

Safety Data Sheet

SYSTEM 52A22 FRENAFILETTI DEBOLE



Safety Data Sheet dated 6/7/2019, version 4

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

1.1. Product identifier

Mixture identification:

Trade name: SYSTEM 52A22 FRENAFILETTI DEBOLE
Trade code: 4709

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

Recommended use:

Anaerobic sealing adhesive

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):

- ⚠ Warning, Skin Irrit. 2, Causes skin irritation.
- ⚠ Warning, Eye Irrit. 2, Causes serious eye irritation.
- ⚠ Warning, Skin Sens. 1, May cause an allergic skin reaction.
- ⚠ Warning, STOT SE 3, May cause respiratory irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

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P103 Read label before use.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P405 Store locked up.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contains

2-HYDROXYETHYL METHACRYLATE
cumene hydroperoxide

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

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

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:

>= 30% - < 40% 2-HYDROXYETHYL METHACRYLATE

REACH No.: 01-2119490169-29, CAS: 868-77-9, EC: 212-782-2

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.3/2 Eye Irrit. 2 H319

⚠ 3.4.2/1 Skin Sens. 1 H317

>= 2% - < 3% ethanediol

REACH No.: 01-2119456816-28, CAS: 107-21-1, EC: 203-473-3

⚠ 3.1/4/Oral Acute Tox. 4 H302

⚠ 3.9/2 STOT RE 2 H373

>= 1% - < 2% cumene hydroperoxide

REACH No.: 01-2119475796-19, Index number: 617-002-00-8, CAS: 80-15-9, EC: 201-254-7

⚠ 2.8/E Self-react. E H242

⚠ 3.1/4/Oral Acute Tox. 4 H302

⚠ 3.1/4/Dermal Acute Tox. 4 H312

⚠ 3.1/3/Inhal Acute Tox. 3 H331

⚠ 3.2/1B Skin Corr. 1B H314

⚠ 3.3/1 Eye Dam. 1 H318

⚠ 3.8/3 STOT SE 3 H335

⚠ 3.9/2 STOT RE 2 H373

⚠ 4.1/C2 Aquatic Chronic 2 H411

Specific Concentration Limits:

1% <= C < 3%: Eye Irrit. 2 H319

1% <= C < 10%: STOT SE 3 H335

3% <= C < 10%: Skin Irrit. 2 H315

3% <= C < 10%: Eye Dam. 1 H318

C >= 10%: Skin Corr. 1B H314

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SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

In case of ingestion: contact a physician.

Do NOT induce vomiting.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media:

To carbon dioxide.

Foam

To dust.

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.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

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.

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- 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.
Use localized ventilation system.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
- 7.2. Conditions for safe storage, including any incompatibilities
Store in hermetically sealed containers, preferably in a cool place, away from sources of heat and direct sunlight.
- 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)
Adesivo. Sigillante.

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
ethanediol - CAS: 107-21-1
20101.13 - TWA(8h): 52 mg/m³, 20 ppm - STEL(): 104 mg/m³, 40 ppm
EU - TWA(8h): 52 mg/m³, 20 ppm - STEL: 104 mg/m³, 40 ppm - Notes: Skin
ACGIH - STEL: 10 mg/m³ - Notes: (I, H), A4 - URT irr
ACGIH - TWA(8h): 25 ppm - STEL: 50 ppm - Notes: (V), A4 - URT irr
- DNEL Exposure Limit Values
2-HYDROXYETHYL METHACRYLATE - CAS: 868-77-9
Worker Industry: 4.9 mg/m³ - Worker Professional: 4.9 mg/m³ - Consumer: 2.9 mg/m³ -
Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Industry: 1.3 mg/kg - Worker Professional: 1.3 mg/kg - Consumer: 830 µg/kg -
Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 830 µg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects
- ethanediol - CAS: 107-21-1
Worker Professional: 35 mg/m³ - Consumer: 7 mg/m³ - Exposure: Human Inhalation -
Frequency: Long Term, systemic effects
Worker Professional: 106 mg/kg - Consumer: 53 mg/kg - Exposure: Human Dermal -
Frequency: Long Term, systemic effects
- cumene hydroperoxide - CAS: 80-15-9
Worker Professional: 6 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term,
systemic effects
- PNEC Exposure Limit Values
2-HYDROXYETHYL METHACRYLATE - CAS: 868-77-9
Target: Fresh Water - Value: 482 03
Target: 08 - Value: 1 mg/l
Target: Marine water - Value: 482 03
Target: 09 - Value: 10 mg/l

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Target: Freshwater sediments - Value: 3.79 mg/kg
ethanediol - CAS: 107-21-1

Target: Fresh Water - Value: 10 mg/l

Target: Marine water - Value: 1 mg/l

Target: Freshwater sediments - Value: 37 mg/kg

Target: Marine water sediments - Value: 3.7 mg/kg

Target: 09 - Value: 199.5 mg/l

cumene hydroperoxide - CAS: 80-15-9

Target: Fresh Water - Value: 0.031 mg/l

Target: Marine water - Value: 0.00031 mg/l

Target: Freshwater sediments - Value: 0.23 mg/kg

Target: Marine water sediments - Value: 0.023 mg/kg

Target: 09 - Value: 0.350 mg/l

8.2. Exposure controls

Eye protection:

Anti-splash goggles

Face protection shield.

Protection for skin:

protective clothing

Protection for hands:

Nitrile or Viton gloves.

Compliant with EN 374.

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:	Liquid Blue	--	--
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:	>100°C	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--

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Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	1.00	--	--
Solubility in water:	Leggermente Solubile	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	4500 mPa s @25°C	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

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

NA=not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Strong oxidising agents.

10.2. Chemical stability

Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

It is unlikely that any group of materials or specific material will react with the product, creating a dangerous situation.

10.4. Conditions to avoid

Avoid lack of air and contamination with metals.

10.5. Incompatible materials

Metals and their salts.

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Free radical initiators.

10.6. Hazardous decomposition products

Thermal decomposition may result in carbon monoxide, carbon dioxide and other unidentified organic compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

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a) acute toxicity

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

The product is classified: Skin Irrit. 2 H315

c) serious eye damage/irritation

The product is classified: Eye Irrit. 2 H319

d) respiratory or skin sensitisation

The product is classified: Skin Sens. 1 H317

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

The product is classified: STOT SE 3 H335

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:

2-HYDROXYETHYL METHACRYLATE - CAS: 868-77-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 5564 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 3000 mg/kg

ethanediol - CAS: 107-21-1

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Mouse 3500 mg/kg

cumene hydroperoxide - CAS: 80-15-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 328 mg/kg

Test: LD50 - Route: Skin - Species: Rat 1200 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat 1.37 mg/l

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin Positive

c) serious eye damage/irritation:

Test: Eye Irritant Positive

SECTION 12: Ecological information

12.1. Toxicity

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

2-HYDROXYETHYL METHACRYLATE - CAS: 868-77-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 227 mg/l - Duration h: 96

ethanediol - CAS: 107-21-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 72860 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae 6500-13000 mg/l - Duration h: 96

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish 15380 mg/l - Duration h: 168

Endpoint: NOEC - Species: Daphnia 8590 mg/l - Duration h: 168

c) Bacteria toxicity:

Endpoint: CE20 - Species: fanghi 1.995 mg/l - Duration h: 0.5

cumene hydroperoxide - CAS: 80-15-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 3.9 mg/l - Duration h: 96

12.2. Persistence and degradability

None

2-HYDROXYETHYL METHACRYLATE - CAS: 868-77-9

Biodegradability: 4 - Duration: 28gg - %: 84

ethanediol - CAS: 107-21-1

Biodegradability: 4 - Duration: .10gg - %: 90-100

cumene hydroperoxide - CAS: 80-15-9

Biodegradability: 4

12.3. Bioaccumulative potential

2-HYDROXYETHYL METHACRYLATE - CAS: 868-77-9

Bioaccumulation: Bioaccumulative - Test: BCF - Bioconcentration factor 1.44

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

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:

CER 08 04 09 adhesives or sealants containing organic solvents or other dangerous substances.

Do not discharge into drains, ground water or water courses. Observe the laws in force.

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

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- ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No
- 14.6. Special precautions for user
N.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:

No restriction.

Pronto all'Uso

Volatile Organic compounds - VOCs = 33.00 %

Volatile Organic compounds - VOCs = 330.00 g/Kg

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 18.10

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)

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:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

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H373 May cause damage to organs through prolonged or repeated exposure.
H242 Heating may cause a fire.
H312 Harmful in contact with skin.
H331 Toxic if inhaled.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Self-react. E	2.8/E	Self-reactive substance or mixture, Type E
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Paragraphs modified from the previous revision:

SECTION 7: Handling and storage
SECTION 8: Exposure controls/personal protection

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335	Calculation method

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