

BIO FOR N



SAFETY DATA SHEET
(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : BIO FOR N

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

Fire fighting foam concentrate

1.3. Details of the supplier of the safety data sheet

Registered company name : BIO-EX SAS.

Address : Z.I. La petite Olivière.69770.Montrottier.FRANCE.

Telephone : +33(0)474702381. Fax : +33(0)474702394.

contact@bio-ex.fr

1.4. Emergency telephone number : +33(0)145425959.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS07



GHS05

Signal Word :

DANGER

Product identifiers :

ALKYLSULFATE
PRESERVATIVE

Additional labeling :

Hazard statements :

H315

Causes skin irritation.

H317

May cause an allergic skin reaction.

H318

Causes serious eye damage.

H412

Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P264

Wash hands thoroughly after handling.

P273

Avoid release to the environment.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

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Precautionary statements - Response :

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures****Composition :**

Identification	(EC) 1272/2008	Note	%
INDEX: 603-096-00-8 EC: 203-961-6 2-(2-BUTOXYETHOXY)ETHANOL ALKENESULFONATE	GHS07 Wng Eye Irrit. 2, H319	[1]	10 \leq x % < 25
ALKYLSULFATE	GHS07 Wng Skin Irrit. 2, H315 Eye Irrit. 2, H319		2.5 \leq x % < 10
LAURYL ALCOHOL	GHS05 Dgr Skin Irrit. 2, H315 Eye Dam. 1, H318		2.5 \leq x % < 10
EC: 203-982-0 LAURYL ALCOHOL	GHS07, GHS09 Wng Eye Irrit. 2, H319 Aquatic Acute 1, H400 M Acute = 1	[1]	0 \leq x % < 1
EC: 204-000-3 TETRADECANOL	GHS07, GHS09 Wng Eye Irrit. 2, H319 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1	[1]	0 \leq x % < 1
PRESERVATIVE	GHS06, GHS05, GHS09 Dgr Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Acute Tox. 3, H331 Aquatic Acute 1, H400 M Acute = 10 Aquatic Chronic 1, H410 M Chronic = 10		0 \leq x % < 0.01

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures**In the event of exposure by inhalation :**

If you feel sick, seek medical advice

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In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.
Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.
Watch out for any remaining product between skin and clothing, watches, shoes, etc.
In the event of an allergic reaction, seek medical attention.
Wash off with water. Remove contaminated soaked clothing and rinse with water

In the event of swallowing :

Do not give the patient anything orally.
Seek medical attention immediately, showing the label.
Seek medical attention, showing the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

Firefighting foam concentrate not flammable

5.2. Special hazards arising from the substance or mixture

Aqueous solution ; does not present a specific risk in case of fire

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.
Wear impervious clothes, wear gloves and goggles

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.
Prevent any material from entering drains or waterways.
Absorb onto sand or other absorbent material and shovel into container for disposal

6.3. Methods and material for containment and cleaning up

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.
Collecting : Pump into clearly identified unbreakable containers
Wash thoroughly with water

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.
Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

Always wash hands after handling.
Remove and wash contaminated clothing before re-using.

BIO FOR N**Recommended equipment and procedures :**

- For personal protection, see section 8.
- Observe precautions stated on label and also industrial safety regulations.
- Avoid eye contact with this mixture at all times.

Prohibited equipment and procedures :

- No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

- No data available.

Storage

- Storage area should contain accidental spill

Packaging

- Recommended types of packaging :
- Product in bulk : stainless steel, polyester or mild steel protected with epoxy or polyurethane coating. Tanks in PE, PP
- Unsuitable packaging materials :
- Mild steel

7.3. Specific end use(s)

- No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limits :**

- European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

CAS	VME-mg/m3	VME-ppm	VLE-mg/m3	VLE-ppm	Notes
112-34-5	67.5	10	101.2	15	-

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME	VME	Excess	Notes
112-34-5	-	100 mg/m3	1(I)	DFG, Y
112-53-8	20 ml/m3	155 mg/m3	1(I)	AGS
112-72-1	20 ml/m3	178 mg/m3	1(I)	AGS

- France (INRS - ED984 :2008) :

CAS	VME-ppm	VME-mg/m3	VLE-ppm	VLE-mg/m3	Notes	TMP No
112-34-5	10	67.5	15	101.2	-	-

8.2. Exposure controls**Personal protection measures, such as personal protective equipment**

- Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



- During use, do not eat, drink or smoke. Remove and clean contaminated soaked clothing before reuse.
- Use personal protective equipment that is clean and has been properly maintained.

- Eye / face protection

- Avoid contact with eyes.
- Use eye protectors designed to protect against liquid splashes
- Before handling, wear safety goggles with protective sides accordance with standard EN166.
- Prescription glasses are not considered as protection.

- Hand protection

- Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.
- Gloves must be selected according to the application and duration of use at the workstation.
- Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

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Type of gloves recommended :

- PVC (polyvinyl chloride)

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state : Fluid liquid.

Important health, safety and environmental information

pH : 7.00 +/- 1.

Neutral.

Boiling point/boiling range : Not relevant.

Flash point interval : Not relevant.

Vapour pressure (50°C) : Not relevant.

Density : 1,02 +/- 0,02 kg/dm3

Water solubility : Soluble.

Melting point/melting range : Not relevant.

Self-ignition temperature : Not relevant.

Decomposition point/decomposition range : Not relevant.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

None expected in standard use

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

No data available.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

May cause an allergic reaction by skin contact.

11.1.1. Substances

Skin corrosion/skin irritation :

ALKENESULFONATE

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Corrosivity : No observed effect.

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12 : ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity**12.1.1. Substances****TETRADECANOL (CAS: 112-72-1)**

Crustacean toxicity : EC50 = 3.2 mg/l
Species : Daphnia magna
Duration of exposure : 48 h
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity : ECr50 > 10 mg/l
Species : Desmodesmus subspicatus
Duration of exposure : 96 h

PRESERVATIVE

Fish toxicity : LC50 = 0.19 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 0.16 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

Algae toxicity : ECr50 = 0.027 mg/l
Species : Scenedesmus capricornutum
Duration of exposure : 72 h

12.1.2. Mixtures**12.2. Persistence and degradability****12.2.1. Substances****TETRADECANOL (CAS: 112-72-1)**

Biodegradability : Rapidly degradable.

LAURYL ALCOHOL (CAS: 112-53-8)

Biodegradability : Rapidly degradable.

ALKENESULFONATE

Biodegradability : Rapidly degradable.

12.2.2. Mixtures

Biodegradability : Rapidly degradable.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

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12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not discharge in the environment

Small amounts of product do not interfere with water treatment facilities. If released in sewage system, it is recommended to control the flow rate in order to avoid any foaming excess

Do not pour into waterways

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Do not discharge in the environment

Rinse with plenty of water

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

SECTION 15 : REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

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Wording of the phrases mentioned in section 3 :

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Abbreviations :

ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
WGK : Wassergefährdungsklasse (Water Hazard Class).
GHS05 : Corrosion
GHS07 : Exclamation mark
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.