

Material: 319422 GENIOSIL IOTE 800 KG IBC

Version 1.0 (US) Print Date 10/12/2023 Date of last alteration: 02/08/2023

1. Product and company identification

1.1 Identification of the substance or preparation:

Trade name GENIOSIL IOTE 800 KG IBC

Product group: Intermediate

Use of the Substance/Mixture Industrial. Commercial.

Modifying agent for: Building materials

1.2 Company/undertaking identification:

Manufacturer/distributor: Wacker Chemicals (China) Co., Ltd.

Bldg. 3, 1535 Hongmei Road Caohejing Hi-Tech Park Shanghai 200233

China

Customer information: Wacker Chemical Corporation

4950 S State Road Ann Arbor, MI 48108

InfoLine:

Tel (517) 264-8240 Hours of operation:

Monday - Friday, 8 am to 5 pm (eastern standard time)

Corporate website: www.wacker.com

Emergency telephone no. (24h): (517) 264-8500

Transportation emergency: (800) 424-9300 (CHEMTREC, USA)

(703) 527-3887 (CHEMTREC, international)

This SDS was prepared by the Regulatory Affairs and Product Safety Department (RAPS) of Wacker Chemical Corporation.

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (GHS):

Classification	H-Code
Flammable liquids, Category 4	H227

2.2 Label elements

Labelling (GHS):

Signal word: Warning

H-Code	Hazard statements
H227	Combustible liquid.
P-Code	Precautionary statements
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P403	Store in a well-ventilated place.

Special labelling instructions:

Safety data sheet available on request.

2.3 Other hazards

The product hydrolyses under formation of ethanol (CAS-Nr. 64-17-5). Ethanol is classified concerning both physical and health hazards. The hydrolysis rate and consequently the relevance for the hazard profile of the product is strongly dependent on the specific conditions.

Endocrine disrupting properties - human health: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Endocrine disrupting properties - environment: The substance/mixture does not contain components considered to have



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endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

3. Composition/information on ingredients

3.1 Chemical characterization (substance)

CAS-No.	Chemical characterization
	Alkoxy silanes

3.2 Information on ingredients:

This material does not contain any ingredients above the permitted limit(s).

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product. Specific chemical identities and/or exact percentage (concentration) of the composition may have been withheld as a trade secret.

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57) in amounts above ≥ 0.1%.

4. First-aid measures

4.1 General information:

Get medical attention if irritation or other symptoms occur. Take a copy of the Safety Data Sheet when going for medical treatment.

4.2 If inhaled

Material cannot be inhaled under normal conditions. No special treatment required.

4.3 In case of skin contact

After skin contact wipe off excess material with cloth or paper. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

4.4 In case of eve contact

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min. Get medical attention if irritation occurs.

4.5 If swallowed

No special measures are required after swallowing.

Fire-fighting measures

5.1 Flammable properties:

Property:	Value:	Method:
Flash point	.: 65 °C (149 °F)	(ISO 3679)
Sustained combustibility	.: 105 °C (221 °F)	(ISO 9038)
Boiling point/boiling range	.: 239 °C (462 °F) at 1013 hPa	(not specified)
Lower explosion limit	.: 0.4 %(V)	(DIN EN 1839)
Upper explosion limit	.: not determined	
Ignition temperature	.: 259 °C (498 °F)	(EN 14522)

5.2 Fire and explosion hazards:

This material does not present any unusual fire or explosion hazards.

NFPA Hazard Class (comb./flam.liquid)..... IIIA

5.3 Recommended extinguishing media:

Water - Use Fine Spray or Fog. Dry chemical. Carbon dioxide. AFFF alcohol compatible foam.

5.4 Unsuitable extinguishing media:

sharp water jet



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5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Hazardous decomposition products: carbon dioxide , carbon monoxide , silicon dioxide , formaldehyde and incompletely burnt hydrocarbons .

5.6 Fire fighting procedures:

Fire fighters should wear full protective clothing including a self-contained breathing apparatus. Cool endangered containers with water.

Accidental release measures

6.1 Precautions:

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. If material is released indicate risk of slipping. Do not walk through spilled material.

HAZWOPER PPE Level: D

6.2 Containment:

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground.

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. Do not flush away with water. For small amounts: Absorb with a neutral (non-acidic / non-basic) liquid binding material such as diatomaceous earth and dispose of according to government regulations. For large amounts: Liquids may be recovered using suction devices or pumps. If flammable, only air driven or properly rated electrical equipment should be used. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Silicone fluids are slippery; spills are a safety hazard. Apply sand or other inert granular material to improve traction.

6.4 Further information:

Exhaust vapours. Eliminate all sources of ignition. Consider explosion protection. Observe notes under section 7.

Handling and storage

7.1 Handling

Precautions for safe handling:

Ensure adequate ventilation. Must be syphoned off in situ. Spilled substance increases risk of slipping. Avoid formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Observe information in section 8. Keep away from incompatible substances in accordance with section 10.

Precautions against fire and explosion:

Product may release ethanol. Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

7.2 Storage

Conditions for storage rooms and vessels:

Observe local/state/federal regulations.

Advice for storage of incompatible materials:

Observe local/state/federal regulations.

Further information for storage:

Store in a dry and cool place. Protect against moisture. Store container in a well ventilated place.



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8. Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

Use with adequate ventilation.

Local exhaust:

No special ventilation required.

8.2 Associate substances with specific control parameters such as limit values

Maximum airborne concentrations at the workplace:

Substance	Type	mg/m³	ppm	Dust fract.
Ethanol	OSHA PEL	1,900.0	1.000.0	

Re Ethanol (CAS no. 64-17-5): STEL is 1000 ppm; carcinogenicity: A3 (ACGIH).

8.3 Personal protection equipment (PPE)

Respiratory protection:

Respiratory protection is not normally required.

Hand protection:

Recommendation: protective gloves .

Eye protection:

Safety glasses with side shields.

Other protective clothing or equipment:

Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

8.4 General hygiene and protection measures:

When handling do not eat, drink, smoke or apply cosmetics. Wash thoroughly after handling.

Physical and chemical properties

9.1 Appearance

Physical state	liquid
Colour	colourless
Odour:	almost odourless

9.2 Safety data

Property:	Value:	Method:
Melting point	< -50 °C (< -58 °F) at 1013 hPa	(OECD 102)
Boiling point/boiling range	239 °C (462 °F) at 1013 hPa	(not specified)
Flash point:	65 °C (149 °F)	(ISO 3679)
Sustained combustibility	105 °C (221 °F)	(ISO 9038)
Ignition temperature	259 °C (498 °F)	(EN 14522)
Lower explosion limit	0.4 %(V)	(DIN EN 1839)
Upper explosion limit	not determined	
Vapour pressure	0.05 hPa / 25 °C (77 °F)	(EU-GL.A.4)
Vapour pressure	0.52 hPa / 50 °C (122 °F)	(EU-GL.A.4)
Density:	0.87 g/cm³ at 25 °C (77 °F)	(DIN 51757)
Water solubility:	practically insoluble	
pH:	Not applicable. Insoluble in water.	
Partition coefficient: n-octanol/water	no data available	
Viscosity, dynamic	2.0 mPa.s at 25 °C (77 °F)	(DIN 51562)
Viscosity, kinematic	no data available	

9.3 Further information

Hydrolysis products reduce the flash point. Explosion limits for released ethanol: 3.5 - 15%(V).

Odour Threshold: no data available

Thermal decomposition..... exempt



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10. Stability and reactivity

10.1 General information:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

10.2 Conditions to avoid

Moisture, heat, open flames, and other sources of ignition.

10.3 Materials to avoid

Reacts with water, basic substances and acids. The reaction takes place with the formation of ethanol.

10.4 Hazardous decomposition products

Ethanol by hydrolysis. Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

10.5 Further information:

Hazardous polymerization cannot occur.

11. Toxicological information

11.1 Information on toxicological effects

11.1.1 Acute toxicity

Assessment:

Based on the available data acute toxic effects are not expected after single oral exposure. Based on the available data acute toxic effects are not expected after single dermal exposure. Based on the available data acute toxic effects are not expected after short-term inhalative exposure.

Product details:

Exposure routes	Result/Effect
Oral	LD50 > 2000 mg/kg
	Species: Rat, Method: OECD 423, Source: test report
dermal	LD50 > 2000 mg/kg
	Species: Rat, Method: OECD 402, Source: test report
by inhalation	LC50 > 11.2 mg/l; 4 h
(aerosol)	No mortality observed at this dose.
	Species: Rat, Test substance: read-across substance, Method: OECD 403, Source: test report

11.1.2 Skin corrosion/irritation

Assessment:

Based on the available data a clinically relevant skin irritation hazard is not expected.

Product details:

No skin irritation

(Species: Rabbit, Method: OECD 404, Source: test report)

11.1.3 Serious eye damage/eye irritation

Assessment:

Based on the available data a clinically relevant eye irritation hazard is not expected.

Product details:

No eye irritation

(Species: Rabbit, Method: OECD 405, Source: test report)

11.1.4 Respiratory or skin sensitisation

Assessment:

Based on the available data a sensitization reaction is not expected from this product.



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Product details:

Exposure routes	Result
Skin contact	Does not cause skin sensitisation.
	(Species: Guinea pig, Test system: Maximisation Test, Method: OECD 406, Source: test report)

11.1.5 Germ cell mutagenicity

Assessment:

Based on known data a significant mutagenic potential may be excluded.

negative (with and without metabolic activation)

(Test system: mutation assay (in vitro) / bacterial cells, Method: OECD 471, Source: test report)

negative (with and without metabolic activation)

(Test system: chromosome aberration assay (in vitro) / mammalian cells, Method: OECD 473, Source: test report)

positive (without metabolic activation), negative (with metabolic activation)

Positive results only in the presence of cytotoxicity.

(Test system: chromosome aberration assay (in vitro) / mammalian cells, Method: OECD 473, Source: test report)

negative (with and without metabolic activation)

(Test system: mutation assay (in vitro) / mouse lymphoma cells, Test substance: read-across substance, Method: OECD 476,

Source: test report)

negative

(Test system: micro nucleus assay (in vivo), Species: Mouse, Strain: NMRI, Sex: male and female, Application Route: Oral, Cell type: erythrocytes, Method: OECD 474, Source: test report)

11.1.6 Carcinogenicity

Assessment:

Based on the available toxicological data no specific evaluation of the carcinogenic potential is scientifically implicated.

11.1.7 Reproductive toxicity

Assessment:

Animal tests have shown no indications of possibility of damage to embryo and impairment of fertility.

Product details:

Reproductive Toxicity/Fertility

NOAEL: >= 1000 mg/kg

(Test system: screening test, Species: Rat, Strain: wistar, Application Route: Oral, Route of administration: gavage, Method:

OECD 422, Source: test report)

Reproductive Toxicity/Development/Teratogenicity

NOAEL (developmental): >= 1000 mg/kg

NOAEL (maternal): >= 1000 mg/kg

(Symptoms/Effect: Nothing abnormal detected., Test system: Developmental Toxicity Study, Species: Rat, Strain: wistar,

Application Route: Oral, Route of administration: gavage, Frequency of Treatment: day 6 - 20 of gestation, Method: OECD 414,

Source: test report)

11.1.8 Specific target organ toxicity - single exposure

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.9 Specific target organ toxicity - repeated exposure

Assessment:

Based on the available data the criteria for classification as toxic after repeated exposure are not fulfilled.

Product details:

Result/Effect

NOAEL: 150 mg/kg

(Test system: Subchronic study, Species: RatApplication Route: Oral, Route of administration: gavage, Test period: 90 d,

Frequency of Treatment: 7 d/w, Method: OECD 408, Source: test report)



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NOAEC: >= 3 mg/l

(Test system: Subacute study, Species: RatApplication Route: by inhalation, Route of administration: aerosol, Test period: 28 d, Frequency of Treatment: 5 d/w, hours/day: 6, Subsequent observation period: 14 d, Test substance: read-across substance,

Method: OECD 412, Source: test report)

11.1.10 Aspiration hazard

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.11 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

11.1.12 Further toxicological information

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other information: Hydrolysis product / impurity: Ethanol (64-17-5) is readily absorbed at all exposure routes. Ethanol may cause irritation of eyes and mucosa, trigger dysfunction of the central nervous system and cause nausea as well as dizziness. Chronic exposure to high amounts of ethanol may cause damage to liver and central nervous system.

12. Ecological information

12.1 Toxicity

Assessment:

Up to the maximal solubility in the test medium the substance and its hydrolysis products do not show any acute effects on aquatic organisms that are relevant for classification and labelling. According to current knowledge adverse effects on water purification plants are not expected.

Product details:

Result/Effect	Species/Test system	Source
LC50: > 100 mg/l (nominal)	semi-static test	test report
	Oncorhynchus mykiss (rainbow trout) (96 h)	OECD 203
EC50: The effect level is greater than the maximum	Daphnia (water flea) (48 h)	Expert judgement
achievable concentration.		
IC50 (Growth rate): The effect level is greater than the	Pseudokirchneriella subcapitata (green algae) (72	Expert judgement
maximum achievable concentration.	h)	
EC50: > 100 mg/l	activated sludge (3 h)	test report
NOEC (reproduction rate): 32 mg/l (measured)	semi-static test	test report
The effect level is greater than the maximum achievable concentration.	Daphnia magna (Water flea) (21 d)	OECD 211

12.2 Persistence and degradability

Assessment:

Contact with water liberates ethanol and silanol- and/or siloxanol-compounds. The hydrolysis product (Ethanol) is readily biologically degradable.

Product details:

Biodegradation:

Result	Test system/Method	Source
13 % / 28 d	biological oxygen demand (BOD)	test report
Not readily biodegradable.		OECD 310
Rapid biological degradation of the organic hydrolysis		
product.		



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Hydrolysis:

Result	Test system	Source
Half-life: 22 h	pH 7; 20 - 25 °C	calc. value

12.3 Bioaccumulative potential

Assessment:

Product(s) of hydrolysis: Bioaccumulation is not expected to occur.

12.4 Mobility in soil

Assessment:

No data known.

12.5 Results of PBT and vPvB assessment

This product contains no relevant substances considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

none known

13. Disposal considerations

13.1 Product disposal

Recommendation:

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

13.2 Packaging disposal

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

14. Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation Not regulated for transport

and placards are not required.

14.2 Transport by sea IMDG-Code

Valuation Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation Not regulated for transport

15. Regulatory information

15.1 U.S. Federal regulations

TSCA inventory status and TSCA information:

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:

This material does not contain reportable amounts of any TSCA 12(b) listed chemicals.



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CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

No SARA Hazards

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS (Hazardous Air Pollutants):

This material does not contain any hazardous air pollutants.

15.2 U.S. State regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

This material does not contain any chemicals known to the State of California to cause cancer.

This material does not contain any chemicals known to the State of California to cause reproductive effects.

Massachusetts Substance List:

This material contains no listed components.

Pennsylvania Right-to-Know Hazardous Substance List:

This material contains no listed components.

15.3 **Details of international registration status**

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

Japan : ENCS (Handbook of Existing and New Chemical Substances): This product is listed in, or complies with, the substance inventory.

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

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.

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

United States of America (USA)...... TSCA (Toxic Substance Control Act Chemical Substance Inventory): All components of this product are listed as active or are in compliance with the

substance inventory.

Taiwan : TCSI (Taiwan Chemical Substance Inventory):

This product is listed in, or complies with, the substance inventory. General note: The Taiwanese chemicals regulation requires a phase 1 registration for TCSI-listed or TCSI-compliant substances if imports to Taiwan or manufacturing in Taiwan exceed the trigger quantity of 100 kg/a (for mixtures to be calculated per each ingredient). It is the duty of the importing/manufacturing legal entity to take care of

this obligation.

European Economic Area (EEA).....: REACH (Regulation (EC) No 1907/2006):

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.

South Korea (Republic of Korea): AREC (Act on Registration and Evaluation of Chemicals; "K-REACH"):

Please approach your regular contact for more detailed information.

16. Other information

16.1 Additional information:

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This information relates to the specific material designated and may not be valid for such material used in combination



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with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

Vertical lines in the left-hand margin indicate changes compared with the previous version.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental Industrial Hygienists

DOT - Department of Transportation

hPa - Hectopascals

mPa*s - Milli Pascal-Seconds

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

ppm - Parts per Million

SARA - Superfund Amendments and Reauthorization Act

STEL - Short Term Exposure Limit TSCA - Toxic Substances Control Act TWA - Time Weighted Average

Flash point determination methods Common name

16.3 Conversion table:

Pressure:..... 1 hPa * 0.75 = 1 mm Hg = 1 torr; 1 bar = 1000 hPa

Viscosity:..... 1 mPa*s = 1 centipoise (cP)