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20211016

Certificate Number

March 30, 2026

Expiration Date

GSC2021_002

Application Number

*Certified under Version
2.1 of GreenScreen
Certified Standard for
Firefighting Foam*

GreenScreen Certified™ Standard for Firefighting Foam Version 2.1

BIOEX

5 chemin de Clape-Loup
69280 Sainte-Consorte
France

Product Certified

ECOPOL F: Class A&B Wetting Agent

March 31, 2021

Issue Date

A handwritten signature in black ink, appearing to read "Paul A. ...".

Signature

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CERTIFICATE OF ANALYSIS

Work Order	: EB2034347	Page	: 1 of 2
Client	: BIO-EX	Laboratory	: Environmental Division Brisbane
Contact	: AUDREY ROSSARD	Contact	: Customer Services EB
Address	: 19 Impass de la croix Berthier Montrottier 69770	Address	: 2 Byth Street Stafford QLD Australia 4053
Telephone	: ----	Telephone	: +61-7-3243 7222
Project	: TOF by CIC	Date Samples Received	: 29-Dec-2020 11:59
Order number	: Bio/2023	Date Analysis Commenced	: 06-Jan-2021
C-O-C number	: ----	Issue Date	: 28-Jan-2021 07:51
Sampler	: AUDREY ROSSARD		
Site	: ----		
Quote number	: BN/287/19 V3		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Diana Mesa	Senior Organic Chemist	Brisbane Organics, Stafford, QLD



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: **PRODUCT**
 (Matrix: **PRODUCT**)

		<i>Sample ID</i>		ECOPOL F - batch 20M27	ECOPOL F - batch 20M28	ECOPOL F - batch 20M29	----	----
		<i>Sampling date / time</i>		21-Dec-2020 09:00	21-Dec-2020 09:00	21-Dec-2020 09:00	----	----
<i>Compound</i>	<i>CAS Number</i>	<i>LOR</i>	<i>Unit</i>	EB2034347-001	EB2034347-002	EB2034347-003	-----	-----
				Result	Result	Result	----	----
EP040: Total Organic Fluorine (TOF)								
Total Organic Fluorine	----	1	mg/kg	<1	<1	<1	----	----



Forest
Service

Washington Office-
National Technology and Development
Program

5785 Highway 10 West
Missoula, MT 59808

444 East Bonita Avenue
San Dimas, CA 91773

File Code: 5162
Date: December 15, 2021

Mrs. Audrey Rossard
Bio-Ex, Technical Manager
5 chemin de Clape-Loup
69280 Sainte-Consoce, France
+33 (0)4 74 70 23 81
arossard@bio-ex.fr

Dear Audrey,

The laboratory evaluation of Bio-Ex Class A Foam (EcoPol-F, ECPFU55) was completed in 2020 in accordance with Forest Service Specification 5100-307a. This product continues to meet the specification criteria of FS 5100-307b which includes all subject changes to the specification. This product is currently listed as qualified on our program's [Qualified Products List](#) (QPL).

The approved application methods for Bio-Ex Class EcoPol-F are:

- Acceptable at a mix ratio of 1.0% to 0.1% with application methods from multi-engine fixed wing airtankers, single-engine airtankers, fixed tank helicopters, helicopter buckets, and ground engines.

If you have any questions, feel free to contact Wildland Fire Chemical Systems.

Sincerely,

Hunter Jones

Hunter Jones
Project Leader
Wildland Fire Chemical Systems
406-829-6810
hunter.jones@usda.gov

CC: S. Zylstra





File Code: 5160
Date: JUN 30 2020

Ms. Audrey Rossard
Bio-Ex
5 chemin de Clape-Loup
69280 Sainte-Consorce, France
+33 (0)4 74 70 23 81
arossard@bio-ex.fr

Dear Ms. Rossard:

The laboratory evaluation of Bio-Ex Class A Foam (Ecopol-F), formulation identification ECPFU55, has been successfully completed in accordance with Forest Service Specification 5100-307a. The results of the individual tests have been provided to you by the Wildland Fire Chemicals Systems Program.

Based on the results of the laboratory evaluation, Bio-Ex Class A Foam (Ecopol-F), FID ECPFU55 has been added to the Quality Products List (QPL) as a Fire Suppressant Foam, qualified for application from water-scooping airtankers, single-engine airtankers, fixed tank helicopters, helicopter buckets, and ground engines. This product will also be listed as BIO FOR N +.

Please be aware that the status of qualified products may change if/when the specification is revised or amended.

You are authorized, if you so desire, to add the statement below to your product label and other product information.

“This product has been evaluated by the USDA Forest Service and meets the requirements of Forest Service Specification 5100-307a for application from water-scooping airtankers, single-engine airtankers, fixed tank helicopters, helicopter buckets, and ground engines.”

No use of the Forest Service shield or statements implying endorsement by the Forest Service is permitted. The current QPL can be viewed and printed from the following website:

www.fs.fed.us/rm/fire (Click on “Wildland Fire Chemicals” and then “Qualified Products List”)

Sincerely,

SHAWNA A. LEGARZA, PSYD
Director Fire and Aviation Mgt

cc: David Haston, Shirley Zylstra, Hunter Jones



**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 : ECOPOL F

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.

Address : 5 chemin de Clape-Loup .69280.Sainte-Consorce.FRANCE.

Telephone : +33 (0)4.74.70.23.81. Fax : +33 (0)4.74.70.23.94.

contact@bio-ex.fr

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.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).

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

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements**In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazard pictograms :



GHS05

Signal Word :

DANGER

Product identifiers :

PROPRIETARY MIXTURE OF SURFACTANTS

Hazard statements :

H315

Causes skin irritation.

H318

Causes serious eye damage.

Precautionary statements - Prevention :

P280

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

Precautionary statements - Response :

P302 + P352

IF ON SKIN: Wash with plenty of water/...

P305 + P351 + P338

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

P362 + P364

Take off contaminated clothing and wash it before reuse.

Other information :

ECOPOL F

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 fulfils 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	%
PROPRIETARY MIXTURE OF SURFACTANTS	GHS05 Dgr Skin Irrit. 2, H315 Eye Dam. 1, H318		25 \leq x % < 50
INDEX: 603-096-00-8 EC: 203-961-6 2-(2-BUTOXYETHOXY)ETHANOL	GHS07 Wng Eye Irrit. 2, H319	[1]	10 \leq x % < 25

(Full text of H-phrases: see section 16)

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 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.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention immediately, 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

Firefighting foam concentrate not flammable

5.2. Special hazards arising from the substance or mixture

No data available.

ECOPOL F

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.

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.

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.

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.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

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.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Packaging

Always keep in packaging made of an identical material to the original.

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 (2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m ³	VME-ppm	VLE-mg/m ³	VLE-ppm	Notes
112-34-5	67.5	10	101.2	15	-

- Germany - AGW (BAuA - TRGS 900, 08/08/2019) :

CAS	VME :	VME :	Excess	Notes
112-34-5		10 ppm 67 mg/m ³		1.5 (I)

- France (INRS - ED984 / 2019-1487) :

CAS	VME-ppm	VME-mg/m ³	VLE-ppm	VLE-mg/m ³	Notes	TMP No
112-34-5	10	67.5	15	101.2	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

ECOPOL F

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
112-34-5	10 ppm 67.5 mg/m ³	15 ppm 101.2 mg/m ³			

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

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



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- 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.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Recommended properties :

- Impervious gloves in accordance with standard EN ISO 374-2

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Work clothing worn by personnel shall be laundered regularly.

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 : Not stated.

Neutral.

Boiling point/boiling range : Not specified.

Flash point interval : Not relevant.

Vapour pressure (50°C) : Not relevant.

Density : > 1

Water solubility : Soluble.

Melting point/melting range : Not specified.

Self-ignition temperature : Not specified.

Decomposition point/decomposition range : Not specified.

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.

ECOPOL F

10.3. Possibility of hazardous reactions

No data available.

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.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12 : ECOLOGICAL INFORMATION**12.1. Toxicity****12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability**12.2.2. Mixtures**

easily biodegradable

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

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 pour into drains or 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.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

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

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

ECOPOL F

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

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. 2017/776 (ATP 10)

- 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.

Wording of the phrases mentioned in section 3 :

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

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

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.