

SAFETY DATA SHEET according to WHS regulation**AEROSIL® R 974**

Material no.		Version	1.0 / AU
Specification	100804	Revision date	15.10.2016
VA-Nr		Print Date	6/19/2017
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SECTION 1: Identification**1.1. Product identifier**

Trade name : AEROSIL® R 974
Silane, dichlorodimethyl-, reaction products with silica

1.2. Recommended use of the chemical and restrictions on use

Use of the Substance / Preparation : Silicone rubber
Sealants
Paints and varnishes.
Adhesive
Coating agent
Toner
Cosmetics

1.3. Details of Manufacturer and Importer

Company : Evonik Australia Pty Ltd
Suites 33&37
1 Ricketts Road
Mt Waverley, VIC 3149
Australia

Telephone : +61 3 8581-8400

Telefax : +61 3 9544-5002

Email address : Product-regulatory-services@Evonik.com

1.4. Emergency telephone number

CHEMTREC Australia : +61 2 9037-2994
CHEMTREC International : +1 703 527-3887 (collect calls accepted)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

according to WHS regulation

Remarks : Not a hazardous substance or mixture.

2.2. Label elements

Statutory basis : according to WHS regulation
Remarks : Not a hazardous substance or mixture.

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients**3.1. Substances****• Silane, dichlorodimethyl-, reaction products with silica**

CAS-No. 68611-44-9

Remarks : Not a hazardous substance or mixture.

Texts of H phrases, see in Chapter 16

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**3.2. Mixtures
not applicable****SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

In case product dust is released: Possible discomfort: cough, sneezing
Move victims into fresh air.

Skin contact

Wash off with soap and plenty of water.

Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes or until all material has been removed. Obtain medical attention.

Ingestion

If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water. In case of discomfort, obtain medical attention.

4.2. Symptoms caused by exposure**Symptoms**

None known

Hazards

None known

4.3. Medical attention and special treatment

No hazards which require special first aid measures.

SECTION 5: Firefighting measures**5.1. Suitable extinguishing media**

Suitable extinguishing media: Water spray, foam, CO2, dry powder., Adapt fire-extinguishing measures to surroundings

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

5.2. Specific hazards arising from the chemical

May be released in case of fire: carbon monoxide, carbon dioxide, organic products of decomposition. chlorine containing substances

5.3. Special protective equipment and precautions for fire-fighters

Water used to extinguish fire should not enter drainage systems, soil or stretches of water.

Ensure there are sufficient retaining facilities for water used to extinguish fire.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear personal protective equipment.

6.2. Environmental precautions

Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

Additional advice

Avoid dust formation.

6.4. Reference to other sections

Wear personal protective equipment; see section 8.

Disposal considerations; see section 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

If necessary: Local ventilation. Use with adequate ventilation.

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7.2. Conditions for safe storage, including any incompatibilities**Advice on protection against fire and explosion**

Take precautionary measures against static discharges.

Storage

Keep in a dry place.

Dust explosion class

1 m³ vessel = not dust explosive

VDI Guideline 2263 sheet 1

7.3. Specific end use(s)

No further information available

Applications; see Section 1.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

• Silicon dioxide, chemically prepared		
CAS-No.	112945-52-5 7631-86-9	
Control parameters	2 mg/m ³	Time Weighted Average (TWA):(AU NOEL)
type of exposure	Respirable dust.	
Control parameters	2 mg/m ³	Time Weighted Average (TWA):(AU NOEL)
type of exposure	Respirable dust. See Silica, Amorphous	
Control parameters	2 mg/m ³	Time Weighted Average (TWA):(AU OEL)
type of exposure	Respirable fraction.	

8.2. Exposure controls**Personal protective equipment****Respiratory protection**

No special protective equipment required.

If dust occurs: Dust mask with P2 particle filter

Hand protection

Wear protective gloves made of the following materials: material, rubber, leather.

The material thickness and rupture time data do not apply to non-solute solids / dusts.

Use impermeable gloves.

Eye/face protection

Safety glasses with side-shields

If dust occurs: basket-shaped glasses

Wear safety glasses with side shields. In case dusts are formed, wear close fitting protective goggles.

Skin and body protection

No special protective equipment required.

Hygiene measures

When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work.

To ensure ideal skin protection: use super fatted soaps and skin cream for skin care.

Wash contaminated clothing before re-use.

Protective measures

Handle in accordance with good industrial hygiene and safety practice.

If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used.

If the workplace threshold limit value is exceeded and/or the substance is released, use appropriate respiratory protection.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

physical state	solid
Colour	white
Form	powder
Odour	odorless

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Odour Threshold	not applicable
pH	3.7 - 4.7 (40 g / l) (20 °C) Medium: water / methanol 1: 1 in suspension
Melting point/range	not applicable decomposition
Boiling point/range	not applicable decomposition
Flash point	not applicable
Evaporation rate	not applicable
Flammability (solid, gas)	not determined
Lower explosion limit	not determined
Upper explosion limit	not determined
Vapour pressure	not applicable
Vapour density	not applicable
Density	ca. 2 g/cm ³ (20 °C)
Water solubility	> 1 mg/l
Partition coefficient: n-octanol/water	not determined
Autoignition temperature	> 600 °C Method: VDI Guideline 2263 sheet 1
Thermal decomposition	> 300 °C
Viscosity, dynamic	not applicable

9.2. Other information

Explosiveness	Not to be expected in view of the structure
Minimum ignition energy	not determined
Tapped density	ca. 50 g / l Method: DIN / ISO 787/11

SECTION 10: Stability and reactivity**10.1. Reactivity**

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions See Sect. 10.1 Reactivity.

10.4. Conditions to avoid

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Hydrophobic properties disappear at temperatures > 300°C

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

decomposition products with heating above decomposition temperature

Carbon monoxide, Carbon dioxide (CO₂), organic products of decomposition, organic halogen compounds

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute oral toxicity	LD50 Rat: > 5000 mg/kg Method: analogy OECD comparable product
Acute inhalation toxicity	LC0 Rat: 0.477 mg/l / 4 h Method: analogy OECD (maximum concentration attainable in experiments)
Skin irritation	Rabbit not irritating Method: analogy OECD comparable product
	Rabbit Not irritating. Method: literature
Eye irritation	Rabbit not irritating Method: analogy OECD comparable product
	Rabbit Not irritating. Method: literature
Sensitization	not known
Repeated dose toxicity	Oral No negative effects.
	Inhalation No irreversible changes and no indication of silicosis.
Assessment of STOT single exposure	no evidence for hazardous properties
Assessment of STOT repeat exposure	no evidence for hazardous properties
Risk of aspiration toxicity	No aspiration toxicity classification
Gentoxicity in vitro	Ames test S. typhimurium / E. coli negative Method: analogous OECD method
	Ames test S. typhimurium / E. coli Negative Method: literature
Mutagenicity assessment	no evidence of mutagenic effects
Carcinogenicity	No evidence that cancer may be caused.
	No negative effects.

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carcinogenicity assessment	Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.
Toxicity to reproduction	no evidence of reproductiontoxic properties No negative effects.
Human experience	Silicosis or other product specific illnesses of the respiratory tract were not observed in association with the product. Silicosis or other product specific illnesses of the respiratory tract have not been reported.

SECTION 12: Ecological information**12.1. Ecotoxicity**

Toxicity to fish	LC50 (Brachydanio rerio): > 10000 mg/l / 96 h Method: OECD 203 The reported toxic effects relate to the nominal concentration.
Toxicity in aquatic invertebrates	EC50 Daphnia magna: > 10000 mg/l / 24 h Method: OECD 202 The reported toxic effects relate to the nominal concentration.
Toxicity to algae	IC 50 Desmodesmus subspicatus (green algae): > 10000 mg/l / 72 h Method: OECD 201 The reported toxic effects relate to the nominal concentration.

12.2. Persistence and degradability

Biodegradability	The methods designed to assess persistence and biodegradability are not applicable to this product, in analogy to inorganic substances.
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12.3. Bioaccumulative potential

Bioaccumulation	Not to be expected.
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12.4. Mobility in soil

Mobility	No remarkable mobility in soil is to be expected.
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12.5. Other adverse effects

Further Information	The data we have at our disposal do not necessitate identification concerning environmental hazard.
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SECTION 13: Disposal considerations**13.1. Waste treatment methods**

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Product

Can be disposed of with domestic refuse in accordance with the necessary technical regulations following consultation with waste disposal expert(s) and the responsible authorities.

Uncleaned packaging

Offer rinsed packaging material to local recycling facilities.
Other countries: observe the national regulations.

Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

SECTION 14: Transport information**Road transport ADGC**

Not dangerous according to transport regulations.

- | | | |
|-------|-------------------------------|-----|
| 14.1. | UN number: | -- |
| 14.2. | UN proper shipping name: | -- |
| 14.3. | Transport hazard class(es): | -- |
| 14.4. | Packing group: | -- |
| 14.5. | Environmental hazards: | -- |
| 14.6. | Special precautions for user: | Yes |
- Not dangerous according to transport regulations.

Railway transport ADGC

Not dangerous according to transport regulations.

- | | | |
|-------|-------------------------------|-----|
| 14.1. | UN number: | -- |
| 14.2. | UN proper shipping name: | -- |
| 14.3. | Transport hazard class(es): | -- |
| 14.4. | Packing group: | -- |
| 14.5. | Environmental hazards: | -- |
| 14.6. | Special precautions for user: | Yes |
- Not dangerous according to transport regulations.

Air transport ICAO-TI/IATA-DGR

Not dangerous according to transport regulations.

- | | | |
|-------|-------------------------------|-----|
| 14.1. | UN number: | -- |
| 14.2. | UN proper shipping name: | -- |
| 14.3. | Transport hazard class(es): | -- |
| 14.4. | Packing group: | -- |
| 14.5. | Environmental hazards: | -- |
| 14.6. | Special precautions for user: | Yes |
- Not dangerous according to transport regulations.

Sea transport IMDG-Code/GGVSee (Germany)

Not dangerous according to transport regulations.

- | | | |
|-------|-------------------------------|-----|
| 14.1. | UN number: | -- |
| 14.2. | UN proper shipping name: | -- |
| 14.3. | Transport hazard class(es): | -- |
| 14.4. | Packing group: | -- |
| 14.5. | Environmental hazards: | -- |
| 14.6. | Special precautions for user: | Yes |
- Not dangerous according to transport regulations.

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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
for transport approval see regulatory information

Additional Information

Not dangerous according to transport regulations.

Hazchem code

NONE

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Poison schedule No poison schedule number allocated

Registration

Europe (EINECS/ELINCS)	Listed/registered
USA (TSCA)	Listed/registered
Canada (DSL)	Listed/registered
Australia (AICS)	Listed/registered
Japan (MITI)	Listed/registered
Korea (TCCL)	Listed/registered
Philippines (PICCS)	Listed/registered
China	Listed/registered

SECTION 16: Other information**Further information**

Revision: 15.10.2016

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Legend to abbreviations and acronyms

ADI	Acceptable Daily Intake
BCF	Bioconcentration Factor
BOD	Biochemical Oxygen Demand
c. c.	closed cup
CAO	Cargo Aircraft Only
Carc	Carcinogen
CAS	Chemical Abstract Services
CEPA	Canadian Environmental Protection Act
CERCLA	Comprehensive Environmental Response – Compensation and Liability Act
CFR	Code of Federal Regulations
CMR	Carcinogenic-Mutagenic-toxic for Reproduction
COD	Chemical Oxygen Demand
DIN	German Institute for Standardization
DOT	Department of Transportation
DNEL	Derived No Effect Level
EC50	Effective Concentration that causes 50% of the maximum response
EPA	Environmental Protection Agency
ErC50	Reduction of Growth Rate
ERG	Emergency Response Guide Book
FDA	Federal Drug Administration
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
GLP	Good Laboratory Practice
GMO	Genetic Modified Organism
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
ICAO-TI	International Civil Aviation Organization- Technical Instructions
IMDG	International Maritime Dangerous Goods
LD50	50% Lethal Dose
LC50	50% Lethal Concentration
L(E)C50	LC50 or EC50
LOAEL	Lowest Observed Adverse Effect Level
LOEL	Lowest Observed Effect Level
MARPOL	International Convention for the Prevention of Pollution from Ships
NFPA	National Fire Protection Association
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
o.c.	open cup
OECD	Organization for Economic Cooperation and Development
OEL	Occupational Exposure Limit
PBT	Persistence, Bioaccumulative, Toxic
PEC	Predicted Environmental Concentration
PNEC	Predicted No Effect Concentration
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
UN	United Nations
vPvB	Very Persistent, Very Bioaccumulative
voc	Volatile Organic Compounds
WHS	Work Health and Safety