

CoatOSil MP 200 silane

SAFETY DATA SHEET

In accordance with ABNT-NBR 14725-4:2014

1. Identification

GHS Product identifier: CoatOSil MP 200 silane

Recommended use of the chemical and restrictions on use

Recommended use: Coating additive.

Recommended restrictions: Not known.

Supplier's details

Manufacturer/Importer/Distributor Information : Momentive Performance Materials Indústria de Silicones Ltda
Rod. Eng. Constâncio Cintra, Km 78,5 - Bairro Pinhal
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2. Hazard identification

Classification of the substance or mixture:

Health Hazards

Serious Eye Damage/Eye Irritation Category 1

Classification System used: ABNT-NBR 14725-2:2019
Adoption of the UN Globally Harmonized System of Classification and Labeling of Chemicals

GHS label elements, including precautionary statements:

Hazard Symbol:



Signal Word Danger

Hazard Statement: H318; Causes serious eye damage.

Precautionary Statements

Prevention: P280; Wear eye protection/face protection.

Response: P305+P351+P338; IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

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rinsing. P310; Immediately call a POISON CENTER/doctor.

Other hazards which do not result in classification:

Additional methanol may be formed by reaction with moisture.

3. Composition/information on ingredients

Chemical nature: Epoxy Silane oligomer

Mixtures

Hazardous ingredients	CAS number	Concentration*	Notes
3-glycidyl-oxypropyl-trimethoxy-silane	2530-83-8	10 - 20%	No data available.

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Classification

Chemical name	Classification
3-glycidyl-oxypropyl-trimethoxy-silane	Eye Dam.: 1: H318: Causes serious eye damage. Acute Tox.: 5: H313: May be harmful in contact with skin.

4. First-aid measures

General information:

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves Consult a physician for specific advice.

Description of necessary first-aid measures

Ingestion:

If conscious, drink plenty of water. Do not induce vomiting. Call a physician or poison control center immediately.

Inhalation:

Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen. Call a physician or poison control center immediately.

Skin Contact:

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Continue to rinse for at least 15 minutes. Get medical attention. Wash contaminated clothing before reuse. After contact with skin, remove product mechanically.

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Symptoms:

Product may hydrolyse on contact with moisture and upon contact with bodily fluids to produce methanol, which is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Therefore, consider the signs/symptoms of methanol poisoning and also observe the known latency period of several days.

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Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Notes to the physician

Treatment: This product reacts with moisture in the acid contents of the stomach to form methanol. Treat symptomatically

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Carbon dioxide Foam. Water spray Dry chemical.

Unsuitable extinguishing media: water jet

Specific hazards arising from the chemical: In case of fire, carbon monoxide and carbon dioxide may be formed. Reacts with water liberating small amounts of methanol. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

Special protective action for fire fighters

Special fire fighting procedures: Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Caution: Contaminated surfaces may be slippery. Use personal protective equipment (PPE) with overall or trousers and long-sleeved cotton shirt, butyl or nitrilic rubber gloves, leather safety shoes, polycarbonate goggles, full face or face protection mask, and if necessary foam, silicone or polymer hearing protection, and polyethylene protective helmet.

For non-emergency personnel: Do not allow runoff to sewer, waterway or ground.

For emergency responders: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). See Section 8 of the SDS for Personal Protective Equipment.

Environmental Precautions: Do not allow runoff to sewer, waterway or ground.

Methods and material for containment and cleaning up: See Section 8 of the SDS for Personal Protective Equipment. Collect spillage with granulates, sawdust, rags or other absorbent. Shovel up and place in a container for salvage or disposal.

7. Handling and storage

Precautions for safe handling Avoid contact with eyes, skin, and clothing. See Section 8 of the SDS for Personal Protective Equipment. Do not eat, drink or smoke when using the product. Wash thoroughly after handling.

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Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep away from sources of ignition - No smoking. Keep away from food, drink and animal feeding stuffs. Purge opened containers with bone dry inert gas before resealing. Use original container or packaging of similar material of construction

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Biological Limit Values

None of the components have assigned exposure limits.

Appropriate Engineering Controls

Provide eyewash station and safety shower. General (mechanical) room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment. Provide adequate ventilation if fumes or vapors are generated.

Individual protection measures, such as personal protective equipment

Eye/face protection: Safety glasses with side shields Use face shield in case of splash risk.

Skin Protection

Hand Protection: Chemical resistant gloves

Other: Safety shoes Wear suitable protective clothing.

Respiratory Protection: Use only in well-ventilated areas. In case of insufficient ventilation, wear suitable respiratory equipment.

Hygiene measures: Avoid contact with eyes. When using do not smoke. Wash thoroughly after handling.

9. Physical and chemical properties

Appearance

Physical state: liquid

Form: liquid

Color: Yellow

Odor: ester like

Odor threshold: No data available.

pH: 8,5 - 10,5

Melting point/freezing point: < -70 °C

Initial boiling point and boiling range: 290 °C (1.013 hPa)

Flash Point: Measured 96 °C (Closed Cup)

Evaporation rate: < 1

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available.

Flammability limit - lower (%): No data available.

Explosive limit - upper: No data available.

Explosive limit - lower: No data available.

Vapor pressure: < 1,33 hPa (20 °C)

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Vapor density:	No data available.
Density:	1,166 g/cm ³ (25 °C)
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	Reactive.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	No data available.

10. Stability and reactivity

Reactivity:	No dangerous reaction if used as recommended.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	POLYMERIZATION - HYDROLYSIS The epoxysilane esters are not monomers in the usual sense, but polymeric materials may be produced under certain conditions of catalyzed partial hydrolysis. Polysiloxanes are produced by polymerization of the silyl ester group in the presence of controlled amounts of water and alkali or acid catalyst at ambient temperatures. At slightly higher temperatures (ca. 50 °C), polyglycols or polyglycol ethers are produced via the epoxy functional group under the same conditions of water concentration and alkali or acid catalyst. In as much as both of these reactions are exothermic and may occur simultaneously, the heat evolved may be cumulative and greatly accelerate the rate of reactions. It is imperative, therefore, that unintentional contamination of the epoxysilane esters with water be avoided, and that intentional hydrolysis be properly controlled to avoid hazardous consequences.
Conditions to avoid:	Avoid contact with: Ignition sources. Moisture.
Incompatible Materials:	Reacts with water or moisture to form: Methanol
Hazardous Decomposition Products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Reacts with water or moisture to form methanol

11. Toxicological information

General information: This product is not tested.

Information on likely routes of exposure

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.

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Eye contact: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Dermal

Product: ATEmix (): 20.833,33 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane LC50 (,): > 5,3 mg/l (OECD Test Guideline 403)

Repeated dose toxicity

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane NOAEL : 500 mg/kg
NOAEL : 225 mg/m³

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane OECD-Guideline 404 (Acute Dermal Irritation/Corrosion) Non irritating

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-trimethoxy-silane , OECD-Guideline 406 (Skin Sensitisation)Non sensitizing.

Carcinogenicity

Product: No data available.

Specified substance(s):

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3-glycidyl-oxypropyl-
 trimethoxy-silane Not classified

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

ACGIH Carcinogen List:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-
 trimethoxy-silane (OECD-Guideline 471 (Genetic Toxicology: Salmonella typhimurium, Reverse Mutation Assay))Positive in the Ames test.
 Chinese Hamster Ovary (CHO) (OECD 476): negative (not mutagenic)
 Mouse Lymphoma Assay (OECD Guidline 476) (OECD 476): positive
 Micronucleus test (OECD 487): negative (not mutagenic) based on read-across from structural analogue [3-(2,3-epoxypropoxy)propyl]triethoxysilane

In vivo

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-
 trimethoxy-silane Chromosomal aberration (OECD-Guideline 474 (Genetic Toxicology: Micronucleus Test)): positive
 Comet Assay (OECD 489): No clear conclusions about germ cell mutagenicity was reached based on the results from this study.

Reproductive toxicity

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-
 trimethoxy-silane Not classified

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

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12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment

Fish

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-
trimethoxy-silane LC50 (Fish, 96 h): 55 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-
trimethoxy-silane EC 50 (Daphnia, 48 h): 324 mg/l

Chronic hazards to the aquatic environment

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-
trimethoxy-silane NOEC (Daphnia, 21 d): > 100 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-
trimethoxy-silane NOEC (Algae, 7 d): 119 mg/l

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-
trimethoxy-silane The product is not readily biodegradable.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

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Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

3-glycidyl-oxypropyl-
trimethoxy-silane Log Kow: 0,5 20 °C

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

3-glycidyl-oxypropyl-
trimethoxy-silane No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information: The generation of waste should be avoided or minimized wherever possible. See Section 8 for information on appropriate personal protective equipment. Do not discharge into drains, water courses or onto the ground.

Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

14. Transport information

ANTT (Resolução ANTT nº 5232)

Não regulado.

IATA

Not regulated.

IMDG

Not regulated.

Special precautions for user: 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. Protect from moisture.

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15. Regulatory information

Safety, health and environmental regulations specific for the product in question

Brasil. Uso e esforços fisiológicos de produtos químicos (Decreto n° 3665, anexo 3)

Não regulado

Brasil. Relação de Produtos Controlados Pelo Exército (Decreto n° 3.665, Anexo I)

Não aplicável

Brasil. (Decreto n° 99.280, anexos A, B, C e E, tal como alterada) substâncias que empobrecem a camada de ozônio

Não regulado

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

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Inventory Status:

Australia AICS:	On or in compliance with the inventory	Remarks: None.
Canada DSL Inventory List:	On or in compliance with the inventory	Remarks: None.
EINECS, ELINCS or NLP:	Not in compliance with the inventory.	Remarks: None.
Japan (ENCS) List:	n (negative listing)	Remarks: None.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory	Remarks: None.
Canada NDSL Inventory:	Not in compliance with the inventory.	Remarks: None.
Philippines PICCS:	Not in compliance with the inventory.	Remarks: None.
US TSCA Inventory:	On or in compliance with the inventory	Remarks: None.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory	Remarks: None.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory	Remarks: None.
REACH:	If purchased from Momentive Performance Materials GmbH in Leverkusen, Germany, all substances in this product have been registered by Momentive Performance Materials GmbH or upstream in our supply chain or are exempt from registration under Regulation (EC) No 1907/2006 (REACH). For polymers, this includes the constituent monomers and other reactants.	Remarks: None.

16. Other information, including date of preparation or last revision

Issue Date: 27.01.2021
Revision Date: No data available.No data available.

Wording of the H-statements in section 2 and 3

H225	Highly flammable liquid and vapor.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H313	May be harmful in contact with skin.
H318	Causes serious eye damage.
H370	Causes damage to organs.

Version #: 4.0
Date of printing: 01.08.2022

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Key abbreviations or acronyms used:

ABNT=The Brazilian Association of Technical Standards
ACGIH = American Conference of Governmental Industrial Hygienists
ANTT=Agencia Nacional de Transporte Terrestre
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
BEI = Biological Exposure indices
BR OEL = Brazilian Occupational Exposure Limits
CAS = Chemical Abstracts Service
ECx=Concentration associated with x% response
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IBMP = Maximum Biological Index allowed
IMDG = International Maritime Dangerous Goods
LC0=Lethal Concentration, 0% mortality
LC50 = Lethal Concentration, 50%
LD50=Lethal Dose, 50%
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOEC=No Observed Effect Concentration
NR = Regulatory Standard
OECD = Organization for Economic Cooperation and Development
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
STEL = Short Term Exposure Level
TLV = Threshold Limit Value
TWA = Time Weighted Average
UN = United Nations

References:

ACGIH Biological exposure indices - Revision identified in brackets, in the table in Section 8
ACGIH Threshold Limit Values - Revision identified in brackets, in the table in Section 8
Brazil Biological Exposure Limits (NR-07, Table 1) - Revision identified in brackets, in the table in Section 8
Brazil Occupational Exposure Limits (NR - 15, Annex 11) - Revision identified in brackets, in the table in Section 8
IHS Regulatory Database
3E Ariel WebInsight

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Disclaimer:

Notice to reader

Unless otherwise specified in section 1, Momentive products are intended for use in the manufacture and/or formulation of products and are not intended for direct consumer use. These products are not intended for long-lasting (> 30 days) implantation, injection or direct ingestion into the human body, nor for use in the manufacture of multiple use contraceptives.

| A vertical line in the left hand margin indicates an amendment from the previous version

Further Information

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 safehandling, 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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