

Safety Data Sheet dated 4/7/2019, version 7

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: SEAL 5552 NERA

Trade code: 0075

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

Recommended use:

Liquid seal

1.3. Details of the supplier of the safety data sheet

Supplier:

Arexons S.p.A.

via Antica di Cassano, 23, 20063 Cernusco sul Naviglio (MI), Italy

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Competent person responsible for the safety data sheet:

arexons@arexons.it

1.4. Emergency telephone number

Arexons S.p.A.

Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306

Centro Antiveleni di Pavia IRCCS- Fondazione Maugeri tel. +39 (0)382 24444 (h24; it, en)

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

In Ireland: Beaumont Hospital - National Poisons Information Centre 01 809 2166 (7days, 8:00 -

22:00)

In South Africa: Poison Information Helpline 0861 555 777

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

Contains

3-aminopropyltriethoxysilane: May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

. None

2.3. Other hazards

PBT Substances:

>= 0.5% - < 1% Decamethylcyclopentasiloxane - REACH No.: 01-2119511367-43, CAS:



541-02-6, EC: 208-764-9

>= 0.5% - < 1% Dodecamethylcyclohexasiloxane - REACH No.: 01-2119517435-42, CAS:

540-97-6, EC: 208-762-8

vPvB Substances:

>= 0.5% - < 1% Decamethylcyclopentasiloxane - REACH No.: 01-2119511367-43, CAS:

541-02-6, EC: 208-764-9

>= 0.5% - < 1% Dodecamethylcyclohexasiloxane - REACH No.: 01-2119517435-42, CAS:

540-97-6, EC: 208-762-8

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 3% - < 5% 2-Pentanone, O,O',O"-(ethenylsilylidyne)trioxime

REACH No.: 01-2120006148-66, CAS: 58190-62-8, EC: 700-810-0

- 3.1/4/Oral Acute Tox. 4 H302
- ◆ 3.3/2 Eye Irrit. 2 H319
- ♦ 3.9/2 STOT RE 2 H373

>= 1% - < 2% 2-Pentandione, O, O',O"-(methylsilydyne)trioxime

REACH No.: 01-2120004323-76, CAS: 37859-55-5

- 3.1/4/Oral Acute Tox. 4 H302
- ◆ 3.3/2 Eye Irrit. 2 H319
- **♦** 3.9/2 STOT RE 2 H373

>= 0.5% - < 1% 3-aminopropyltriethoxysilane

REACH No.: 01-2119480479-24, CAS: 919-30-2, EC: 213-048-4

- 1 3.1/4/Oral Acute Tox. 4 H302
- 3.4.2/1 Skin Sens. 1 H317
- ♦ 3.2/1B Skin Corr. 1B H314

>= 0.5% - < 1% Decamethylcyclopentasiloxane

REACH No.: 01-2119511367-43, CAS: 541-02-6, EC: 208-764-9

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

>= 0.5% - < 1% Dodecamethylcyclohexasiloxane

REACH No.: 01-2119517435-42, CAS: 540-97-6, EC: 208-762-8

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

SVHC Substances:

>= 0.5% - < 1% Decamethylcyclopentasiloxane

REACH No.: 01-2119511367-43, CAS: 541-02-6, EC: 208-764-9

Substance PBT and vPvB and SVHC

>= 0.5% - < 1% Dodecamethylcyclohexasiloxane

REACH No.: 01-2119517435-42, CAS: 540-97-6, EC: 208-762-8

Substance PBT and vPvB and SVHC

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media:

Foam

To dust.

To carbon dioxide.

Not Recommended Extinguishing Media:

To water

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry place.

Avoid exposure to direct sunlight.

Provide adequate ventilation/air extraction in work areas.

Store at temperatures below 50°C/122°F.

Keep away from food, drink and feed.



Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

N.A

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Safety goggles.

Protection for skin:

protective clothing

Protection for hands:

We recommend using rubber gloves.

Respiratory protection:

In case of insufficient ventilation, use adequate respiratory protection equipment.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

The normal (mechanical) ventilation of the room should be sufficient for work not extended with the product. For more extensive activities with it (or if necessary to ensure the well-being of the worker), a local mechanical air extractor should be provided.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Properties | Value | Method: | Notes: |
|--|----------------|---------|--------|
| Appearance and colour: | Paste | | |
| Odour: | Characteristic | | |
| Odour threshold: | N.A. | | |
| pH: | N.A. | | |
| Melting point / freezing point: | N.A. | | |
| Initial boiling point and boiling range: | N.A. | | |
| Flash point: | N.A. | | |
| Evaporation rate: | N.A. | | |
| Solid/gas flammability: | N.A. | | |



| Upper/lower flammability or explosive limits: | N.A. | |
|---|-------------|------|
| Vapour pressure: | N.A. | |
| Vapour density: | N.A. | |
| Relative density: | 1.33 kg/dm3 | |
| Solubility in water: | Insoluble | |
| Solubility in oil: | N.A. | |
| Partition coefficient (n-octanol/water): | N.A. | |
| Auto-ignition temperature: | N.A. | |
| Decomposition temperature: | N.A. | |
| Viscosity: | N.A. | |
| Explosive properties: | N.A. | |
| Oxidizing properties: | N.A. | |

9.2. Other information

| Properties | Value | Method: | Notes: |
|--------------------------------------|-------|---------|--------|
| Miscibility: | N.A. | | |
| Fat Solubility: | N.A. | | |
| Conductivity: | N.A. | | |
| Substance Groups relevant properties | N.A. | | |

NA=not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Vulcanizes at room temperature in contact with humid air.

10.2. Chemical stability

Stable at room temperature, not in contact with air.

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Strong oxidising agents. Water.

10.6. Hazardous decomposition products

Thermal decomposition or combustion can release carbon oxides and other toxic gases and vapours. Amorphous silica.

May produce hazardous substances during use or in contact with water.



SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological information of the product:
SEAL 5552 NERA

a) acute toxicity

Based on available data, the classification criteria are not met Test: oecd 10 - Route: Oral 15997.4 mg/kg
Test: oecd 10 - Route: Skin 8860.46 mg/kg

b) skin corrosion/irritation

Based on available data, the classification criteria are not met c) serious eye damage/irritation

Based on available data, the classification criteria are not met d) respiratory or skin sensitisation

Based on available data, the classification criteria are not met e) germ cell mutagenicity

Based on available data, the classification criteria are not met f) carcinogenicity

Based on available data, the classification criteria are not met g) reproductive toxicity

Based on available data, the classification criteria are not met h) STOT-single exposure

Based on available data, the classification criteria are not met i) STOT-repeated exposure

Based on available data, the classification criteria are not met j) aspiration hazard

Based on available data, the classification criteria are not met Toxicological information of the main substances found in the product:

3-aminopropyltriethoxysilane - CAS: 919-30-2

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat > 0.045 mg/l Test: NOAEL - Route: Oral - Species: Rat 200 mg/kg Test: LOAEL - Route: Oral - Species: Rat 600 mg/kg

b) skin corrosion/irritation:

Test: OECD TG 404 - Route: Skin - Species: Rabbit Positive c) serious eye damage/irritation:

Test: OECD TG 405 - Route: EYE - Species: Rabbit Positive d) respiratory or skin sensitisation:

Test: OECD TG 406 - Route: Skin - Species: CAVIA Positive e) germ cell mutagenicity:

Test: oecd - Species: Generic Bacteria No

g) reproductive toxicity:

Test: oecd 6 - Route: Oral - Species: Rat noael 100 mg/kg Decamethylcyclopentasiloxane - CAS: 541-02-6

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat 8.67 mg/l

d) respiratory or skin sensitisation:



Test: Skin Sensitization Negative

e) germ cell mutagenicity:

Test: Mutagenesis - Species: vitro Negative

g) reproductive toxicity:

Test: NOAEL - Route: Inhalation - Species: Rat 3.64 mg/l

Dodecamethylcyclohexasiloxane - CAS: 540-97-6

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Species: CAVIA Negative - Notes: OECD 406

e) germ cell mutagenicity:

Test: oecd 2 - Species: vitro Negative

g) reproductive toxicity:

Test: NOAEL - Route: Oral - Species: Rat > 1000 mg/kg - Notes: OECD 422

Test: arx1 - Species: Rabbit > 1000 mg/kg - Notes: OECD 414

h) STOT-single exposure:

Test: oecd 11 Negative

i) STOT-repeated exposure:

Negative

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

3-aminopropyltriethoxysilane - CAS: 919-30-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 934 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia 331 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae 1000 mg/l - Duration h: 72

Decamethylcyclopentasiloxane - CAS: 541-02-6

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish > 0.014 mg/l - Duration h: 2160

Dodecamethylcyclohexasiloxane - CAS: 540-97-6

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae > 0.002 mg/l - Duration h: 72

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia > 0.0046 mg/l - Duration h: 504

Endpoint: NOEC - Species: Algae > 0.002 mg/l - Duration h: 72

12.2. Persistence and degradability

None

3-aminopropyltriethoxysilane - CAS: 919-30-2

Biodegradability: Non-readily biodegradable - Duration: 28gg - %: 67

Decamethylcyclopentasiloxane - CAS: 541-02-6

Biodegradability: Non-readily biodegradable - Duration: 28gg - %: 0.14

Dodecamethylcyclohexasiloxane - CAS: 540-97-6

Biodegradability: Non-readily biodegradable - Test: OECD TG 310 - Duration: 28gg - %: 4.5

12.3. Bioaccumulative potential

3-aminopropyltriethoxysilane - CAS: 919-30-2

Bioaccumulation: OECD305 - Test: BCF - Bioconcentrantion factor 3.4

Decamethylcyclopentasiloxane - CAS: 541-02-6

Test: BCF - Bioconcentrantion factor 7060

Dodecamethylcyclohexasiloxane - CAS: 540-97-6

Bioaccumulation: Bioaccumulative - Test: BCF - Bioconcentrantion factor 2860

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

PBT Substances:

>= 0.5% - < 1% Decamethylcyclopentasiloxane - CAS: 541-02-6



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>= 0.5% - < 1% Dodecamethylcyclohexasiloxane - CAS: 540-97-6 vPvB Substances:
>= 0.5% - < 1% Decamethylcyclopentasiloxane - CAS: 541-02-6
>= 0.5% - < 1% Dodecamethylcyclohexasiloxane - CAS: 540-97-6 12.6. Other adverse effects
None
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. Additional disposal information:

Dispose of waste at suitable centres for the processing or disposal of waste in compliance with the laws and regulations in force and the characteristics of the product at the time of disposal. Contaminated packaging must be emptied as far as possible. After cleaning, send to an authorised centre for recycling or disposal.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

ADR-Enviromental Pollutant: No IMDG-Marine pollutant: No

14.6. Special precautions for user

Ň.A

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code No

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:



Restrictions related to the product:
Restriction 3

Restrictions related to the substances contained: Restriction 70

Volatile Organic compounds - VOCs = 0.00 % Volatile Organic compounds - VOCs = 0.00 g/Kg Volatile Organic compounds - VOCs = 0.00 g/I

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

SVHC Substances:

Substances in candidate list (Art. 59 Reg. 1907/2006, REACH):

Decamethylcyclopentasiloxane

PBT, vPvB

Dodecamethylcyclohexasiloxane

PBT, vPvB

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture. Substances for which a Chemical Safety Assessment has been carried out:

None

SECTION 16: Other information

Text of phrases referred to under heading 3:

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H317 May cause an allergic skin reaction.

H314 Causes severe skin burns and eye damage.

| Hazard class and hazard category | Code | Description |
|----------------------------------|------------|--|
| Acute Tox. 4 | 3.1/4/Oral | Acute toxicity (oral), Category 4 |
| Skin Corr. 1B | 3.2/1B | Skin corrosion, Category 1B |
| Eye Irrit. 2 | 3.3/2 | Eye irritation, Category 2 |
| Skin Sens. 1 | 3.4.2/1 | Skin Sensitisation, Category 1 |
| STOT RE 2 | 3.9/2 | Specific target organ toxicity - repeated exposure, Category 2 |

Paragraphs modified from the previous revision:

SECTION 2: Hazards identification

SECTION 3: Composition/information on ingredients

SECTION 7: Handling and storage SECTION 12: Ecological information SECTION 15: Regulatory information



This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,

Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van

Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

NA: Not applicable

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

bv Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.