

# SAFETY DATA SHEET

Based on Regulation (EC) No. 1907/2006 (REACH) Article 31 and Annex II

## RE-HEALING FOAM RF-MB

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

#### 1.1 Identification of the substance or preparation:

Product name RE-HEALING FOAM RF-MB  
Product type REACH Mixture

#### 1.2 Use of the substance/preparation:

Fire extinguishing medium: concentrate

#### 1.3 Company/undertaking identification:

Supplier of the safety data sheet  
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24h/24h:  
+47 97 64 00 00 Europe, Middle East, Africa  
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### 2. Hazards identification

#### DSD/DPD

Classified as dangerous in accordance with the criteria of Directives 67/548/EEC and 1999/45/EC

Irritating to eyes

### 3. Composition/information on ingredients

Name	CAS No EINECS/ELINCS	Conc.	Classification according to DSD/DPD	Classification according to CLP	Note
2-(2-butoxyethoxy)ethanol	112-34-5 203-961-6	1%<C<20%	Xi; R36	Eye Irrit. 2; H319	(1)(2)(10)
starch	9005-25-8 232-679-6	C≥1%			(2)
sucrose	57-50-1 200-334-9	C>1%			(2)

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# RE-HEALING FOAM RF-MB

sulfuric acid, mono-C12-14-alkyl esters, compds. with triethanolamine	90583-18-9 292-216-9	C<5%	Xi; R38 - 41	Skin Irrit. 2; H315 Eye Dam. 1; H318	(1)
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(1) For R-phrases and H-statements in full: see heading 16

(2) Substance with a Community workplace exposure limit

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

## 4. First aid measures

### 4.1 After inhalation:

Remove the victim into fresh air

Respiratory problems: consult a doctor/medical service

### 4.2 Skin contact:

Rinse with water

Soap may be used

Take victim to a doctor if irritation persists

### 4.3 Eye contact:

Rinse immediately with plenty of water

Take victim to an ophthalmologist if irritation persists

### 4.4 After ingestion:

Rinse mouth with water

Immediately after ingestion: give lots of water to drink

Consult a doctor/medical service if you feel unwell

## 5. Fire-fighting measures

### 5.1 Suitable extinguishing media:

Adapt extinguishing media to the environment

### 5.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known

### 5.3 Special exposure hazards:

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, sulphur oxides, carbon monoxide - carbon dioxide)

### 5.4 Instructions:

Dilute toxic gases with water spray

### 5.5 Special protective equipment for fire-fighters:

Gloves

Safety glasses

Protective clothing

Heat/fire exposure: compressed air/oxygen apparatus

## 6. Accidental release measures

### 6.1 Personal precautions:

See heading 8.2

### 6.2 Environmental precautions:

Contain released substance, pump into suitable containers

Plug the leak, cut off the supply

See heading 13

### 6.3 Methods for cleaning up:

Take up liquid spill into inert absorbent material, e.g.: sand/earth

Scoop absorbed substance into closing containers

Clean contaminated surfaces with an excess of water

Wash clothing and equipment after handling

## 7. Handling and storage

# RE-HEALING FOAM RF-MB

## 7.1 Handling:

Keep away from naked flames/heat  
Observe normal hygiene standards

## 7.2 Storage:

### Safe storage requirements:

Keep container in a well-ventilated place  
Meet the legal requirements  
Storage temperature: 0 - 50 °C

### Keep away from:

No data available

## 7.3 Specific use(s):

See information supplied by the manufacturer for the identified use(s).

## 8. Exposure controls/Personal protection

### 8.1 Exposure limit values:

#### 8.1.1 Occupational exposure:

If limit values are applicable and available these will be listed below.

#### Regulatory exposure limit (The Netherlands)

2-(2-butoxyethoxy)ethanol	Short time value	100 mg/m <sup>3</sup>
	Short time value, calculated	15 ppm
	Time-weighted average exposure limit 8 h	50 mg/m <sup>3</sup>
	Time-weighted average exposure limit, calculated	7.4 ppm

#### Indicative exposure limit EU (Directives 2009/19/EU, 2006/15/EC, 2000/39/EC, 98/27/EC, 96/94/EC, 91/322/EEC)

2-(2-Butoxyethoxy)ethanol	Short time value	15 ppm 101.2 mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h	10 ppm 67.5 mg/m <sup>3</sup>

#### Limit Value (Belgium)

Saccharose	Short time value	- ppm - mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h	- ppm 10 mg/m <sup>3</sup>
Amidon	Short time value	- ppm - mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h	- ppm 10 mg/m <sup>3</sup>
2-(2-Butoxyéthoxy)éthanol	Short time value	15 ppm 101.2 mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h	10 ppm 67.5 mg/m <sup>3</sup>

#### TLV (USA)

Starch	Time-weighted average exposure limit 8 h	10 mg/m <sup>3</sup>
Sucrose	Time-weighted average exposure limit 8 h	10 mg/m <sup>3</sup>

#### TRGS 900 (Germany)

2-(2-Butoxyethoxy)ethanol	Time-weighted average exposure limit 8 h	10 ppm 67
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#### Limit Value (France)

Saccharose	Short time value	- ppm - mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h	- ppm 10 mg/m <sup>3</sup>

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2-(2-Butoxyéthoxy)éthanol	Short time value	15 ppm 101.2 mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h	10 ppm 67.5 mg/m <sup>3</sup>

## Limit Value (UK)

Sucrose	Short time value	20 mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h	10 mg/m <sup>3</sup>
2-(2-Butoxyéthoxy)éthanol	Short time value	15 ppm 101.2 mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h	10 ppm 67.5 mg/m <sup>3</sup>
Starch total inhalable	Short time value	
	Time-weighted average exposure limit 8 h	10 mg/m <sup>3</sup>
Starch respirable	Short time value	
	Time-weighted average exposure limit 8 h	4 mg/m <sup>3</sup>

## 8.1.2 Sampling methods:

Product name	Test	Number
Sulfites, & Sulfates	NIOSH	6004

## 8.2 Exposure controls:

### 8.2.1 Occupational exposure controls:

Measure the concentration in the air regularly

Carry operations in the open/under local exhaust/ventilation or with respiratory protection

Personal protective equipment:

#### a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit

#### b) Hand protection:

Gloves

materials for protective clothing (good resistance)

- butyl rubber

#### c) Eye protection:

Safety glasses

#### d) Skin protection:

Protective clothing

### 8.2.2 Environmental exposure controls:

See headings 6.2, 6.3 and 13

## 9. Physical and chemical properties

### 9.1 General information:

Physical form	Liquid
Odour	Mild odour
Colour	Brown

### 9.2 Important health, safety and environmental information:

pH	7 - 8.5; 100 %
Boiling point	100 °C
Flashpoint	Not applicable
Vapour pressure (20°C)	24 hPa
Relative density	1.05
Solubility in water	Complete
Relative vapour density	1

### 9.3 Other information:

Melting point	0 °C
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## 10. Stability and reactivity

### 10.1 Conditions to avoid:

# RE-HEALING FOAM RF-MB

## Possible fire hazard

heat sources

## Stability

Stable under normal conditions

## 10.2 Materials to avoid:

No data available

## 10.3 Hazardous decomposition products:

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, sulphur oxides, carbon monoxide - carbon dioxide)

## 11. Toxicological information

### 11.1 Acute toxicity:

2-(2-butoxyethoxy)ethanol

LD50 oral (mouse)	2410 mg/kg bw
LD50 dermal (rabbit)	2764 mg/kg bw
IRT (inhalation risk test) inhalation (rat)	> 29 ppm

starch

LD50 oral (rat)	> 2000 mg/kg
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sucrose

LD50 oral (rat)	29700 mg/kg
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### 11.2 Chronic toxicity:

Not listed in carcinogenicity class (IARC,EC,TLV,MAK)

Not listed in mutagenicity class (EC,MAK)

Not classified as toxic to reproduction (EC)

2-(2-butoxyethoxy)ethanol

Schwangerschaft Gruppe	C
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starch

TLV - Carcinogen	A4
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sucrose

TLV - Carcinogen	A4
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### 11.3 Acute effects/symptoms:

#### Inhalation:

No effects known

#### Skin contact:

No effects known

#### Eye contact:

Redness of the eye tissue

Irritation of the eye tissue

#### Ingestion:

No effects known

### 11.4 Chronic effects:

No effects known

## 12. Ecological information

### 12.1 Ecotoxicity:

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LC50 fishes

species	value	duration (h)	remarks
Salmo gairdneri (Oncorhynchus mykiss)	42 mg/l	96 h	

# RE-HEALING FOAM RF-MB

## EC50 other aquatic organisms

species	value	duration (h)	remarks
Selenastrum capricornutum	>6.9 mg/l	96 h	GROWTH RATE

## Acute toxicity invertebrates

Species	Value	Duration	Remarks
Daphnia magna	644 mg/l	48 h	

## 2-(2-butoxyethoxy)ethanol

### LC50 fishes

species	value	duration (h)	remarks
Lepomis macrochirus	1300 mg/l	96 h	
Menidia sp.	2000 mg/l	96 h	

### Threshold limit algae

species	value	duration (h)	remarks
Desmodesmus subspicatus	>100 mg/l	96 h	

## Acute toxicity invertebrates

Species	Value	Duration	Remarks
Daphnia magna	4950 mg/l	48 h	
Americamysis bahia	13415 mg/l	96 h	

Not harmful to activated sludge

## 12.2 Mobility:

Solubility in/reaction with water  
Soil physicochemical processes

Soluble in water  
No (test)data on mobility of the components of the mixture available

## 12.3 Persistence and degradability:

BOD20  
Readily biodegradable in water

0.21 g O<sub>2</sub>/g substance

## 12.4 Bioaccumulative potential:

No bioaccumulation data available

## 12.5 Results of PBT assessment:

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to Annex XIII of Regulation (EC) No 1907/2006

## 12.6 Other adverse effects:

Not classified as dangerous for the ozone layer (Regulation (EC) No. 1272/2008 and 1005/2009)

# 13. Disposal considerations

## 13.1 Provisions relating to waste:

Waste material code (Directive 2008/98/EC, decision 2001/118/EC)  
07 06 04\* : other organic solvents, washing liquids and mother liquors  
Hazardous waste according to Directive 2008/98/EC

## 13.2 Disposal methods:

Dilute  
Remove waste in accordance with local and/or national regulations  
Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste  
Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals  
May be discharged to wastewater treatment installation or reed bed  
Contains a component for which a prohibition exists against discharge into surface water  
Contains no organic halogen which may add to the AOX value

## 13.3 Packaging/Container:

Waste material code packaging (Directive 2008/98/EC)  
15 01 10\* : packaging containing residues of or contaminated by dangerous substances

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## 14. Transport information

### ADR

Transport	Not subject
UN number	
Class	
Packing group	
Hazard identification number	
Classification code	
Labels	
Environmentally hazardous substance mark	no

### RID

Transport	Not subject
UN number	
Class	
Packing group	
Classification code	
Labels	
Environmentally hazardous substance mark	no

### ADN

Transport	Not subject
UN number	
Class	
Packing group	
Classification code	
Labels	
Environmentally hazardous substance mark	no

### IMO

Transport	Not subject
UN number	
Class	
Packing group	
Labels	
Marine pollutant	-
Environmentally hazardous substance mark	no

### ICAO

Transport	Not subject
UN number	
Class	
Packing group	
Labels	
Environmentally hazardous substance mark	no

## 15. Regulatory information

### 15.1 EU Legislation:

#### DSD/DPD

Labelling according to directives 67/548/EEC, 1999/45/EC and 2006/8/EC

# RE-HEALING FOAM RF-MB



Irritant

## R-phrases

36	Irritating to eyes
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## S-phrases

(02)	(Keep out of the reach of children)
(46)	(If swallowed, seek medical advice immediately and show this container or label)

## 15.2 National provisions:

## 15.3 Specific community rules:

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

## 16. Other information

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question.

Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement. All intellectual property rights to this sheet are the

(\* ) = INTERNAL CLASSIFICATION (NFPA)

PBT-substances = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive  
DPD Dangerous Preparation Directive  
CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

Full text of any R-phrases referred to under headings 2 and 3:

R36	Irritating to eyes
R38	Irritating to skin
R41	Risk of serious damage to eyes

Full text of any H-statements referred to under headings 2 and 3:

H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

Full text of any classes referred to under headings 2 and 3:

Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Skin Irrit.	Skin irritation