from foodstuffs and animal feed.

15. REGULATORY INFORMATION

15.1 EU – regulations
EU list of existing chemical substances : y (positive listing)
Information on Directive 1999/13 / EC on the limitation of emissions of volatile organic
Compounds (VOC - Directive) : Not applicable
EU - Classification(classification/hazard statements /S – phrases) : Not applicable
This product is not considered dangerous according to 99/45/EC as amended.

15.2 Germany Regulations Information
Restriction of occupation : Not applicable.

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Hazardous Incident Ordinance (12th BImSchV)

: Not applicable.

Water Hazard

: Class 1 (B silicones, Identification No. 543.)

Technical Instructions on Air Quality (TA Luft)

: Not applicable.

Other regulations, restrictions and prohibitions

: Not applicable.

15.3 US Regulatory Information

CERCLA

: None.

CLEAN AIR ACT

: None.

CLEAN WATER ACT

: None.

SARA SECTION 302

: None.

SARA (311,312) HAZARD CLASS

: No SARA Hazards

SARA (313) CHEMICALS

: None.

15.4 Inventories

Canadian Regulatory Information

WHMIS HAZARD CLASS

: Non-controlled

Canada DSL Inventory

: y (positive listing)

Canada NDSL Inventory

: n (negative listing)

Japan Inventory of Existing & New Chemical Substances (ENCS)

: y (positive listing)

Korea Existing Chemicals Inventory (KECI)

: y (positive listing)

China Inventory of Existing Chemical Substances

: y (positive listing)

Australia Inventory of Chemical Substances (AICS)

: y (positive listing)

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

: y (positive listing)

TSCA list

: y (positive listing)

Taiwan Chemical Substance Inventory (TCSI)

: y (positive listing)

15.5 Other

The product does not need to be labeled in accordance with EC directives or respective national laws.

CALIFORNIA PROPOSITION 65: This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

OTHER

Classification for mixtures and used evaluation method according to regulation (EC)

1207/2008[CLP] : None.

Hazards description:

HMIS

Flammability : 1

Reactivity : 0

Health : 0

Caution:

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material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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