

Trade name: BRS Remover

Revised at: 06.04.2010 Print date: 12.09.2011 Page 1/5

1. Identification of the substance/preparation and of the company/undertaking

Trade name:

BRS Remover

Recommended use:

Together with BRS Activator the BRS Remover causes the basic cleaning (removal of biofilm) of the process water lines in dental treatment units

before the use of Alpron or Bilpron.

Effect of the preparation:

Cleansing agent

Manufacturer:

ALPRO MEDICAL GMBH

Mooswiesenstr. 9

D-78112 St. Georgen (Germany) Telephone: +49 7725 9392-0 Telefax: +49 7725 9392-91 Email: alpro@alpro-medical.de Internet: www.alpro-medical.com

Technical contact point:

+49 7725 9392-0

Emergency phone: +49 7725 9392-0 (business hours)

+49 761 19240 Poisoning-information-central, Freiburg (24h emergency call)

2. Hazards identification

R36 Irritating to eyes.

3. Composition/information on ingredients

Chemical characterization:

Mixture of substances listed below with nonhazardous additions.

Hazardous ingredients

CAS-No.

Weight-% Code letter

Xi

R-phrases*

Citric acid anhydrate

77-92-9

>50%

36

4. First aid measures

General information:

Note precautions for self-protection.

On inhalation:

Move affected person into fresh air and keep still and warm. In case of

irritation of the airways, seek medical advice.

On contact with skin:

Wash off immediately with soap and water. In case of skin reactions, seek

medical advice.

On contact with the eyes:

Rinse the eyes with water with the eyelids open for a sufficient length of

time, then seek ophthalmological advice immediately.

If swallowed:

Rinse out mouth and then drink plenty of water. Do not induce vomiting.

Seek medical advice.

Information for the doctor:

First aid, decontamination, symptomatic treatment.

^{*}Full text of R-phrases: see under section 16



Trade name: BRS Remover

Revised at: 06.04.2010 Print date: 12.09.2011

Page 2/5

Fire-fighting measures

Suitable extinguishing media:

Water, foam, dry fire-extinguishing media, carbon dioxide

Extinguishing media which must not be used

for safety reasons:

None known

Special exposure hazards arising from the substance or preparation itself, combustion

products, resulting gases:

None known

Special protective equipment for firefighting:

Not necessary

Additional information:

Cool endangered containers with water spray jet and if

possible remove off fire area.

Accidental release measures

Personal precautions:

Use personal protective clothing. High risk of slipping due

to leakage/spillage of product.

Environmental precautions:

Do not empty into drains/surface water/ground water.

Methods for cleaning up/taking up:

Treat recovered material as prescribed in: Disposal

considerations.

7. Handling and storage

Hints for safe handling:

Avoid contact with skin and eyes.

Hints for protection against fire and explosion: Product is not flammable.

Further information:

Not necessary

Requirements for storage rooms and vessels:

Keep tightly closed and store only in original container.

Hints on storage assembly:

Not necessary

Further information on storage conditions:

Not necessary

Storage class:

LGK 10

Exposure controls / Personal protection

Constituents with occupational exposure limits rsp. biological occupational exposure limits requiring monitoring:

Does not contain substances above concentration limits fixing an occupational limit.

General health and safety measures:

Do not eat, drink, smoke while working.

Wash hands before breaks and on finishing work.

Preventive skin protection using barrier ointment.

Keep away of foods and drinks.

Avoid contact with eyes, skin and clothing.

Avoid inhalation of aerosols and vapours.



Trade name: BRS Remover

Revised at: 06.04.2010 Print date: 12.09.2011

Page 3/5

Personal protection equipment:

Respiratory protection:

Not necessary if handled cautiously.

Hand protection:

E.g. natural rubber- or PVC-gloves are recommended.

Eye protection:

Tightly sealed goggles.

Protective clothing:

Not necessary if handled cautiously.

Physical and chemical properties

Form:

powdered

Colour:

light-blue

Odour:

characteristic

pH-value (80 g/l H₂O):

1,5-2,0

(20°C)

Boiling point/Boiling range:

not relevant to safety

Melting point/Melting range:

not relevant to safety

Flash point (DIN, TRbF):

>55°C

Flammability (solid, gases):

not determinable

Explosive properties:

none

Lower explosion limit:

none

Upper explosion limit:

none

Ignition temperature:

not necessary

Oxidizing properties:

none

Vapour pressure:

not necessary

at ...°C

Density:

not determinable

at ...°C

Bulk density:

not necessary

at ...°C

Solubility in water:

1330 g/l

in ethanol:

soluble

in hexan:

not soluble

(n-octanol/water)

Partition coefficient: Viskosity (sort):

not necessary not necessary

at ...°C

Electrical conductivity (80 g/l H₂O):

5500-6000 µS/cm

(20°C)

Refractive index nD (80 g/l H₂O):

1,3418-1,3433

(20°C)

Optical rotation \(\alpha D: \)

not necessary

10. Stability and reactivity

Conditions to avoid:

No hazardous decomposition products if stored and handled as

prescribed.

Materials to avoid:

No hazardous reactions with other substances known.

Hazardous decomposition products:

No decomposition if used as prescribed.



Trade name: BRS Remover

Revised at: 06.04.2010 Print date: 12.09.2011 Page 4/5

11. Toxicological information

Acute toxicity:

No acute toxicity known.

Primary irritant effect on the skin:

No primary irritant effect on the skin known.

Primary irritant effect on the eye:

Irritating to eyes.

Mutagenic potential:

No mutagenic potential known.

Sensitization:

No sensitizing effects known.

The product was classified on the basis of the calculation procedure of the preparation directive 1999/45/EC.

Based on manufacturer data of the main components the acute toxicity, the skin irritation, the mucous membrane irritation and the mutagenic potential of the preparation were evaluated. However, some data are not complete regarding particular main components. Nevertheless according to the experience of the manufacturer there are no other hazards expected than those which are already mentioned on the label.

12. Ecological information

Ecotoxicity:

Inhibition of degradation activity in activated sludge is not to be

anticipated during correct introduction of low concentrations.

Persistence and degradation:

Ingredients are biodegradable.

Other adverse effects:

No other adverse effects known.

Further information:

Do not allow product to reach ground water or waters and do not

empty undiluted product into sewers.

13. Disposal considerations

Disposal of the product:

In the EC member states there are no standardized regulations for the disposal of chemicals. In Germany the law of the cycle of economy and waste (KrW/AbfG) prescribes the principle of utilization and therefore a distinction must be made between "waste for utilization" and "waste for removal". Furthermore special cases – particularly in case of delivery – are also regulated by the federal states. Please contact the corresponding office (authority or waste disposal company) who will inform you about the utilization or removal.

Waste code no.*: 16 03 05

Disposal of uncleaned as well as completely emptied packings:

Disposal according to official regulations. Contaminated packings are to be treated like the substance.

Waste code no.*: 15 01 10

Further information:

If there is no official regulation, non-contaminated packings can be treated like domestic waste or can be recycled.

*Waste code no .:

Waste incurred is classified following the code of the European waste register

according to kind of waste and branch.



Trade name: BRS Remover

Revised at: 06.04.2010 Print date: 12.09.2011

Page 5/5

14. Transport information

No hazardous material as defined by the transport regulations (ADR/RID, IMDG-Code, ICAO-TI/IATA-DGR)

15. Regulatory information

Labelling

Code letter:

Xi

Hazard designation:

Irritant

contains:

R-phrases:

R36

Irritating to eyes.

S-phrases:

S24

Avoid contact with skin.

S26

In case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

S39

Wear eye/face protection.

Special labelling of certain preparations (preparation directive 1999/45/EC annex V):

not necessary

National regulations (Germany)

Restrictions of occupation:

Juvenile in relation to § 22 JArbSchG

Störfallverordnung:

Classification according to VbF:

Not subject to the VbF

Technische Anleitung Luft:

Water hazard class:

WGK 1 (slightly water hazardous); self-classification

16. Other information

Full text of R-phrases appearing in section 3:

Irritating to eyes. R36

Further information:

This information is based on our present knowledge and describes the safety measures which are to be taken for this product. However, this shall not constitute a guarantee for any product features.

Marking of changes:

A backslash in the left hand margin indicates an amendment from the previous version.



Trade name: BRS Activator

Revised at: 06.04.2010 Print date: 12.09.2011 Page 1/5

1. Identification of the substance/preparation and of the company/undertaking

Trade name:

BRS Activator

Recommended use:

Together with BRS Remover the BRS Activator causes the basic cleaning

(removal of biofilm) of the process water lines in dental treatment units

before the use of Alpron or Bilpron.

Effect of the preparation:

Cleansing agent

Manufacturer:

ALPRO MEDICAL GMBH

Mooswiesenstr. 9

D-78112 St. Georgen (Germany) Telephone: +49 7725 9392-0 Telefax: +49 7725 9392-91 Email: alpro@alpro-medical.de Internet: www.alpro-medical.com

Technical contact point:

+49 7725 9392-0

Emergency phone: +49

+49 7725 9392-0 (business hours)

+49 761 19240 Poisoning-information-central, Freiburg (24h emergency call)

2. Hazards identification

This product does not require labelling in terms of preparation guideline 1999/45/EC.

3. Composition/information on ingredients

Chemical characterization:

Mixture of tensides with nonhazardous additions.

Does not contain hazardous ingredients above concentration limits fixed in preparation guideline 1999/45/EC.

4. First aid measures

General information:

Note precautions for self-protection.

On inhalation:

No special measures necessary.

On contact with skin:

Wash off with soap and water.

On contact with the eyes:

Rinse the eyes with water with the eyelids open for a sufficient length of

time.

If swallowed:

Rinse out mouth and then drink plenty of water.

Information for the doctor:

First aid, decontamination, symptomatic treatment.



Trade name: BRS Activator

Revised at: 06.04.2010 Print date: 12.09.2011

Page 2/5

Fire-fighting measures

Suitable extinguishing media:

Water, foam, dry fire-extinguishing media, carbon dioxide

Extinguishing media which must not be used

for safety reasons:

None known

Special exposure hazards arising from the substance or preparation itself, combustion

products, resulting gases:

None known

Special protective equipment for firefighting:

Not necessary

Additional information:

Cool endangered containers with water spray jet and if

possible remove off fire area.

Accidental release measures

Personal precautions:

Use personal protective clothing. High risk of slipping due

to leakage/spillage of product.

Environmental precautions:

Contain spillage with absorbing material, e.g. with sand.

Methods for cleaning up/taking up:

Treat recovered material as prescribed in: Disposal

considerations.

7. Handling and storage

Hints for safe handling:

Not necessary

Hints for protection against fire and explosion: Product is not flammable.

Further information:

Not necessary

Requirements for storage rooms and vessels:

Keep tightly closed and store only in original container.

Hints on storage assembly:

Not necessary

Further information on storage conditions:

Not necessary

Storage class:

LGK 10

Exposure controls / Personal protection

Constituents with occupational exposure limits rsp. biological occupational exposure limits requiring monitoring:

Does not contain substances above concentration limits fixing an occupational limit.

General health and safety measures:

Do not eat, drink, smoke while working.

Wash hands before breaks and on finishing work.

Preventive skin protection using barrier ointment.

Keep away of foods and drinks.

Avoid contact with eyes, skin and clothing.

Avoid inhalation of aerosols and vapours.



Trade name: BRS Activator

Revised at: 06.04.2010 Print date: 12.09.2011 Page 3/5

Personal protection equipment:

Respiratory protection:

Not necessary.

Hand protection:

Not necessary.

Eye protection:

Goggles are recommended.

Protective clothing:

Not necessary.

9. Physical and chemical properties

Form:

liquid

Colour:

light green, clear

Odour:

of tenside

pH-value (undiluted):

8,5-9,5

(20°C)

Boiling point/Boiling range:

not relevant to safety

0.000

Melting point/Melting range:

not relevant to safety

Flash point (DIN, TRbF):

>55°C

Flammability (solid, gases):

not determinable

Explosive properties:

none

Lower explosion limit:

none none

Upper explosion limit: Ignition temperature:

not necessary

Oxidizing properties:

none

Vapour pressure:

not necessary

at ...°C

Density: Bulk density: 0,991-0,999 g/cm³ not determinable

at 20°C at ...°C

Solubility in water:

soluble

in ethanol:

soluble

in hexan:

not soluble

Partition coefficient:

not necessary

(n-octanol/water)

Viskosity (sort):

not necessary

at ...°C

Electrical conductivity (undiluted):

2000-2500 μS/cm

(20°C) (20°C)

Refractive index nD:

not necessary

Optical rotation \(\alpha D: \)

not necessary

10. Stability and reactivity

Conditions to avoid:

No hazardous decomposition products if stored and handled as

prescribed.

Materials to avoid:

No hazardous reactions with other substances known.

Hazardous decomposition products:

No decomposition if used as prescribed.



Trade name: BRS Activator

Revised at: 06.04.2010 Print date: 12.09.2011 Page 4/5

11. Toxicological information

Acute toxicity:

No acute toxicity known.

Primary irritant effect on the skin:

No primary irritant effect on the skin known.

Primary irritant effect on the eye:

No primary irritant effect on the eye known.

Mutagenic potential:

No mutagenic potential known.

Sensitization:

No sensitizing effects known.

The product was classified on the basis of the calculation procedure of the preparation directive 1999/45/EC.

Based on manufacturer data of the main components the acute toxicity, the skin irritation, the mucous membrane irritation and the mutagenic potential of the preparation were evaluated. However, some data are not complete regarding particular main components. Nevertheless according to the experience of the manufacturer there are no other hazards expected than those which are already mentioned on the label.

12. Ecological information

Ecotoxicity:

Inhibition of degradation activity in activated sludge is not to be

anticipated during correct introduction of low concentrations.

Persistence and degradation:

Ingredients are biodegradable.

Other adverse effects:

No other adverse effects known.

Further information:

Do not allow product to reach ground water or waters and do not

empty undiluted product into sewers.

13. Disposal considerations

Disposal of the product:

In the EC member states there are no standardized regulations for the disposal of chemicals. In Germany the law of the cycle of economy and waste (KrW/AbfG) prescribes the principle of utilization and therefore a distinction must be made between "waste for utilization" and "waste for removal". Furthermore special cases – particularly in case of delivery – are also regulated by the federal states. Please contact the corresponding office (authority or waste disposal company) who will inform you about the utilization or removal.

Waste code no.*: 16 10 02

Disposal of uncleaned as well as completely emptied packings:

Disposal according to official regulations. Contaminated packings are to be treated like the substance.

Waste code no.*: 15 01 02

Further information:

If there is no official regulation, non-contaminated packings can be treated like domestic waste or can be recycled.

*Waste code no .:

Waste incurred is classified following the code of the European waste register

according to kind of waste and branch.

Safety Data Sheet

according to regulation (EC) 1907/2006 (REACH)



Trade name: BRS Activator

Revised at: 06.04.2010 Print date: 12.09.2011 Page 5/5

14. Transport information

No hazardous material as defined by the transport regulations (ADR/RID, IMDG-Code, ICAO-TI/IATA-DGR)

15. Regulatory information

La	bell	ing

Code letter:

_

Hazard designation:

_

contains:

=

R-phrases:

S-phrases:

-

Special labelling of certain preparations (preparation directive 1999/45/EC annex V):

not necessary

National regulations (Germany)

Restrictions of occupation:

None

Störfallverordnung:

....

Classification according to VbF:

Not subject to the VbF

Technische Anleitung Luft:

2000

Water hazard class:

WGK 0 (not water hazardous); self-classification

16. Other information

Further information:

This information is based on our present knowledge and describes the safety measures which are to be taken for this product. However, this shall not constitute a guarantee for any product features.

Marking of changes:

There are no changes so far.



Trade name: BRS NaOCl

Revised at: 20.01.2011 Print date: 21.01.2011

Page 1/5

Identification of the substance/preparation and of the company/undertaking

Trade name:

BRS NaOCI

Recommended use:

Cleaning of the process water lines in dental treatment units as a partial measure of the Biofilm-Removing-Set before the use of Alpron or Bilpron.

Effect of the preparation:

Cleansing agent

Manufacturer:

ALPRO MEDICAL GMBH

Mooswiesenstr. 9

D-78112 St. Georgen (Germany) Telephone: +49 7725 9392-0 Telefax: +49 7725 9392-91 Email: alpro@alpro-medical.de Internet: www.alpro-medical.com

Technical contact point:

+49 7725 9392-0

+49 7725 9392-0 (business hours) Emergency phone:

+49 761 19240 Poisoning-information-central, Freiburg (24h emergency call)

Hazards identification

R31 Contact with acids liberates toxic gas.

Composition/information on ingredients 3.

Chemical characterization:

Mixture of substances listed below with nonhazardous additions in

aqueous solution.

Hazardous ingredients

CAS-No.

Weight-% Code letter C

R-phrases*

Sodium hypochlorite

7681-52-9

5-15%

31, 34

(13% active chlorine)

Note: The product BRS NaOCl contains effectively sodium hypochlorite with 1-2% active chlorine.

First aid measures

General information:

Note precautions for self-protection.

On inhalation:

Move affected person into fresh air and keep still and warm. In case of

irritation of the airways, seek medical advice.

On contact with skin:

Wash off immediately with soap and water. In case of skin reactions, seek

medical advice.

On contact with the eyes:

Rinse the eyes with water with the eyelids open for a sufficient length of

time, then seek ophthalmological advice immediately.

If swallowed:

Rinse out mouth and then drink plenty of water. Do not induce vomiting.

Seek medical advice.

Information for the doctor:

First aid, decontamination, symptomatic treatment.

^{*}Full text of R-phrases: see under section 16



Trade name: BRS NaOCl

Revised at: 20.01.2011 Print date: 21.01.2011

Page 2/5

Fire-fighting measures

Suitable extinguishing media:

Water, foam, dry fire-extinguishing media, carbon dioxide

Extinguishing media which must not be used

for safety reasons:

None known

Special exposure hazards arising from the substance or preparation itself, combustion

products, resulting gases:

Substances potentially set free in case of fire: Chlorine,

hydrogen chloride, dichloroxide

Special protective equipment for firefighting:

Additional information:

Not necessary Cool endangered containers with water spray jet and if

possible remove off fire area.

Accidental release measures

Personal precautions:

Use personal protective clothing. High risk of slipping due

to leakage/spillage of product.

Environmental precautions:

Contain spillage with absorbing material, e.g. with sand.

Methods for cleaning up/taking up:

Treat recovered material as prescribed in: Disposal

considerations.

Handling and storage

Hints for safe handling:

Avoid contact with skin and eyes. Do not mix with acids.

Hints for protection against fire and explosion: Product is not flammable.

Further information:

Not necessary

Requirements for storage rooms and vessels:

Keep tightly closed and store only in original container.

Hints on storage assembly:

Not necessary

Further information on storage conditions:

Not necessary

Storage class:

LGK 10

8. Exposure controls / Personal protection

Constituents with occupational exposure limits rsp. biological occupational exposure limits requiring monitoring:

Maximum occupational exposure concentration; see TRGS 900 (German regulation)

Chlorine

CAS-No.: 7782-50-5

Air limit value: 0,5 ml/m3; 1,5 mg/m3

Overflow factors for short-term values:

Peak limitation-category 1(I)

General health and safety measures:

Do not eat, drink, smoke while working.

Wash hands before breaks and on finishing work.

Preventive skin protection using barrier ointment.

Keep away of foods and drinks.

Avoid contact with eyes, skin and clothing.

Avoid inhalation of aerosols and vapours.

Safety Data Sheet

according to regulation (EC) 1907/2006 (REACH)



Trade name: BRS NaOCI

Revised at: 20.01.2011 Print date: 21.01.2011 Page 3/5

Personal protection equipment:

Respiratory protection:

Not necessary if handled cautiously.

Hand protection:

E.g. natural rubber- or PVC-gloves are recommended.

Eye protection:

Tightly sealed goggles are recommended.

Protective clothing:

Not necessary if handled cautiously.

9. Physical and chemical properties

Form:

liquid

Colour:

slightly yellowish, clear

Odour:

slightly of chlorine

pH-value:

10-11

(20°C)

Boiling point/Boiling range:

10-11

not relevant to safety

Melting point/Melting range:

not relevant to safety

Flash point (DIN, TRbF):

>55°C

Flammability (solid, gases):

not determinable

Explosive properties:

none

Lower explosion limit:

none

Upper explosion limit: Ignition temperature:

not necessary

Oxidizing properties:

none

Vapour pressure:

not necessary

at ...°C

Density:

1,015-1,025 g/cm³

at 20°C

Bulk density:

not determinable

at ...°C

Solubility in water:

soluble

in ethanol:

soluble

in hexan:

not soluble

Partition coefficient:

not necessary

at ...°C

(n-octanol/water)

Viskosity (sort):

(20°C)

Electrical conductivity:

not necessary

(20 C)

Refractive index nD:

1,3374-1,3380

(20°C)

Optical rotation \(\alpha D: \)

not necessary

10. Stability and reactivity

Conditions to avoid:

Thermically autocatalysed movement to NaClO3 and NaCl.

Materials to avoid:

Acids, reducing agents. Reacts with acids and salts by developing

chlorine.

Hazardous decomposition products:

Hydrogen chloride, chlorine.



Trade name: BRS NaOCl

Revised at: 20.01.2011 Print date: 21.01.2011 Page 4/5

11. Toxicological information

Acute toxicity:

No acute toxicity known.

Primary irritant effect on the skin:

No primary irritant effect on the skin known.

Primary irritant effect on the eye:

No primary irritant effect on the eye known.

Mutagenic potential:

No mutagenic potential known.

Sensitization:

No sensitizing effects known.

The product was classified on the basis of the calculation procedure of the preparation directive

1999/45/EC.

Based on manufacturer data of the main components the acute toxicity, the skin irritation, the mucous membrane irritation and the mutagenic potential of the preparation were evaluated. However, some data are not complete regarding particular main components. Nevertheless according to the experience of the manufacturer there are no other hazards expected than those which are already mentioned on the label.

12. Ecological information

Ecotoxicity:

Inhibition of degradation activity in activated sludge is not to be

anticipated during correct introduction of low concentrations.

Persistence and degradation:

Ingredients are biodegradable.

Other adverse effects:

No other adverse effects known.

Further information:

Do not allow product to reach ground water or waters and do not

empty undiluted product into sewers.

13. Disposal considerations

Disposal of the product:

In the EC member states there are no standardized regulations for the disposal of chemicals. In Germany the law of the cycle of economy and waste (KrW/AbfG) prescribes the principle of utilization and therefore a distinction must be made between "waste for utilization" and "waste for removal". Furthermore special cases – particularly in case of delivery – are also regulated by the federal states. Please contact the corresponding office (authority or waste disposal company) who will inform you about the utilization or removal.

Waste code no.*: 16 10 04

Disposal of uncleaned as well as completely emptied packings:

Disposal according to official regulations. Contaminated packings are to be treated like the substance.

Waste code no.*: 15 01 02

Further information:

If there is no official regulation, non-contaminated packings can be treated like domestic waste or can be recycled.

*Waste code no.:

Waste incurred is classified following the code of the European waste register

according to kind of waste and branch.

14. Transport information

No hazardous material as defined by the transport regulations (ADR/RID, IMDG-Code, ICAO-TI/IATA-DGR)



Trade name: BRS NaOCl

Revised at: 20.01.2011 Print date: 21.01.2011 Page 5/5

15. Regulatory information

Labelling

Code letter:

-

Hazard designation:

_

contains:

R31

Contact with acids liberates toxic gas.

R-phrases: S-phrases:

8

Special labelling of certain preparations (directive 67/548/EEC annex I, nota B):

Contains sodium hypochlorite solution with 1 - 2 % active chlorine

National regulations (Germany)

Restrictions of occupation:

None

Störfallverordnung:

.....

Classification according to VbF:

Not subject to the VbF

Technische Anleitung Luft:

Water hazard class:

WGK 2 (water hazardous); self-classification

16. Other information

Full text of R-phrases appearing in section 3: (This is not the classification of the product BRS NaOCI!)

- R31 Contact with acids liberates toxic gas.
- R34 Causes burns.

Further information:

This information is based on our present knowledge and describes the safety measures which are to be taken for this product. However, this shall not constitute a guarantee for any product features.

Marking of changes:

A backslash in the left hand margin indicates an amendment from the previous version.