

SAFETY DATA SHEET (EC 1907/2006)

AEROSIL® R 974

Material no.		Version	2.9 / GB
Specification	100804	Revision date	19.02.2010
VA-Nr		Print Date	22.02.2010
		Page	1 / 6



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

Product information

Trade name	AEROSIL® R 974
Company	Evonik Degussa GmbH Inorganic Materials Produktsicherheit IM-PT-PS Postfach 1345 D-63403 Hanau
Telephone	+49 (0)6181 59-4787
Telefax	+49 (0)6181 59-4205
Email address	sds.asfp@evonik.com
Emergency telephone number	+49 (0)7623-919191

Use of the Substance / Preparation	Silicone rubber Sealants Paints and lacquers Adhesive Coating agent Toner
------------------------------------	--

REACH Registration No.: if available listed in Chapter. 3

2. HAZARDS IDENTIFICATION

Additional safety information for humans and the environment

On the basis of our data the product is not a hazardous substance as defined by the Chemicals Act or Hazardous Substance Ordinance in the currently valid versions.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Information on ingredients / Hazardous components As per Directive 67/548/EC or Directive 1999/45/EC

• Silane, dichlorodimethyl-, reaction products with silica

CAS-No.	68611-44-9	EC-No.	271-893-4
---------	------------	--------	-----------

See chapter 16 for text of risk phrases

4. FIRST AID MEASURES

Inhalation

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

Skin contact

Wash off with plenty of water and soap.

Eye contact

Possible discomfort is due to foreign substance effect.
Rinse thoroughly with plenty of water keeping eyelid open.

SAFETY DATA SHEET (EC 1907/2006)

AEROSIL® R 974

Material no.		Version	2.9 / GB
Specification	100804	Revision date	19.02.2010
VA-Nr		Print Date	22.02.2010
		Page	2 / 6



In case of persistent discomfort: Consult an ophthalmologist.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

After absorbing large amounts of substance / In case of discomfort: Supply with medical care.

Notes to physician

No hazards which require special first aid measures.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

All extinguishing substances suitable.

Specific hazards during fire fighting

May be released in case of fire: carbon monoxide, carbon dioxide, formaldehyde and methane.

Further information

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear personal protective equipment.

Environmental precautions

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

Methods for cleaning up

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

Additional advice

Avoid dust formation.

7. HANDLING AND STORAGE

Handling

Safe handling advice

If necessary: Local ventilation.

Advice on protection against fire and explosion

Take precautionary measures against static discharges.

Dust explosion class

1 m³ vessel = not dust explosive

VDI Guideline 2263 sheet 1

Storage

Requirements for storage areas and containers

Keep in a dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

SAFETY DATA SHEET (EC 1907/2006)**AEROSIL® R 974**

Material no.		Version	2.9 / GB
Specification	100804	Revision date	19.02.2010
VA-Nr		Print Date	22.02.2010
		Page	3 / 6

**• Dust**

CAS-No.		
Control parameters	4 mg/m3	Time Weighted Average (TWA):(EH40 WEL)
type of exposition	Respirable dust.	
Control parameters	10 mg/m3	Time Weighted Average (TWA):(EH40 WEL)
type of exposition	Inhalable dust.	

DNEL/DMEL and PNEC values**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.

Eye protection

Safety glasses with side-shields
If dust occurs: basket-shaped glasses

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 practices.
If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used.
If the limits at the workplace are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form	powder
Colour	white
Odour	odourless

Safety data

pH	3.7 - 4.7	(40 g / l)	(20 °C)
	Medium:	water / methanol	
		1: 1 in suspension	

Melting point/range	not applicable
---------------------	----------------

Boiling point/range	not applicable
---------------------	----------------

Flash point	not applicable
-------------	----------------

Flammability	not applicable
--------------	----------------

Ignition temperature	> 400 °C
----------------------	----------

SAFETY DATA SHEET (EC 1907/2006)**AEROSIL® R 974**

Material no.		Version	2.9 / GB
Specification	100804	Revision date	19.02.2010
VA-Nr		Print Date	22.02.2010
		Page	4 / 6



Autoinflammability	not applicable
Lower explosion limit	not determined
Upper explosion limit	not determined
Minimum ignition energy	not applicable
Vapour pressure	not applicable
Density	ca. 2 g/cm ³ (20 °C)
Tapped density	ca. 50 g / l Method: DIN / ISO 787/11
Water solubility	insoluble
Partition coefficient (n-octanol/water)	not applicable
Viscosity, dynamic	not applicable

10. STABILITY AND REACTIVITY

Conditions to avoid	With temperatures > 300 °C, hydrophobicity is lost.
Hazardous decomposition products	Carbon monoxide, carbon dioxide (CO ₂)

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	LD ₅₀ Rat: > 5000 mg/kg Method: literature
Acute inhalation toxicity	LC ₅₀ Rat: > 0.477 mg/l / 4 h Method: analogy OECD (maximum concentration attainable in experiments)
Skin irritation	Rabbit / literature not irritating
Eye irritation	Rabbit / literature not irritating
Repeated dose toxicity	Oral no negative effects inhalative No irreversible changes and no indication of silicosis.
Gentoxicity in vitro	Ames test S. typhimurium / E. coli negative Method: literature
Carcinogenicity	no negative effects
Toxicity to reproduction	no negative effects

SAFETY DATA SHEET (EC 1907/2006)

AEROSIL® R 974

Material no.		Version	2.9 / GB
Specification	100804	Revision date	19.02.2010
VA-Nr		Print Date	22.02.2010
		Page	5 / 6



Human experience

Silicosis or other product specific illnesses of the respiratory tract were not observed in association with the product.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish	LC50 (Brachydanio rerio): > 10000 mg/l / 96 h Method: OECD 203
Toxicity to daphnia	EC50 Daphnia magna: > 10000 mg/l / 24 h Method: OECD 202
Toxicity to algae	IC 50 scenedesmus subspicatus: > 10000 mg/l / 72 h Method: OECD 201

13. DISPOSAL CONSIDERATIONS

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.

Waste Key Number

No waste key number as per the European Waste Types List can be assigned to this product, since such classification is based on the (as yet undetermined) use to which the product is put by the consumer. The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm / producing firm / official authority.

14. TRANSPORT INFORMATION

Transport/further information

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Labelling according to EC Directives

Other data	On the basis of our data the product is not a hazardous substance as defined by the Chemicals Act or Hazardous Substance Ordinance in the currently valid versions.
------------	---

SAFETY DATA SHEET (EC 1907/2006)**AEROSIL® R 974**

Material no.		Version	2.9 / GB
Specification	100804	Revision date	19.02.2010
VA-Nr		Print Date	22.02.2010
		Page	6 / 6

**National legislation****16. OTHER INFORMATION****Risk phrase (R phrase) texts****Further information**

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

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 safe handling, 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.