

Safety Data Sheet
SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM
52A43 / MEDIUM STRENGTH THREADLOCKER



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

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

1.1. Product identifier

Mixture identification:

Trade name: SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM 52A43 /
MEDIUM STRENGTH THREADLOCKER

Trade code: 4704

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):

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:

None

Contains

tert-AMYL HYDROPEROXIDE: May produce an allergic reaction.

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

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

4704/7

Page n. 1 of 9

Safety Data Sheet

SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM 52A43 / MEDIUM STRENGTH THREADLOCKER



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:

>= 0.5% - < 1% tert-AMYL HYDROPEROXIDE

REACH No.: 01-2119964027-36, CAS: 3425-61-4, EC: 222-321-7

- ⚠ 2.6/3 Flam. Liq. 3 H226
- ⚠ 2.15/A Org. Perox. A H240
- ⚠ 3.1/4/Oral Acute Tox. 4 H302
- ⚠ 3.1/3/Dermal Acute Tox. 3 H311
- ⚠ 3.1/3/Inhal Acute Tox. 3 H331
- ⚠ 3.2/1B Skin Corr. 1B H314
- ⚠ 3.3/1 Eye Dam. 1 H318
- ⚠ 3.4.2/1 Skin Sens. 1 H317
- ⚠ 4.1/C2 Aquatic Chronic 2 H411

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.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

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

Prolonged contact may cause redness, irritation and skin dehydration.

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

Treatment:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media:

Foam

To carbon dioxide.

To dust.

Not Recommended Extinguishing Media:

Do not use direct water jets.

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.

Safety Data Sheet

SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM 52A43 / MEDIUM STRENGTH THREADLOCKER



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 well-closed containers, preferably in a cool place, away from sources of heat and direct sunlight.
 - Keep away from food, drink and feed.
 - 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:
 - Not needed for normal use. Anyway, operate according good working practices.
 - Protection for skin:
 - No special precaution must be adopted for normal use.
 - Protection for hands:
 - Suitable material:
 - Nitrile or Viton gloves.
 - Respiratory protection:
 - Not needed for normal use.
 - Thermal Hazards:
 - None
 - Environmental exposure controls:
 - None

Safety Data Sheet

SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM 52A43 / MEDIUM STRENGTH THREADLOCKER



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.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	1.1	--	--
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:	2250 mPas (25°C)	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

Safety Data Sheet

SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM 52A43 / MEDIUM STRENGTH THREADLOCKER



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

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

Flames and other sources of ignition.

Excessive heat.

10.5. Incompatible materials

Strong acids.

Strong oxidising agents, strong reducing agents.

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:

SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM 52A43 / MEDIUM STRENGTH
THREADLOCKER

a) acute toxicity

Based on available data, the classification criteria are not met

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

Safety Data Sheet

SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM 52A43 / MEDIUM STRENGTH THREADLOCKER



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:

tert-AMYL HYDROPEROXIDE - CAS: 3425-61-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 500 mg/kg

Test: LD50 - Route: Skin - Species: Rat 446 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat 2.425 mg/l

g) reproductive toxicity:

Test: NOAEL(C) - Route: Oral - Species: Rat 100 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

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

tert-AMYL HYDROPEROXIDE - CAS: 3425-61-4

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia 6.7 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae 1.2 mg/l - Duration h: 72

Endpoint: EC50 - Species: fanghi 138 mg/l - Duration h: 3

12.2. Persistence and degradability

None

N.A.

12.3. Bioaccumulative potential

N.A.

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.

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.

Safety Data Sheet

SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM 52A43 / MEDIUM STRENGTH THREADLOCKER



- 14.4. Packing group
N.A.
- 14.5. Environmental hazards
 - 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 40

Restrictions related to the substances contained:

No restriction.

Volatile Organic compounds - VOCs = 2.40 %

Volatile Organic compounds - VOCs = 24.00 g/Kg

Volatile Organic compounds - VOCs = 26.40 g/l

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:

H226 Flammable liquid and vapour.

H240 Heating may cause an explosion.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

Safety Data Sheet

SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM 52A43 / MEDIUM STRENGTH THREADLOCKER



H331 Toxic if inhaled.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Org. Perox. A	2.15/A	Organic peroxide, Type A
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

Paragraphs modified from the previous revision:

SECTION 3: Composition/information on ingredients
SECTION 7: Handling and storage

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.



Safety Data Sheet

SYSTEM 52A43 FRENAFILETTI MEDIO SYSTEM 52A43 / MEDIUM STRENGTH THREADLOCKER

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.