



### Material Safety Data Sheet

According to Regulation No 1907/2006/EC – REACH, No 830/2015 and No 1272/2008/EC - CLP

Date of issue Marz 2019

V.1

<b>SECTION 1</b>	The substance and the company information	
1.1	Product identifier	<b>Bioakcelerator BIUS</b>
	Other name or labeling of product:	Metabolic enhancer, concentrate
1.2	The purpose of the substance usage	
	Odor eliminator and microbial metabolism enhancer for agricultural, municipalities and industrial waste. Water and soil remediation substance. Oil and grease eliminator from soiled surfaces.	
1.3	The manufacturer supplier information	
	Manufacturer:	BIOMIX Ltd 603037 Russia, Nizhny Novgorod, Fedoseenko st 57a  NPO EIR Ltd 129626 Russia, Moscow, Rizhsky Proezd, 3 Tel: +7 800 201-22-51 mail@npo-eir.ru , www.npo-eir.ru
1.4	Emergency telephone number (Czech)	Toxikologic institute (TIS) Na Bojisti 1, 128 21 Praha 2 Tel. 224919293, 224915402 (24 hours)

<b>SECTION 2</b>	Hazards identification	
2.1	Classification of the substance or mixture	
	The mixture is not classified as hazardous, does not have hazardous properties	
	The most important adverse physicochemical, human health and environmental effects:	
	If handled and used properly, the product does not cause any harm to health. It is not dangerous for the environment.	
2.2	Label elements - According to Regulation No. 1272/2008 - CLP	
	It is not subject to mandatory labeling	
	Label elements - According to Regulation No. 648/2004 - Detergents	
	<2 - 3% detergents mix	

2.3	Other hazards
	The substance does not belong to the category of PBT, vPvB

SECTION 3		Ingredients composition				
3.2	Product characteristics: aqueous solution of short peptides and biologically active compounds from microbial and plant sources with addition of detergents					
Folder name	Registration number	Index number	CAS number	ES number	Content %	Classification
Aqueous solution of extracts from microbial and plant sources	It is not necessary to register	-	This product does not have any chemical substances above the level significant enough for assigning them with known CAS numbers.	-	approx. 97 -98%	Not classified

It also contains: Aqueous solution of detergents mix, approx. 2 - 3%

SECTION 4		First aid measures
4.1	Description of first aid measures (in general)	
	Disabled person to lead from the contaminated area, bringing it into a state of peace and to facilitate breathing by loosening clothing, watch, and if necessary to maintain its vital functions. If you are experiencing symptoms of acute injury (shortness of breath, persistent cough, chest pain, nausea, impaired sensory perception, fainting, etc.), call a physician or transport the injured person to a doctor.	
	After contact with skin: Wash area thoroughly with soap and running water.	
	Eye Contact: Wash with plenty water.	
	Exposure by inhalation: Remove to fresh air, lukewarm water rinse eyes, mouth and nasal cavity.	
	Ingestion: Transport victim to fresh air, rinse eyes, mouth, and nasal cavity with lukewarm water.	
4.2	Most important symptoms and effects, both acute and delayed	
	Not known	
4.3	Indication of any immediate medical attention and special treatment needed	
	In the workplace, running water and soap.	

SECTION 5		Firefighting measures
5.1	Extinguishing media	
	Extinguishing Media: Product (solution) is non-flammable. Adapt fire extinguishing agents nearby.	
	Inappropriate extinguishing media: Unlisted	
5.2	Special hazards arising from the substance or mixture	
	Applying direct water flow to hot liquids may result in vapor or explosion.	
5.3	Advice for firefighters	
	Breathing apparatus, Protective suit	

SECTION 6		Accidental release measures
6.1	Personal precautions, protective equipment and emergency procedures	
	Zoom out persons not participating in the elimination of consequences of the accident out of reach...	

	When removing the consequences of the accident using the prescribed personal protective equipment.
6.2	Environmental precautions
	Not required. The product is biodegradable.
6.3	Methods and material for containment and cleaning up
	Rinse the affected area thoroughly with water.
6.4	Reference to other sections
	See section 13

<b>SECTION 7</b>	<b>Handling and storage</b>
7.1	Precautions for safe handling Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
7.2	Conditions for safe storage, including any incompatibilities Store in original container in a dry and cool place, max. Storage temperature 45 ° C. Keep away from moisture and moisture.
7.3	Specific end use(s) See in 1.2. , Other uses – not given

<b>SECTION 8</b>	<b>Exposure controls/personal protection</b>
8.1	Control parameters Government Regulation No 361/2007 Coll. - Conditions for health workers at work and occupational exposure limits in the air of workplaces and ways of measuring and evaluating. (Czech)  Commission Directive No. 2000/39 / EC, 2006/15 / EC - EU exposure limits  Exposure limits: not given  Substance is not listed in Notice. No.432/2003 Coll., Laying down limit values of biological exposure tests (Czech)
8.2	Exposure controls
	Individual protection measures: Equip the workplace with local exhaust and a source of running water for eye rinsing, hand washing
	Respiratory protection: In case of sufficient ventilation no need
	Eye protection: Safety glasses
	Skin protection (hands): Prolonged or repeated contact with the skin wear appropriate protective chemical resistant gloves (EN 374) also with prolonged, direct contact, corresponding to > 480 minutes permeation time according to EN 374: eg. Nitrile rubber (0.4 mm) chloroprenkaučuku (0.5 mm), polyvinylchloride (0.7 mm), butyl rubber (0.7 mm). Due to many conditions (eg. Temperature), it must be expected that the actual duration of use of chemical resistant gloves may be shorter than the permeation time determined in accordance with EN 374.  Use suitable clothing and appropriate footwear.
	Environmental exposure: The mixture is not dangerous for the environment, it is biodegradable

SECTION 9	Physical and chemical properties	
9.1	Information on basic physical and chemical properties	
	Appearance	Solution colorless to brownish color
	Odour	slightly
	pH	3,9-4,3 (6,5 diluted))
	Melting point/freezing point	Irrelevant
	Initial boiling point and boiling range	>100 °C
	Flash point	>93 °C (closed cut)
	Evaporation rate	N.a.
	Flammability	N.a.
	Upper/lower flammability or explosive limits	-
	Vapour pressure	N.a.
	Vapour density	>1 calculated, air=1
	Oxidising properties	N.a.
	Relative density	1,002 g/cm <sup>3</sup>
	Solubility – water	Very Soluble
	Partition coefficient: n-octanol/water	Unknown
	Auto-ignition temperature	Irrelevant
	Decomposition temperature	N.a.
	Viscosity;	2,3 cSt (40 oC)
	Explosive properties	No
9.2	Other information	
	Fat solubility	N.a.
	Conductivity	N.a.

SECTION 10	Stability and reactivity	
10.1	Reactivity	
	Under normal conditions the product is stable	
10.2	Chemical stability	
	Under normal thermal conditions the product is stable	
10.3	Possibility of hazardous reactions	
	Does not polymerize	
10.4	Conditions to avoid	
	Humidity	
10.5	Incompatible materials	
	Strong oxidizing agents, acids, bases	
10.6	Hazardous Decomposition Products	
	N.a	



SECTION 11	Toxicological informations
11.1	Information on toxicological effects
Acute toxicity	Based on available data, the criteria for this classification are not match up LD50, oral >5000 mg/kg
Skin corrosion/irritation	Based on available data, the criteria for this classification are not match up
Serious eye damage/eye irritation	Based on available data, the criteria for this classification are not match up
Respiratory or skin sensitisation	Based on available data, the criteria for this classification are not match up
Germ cell mutagenicity	Based on available data, the criteria for this classification are not match up
Carcinogenicity	Based on available data, the criteria for this classification are not match up
Reproductive toxicity	Based on available data, the criteria for this classification are not match up
Specific target organ toxicity — single exposure	Based on available data, the criteria for this classification are not match up
Specific target organ toxicity — repeated exposure	Based on available data, the criteria for this classification are not match up
Aspiration hazard	Based on available data, the criteria for this classification are not match up
Likely routes of exposure and symptoms related to the physical, chemical and toxicological characteristics:	
Toxicity oral. (ingestion / swallowing):	
Ingestion of small quantities is not dangerous	
Toxicity inhal. (inhalation): Not known, solution	
Toxicity dermal.: Not known. May cause mild irritation in susceptible individuals.	
Eye Contact:	
Contact with eyes may cause mild irritation.	
Immediate, delayed and chronic effects of short and long term exposure:	
Unlisted. No symptoms are described	

SECTION 12	Ecological information
	Safe and efficient biocatalytic organic waste separator. The catalytic action of the product results in total biodegradation (except for CO <sub>2</sub> and H <sub>2</sub> O).
12.1	Toxicity
	Acute toxicity test for fish <i>Poecilia recitulata</i> Methodology: OECD 203 according to ČSN EN ISO 7346 LC50, 96 h 1364.1 mg / l
	Acute toxicity test on aquatic arthropod <i>Daphnia magna</i> Straus (Cladocera, Crustacea): Methodology: OECD 202 according to ČSN EN ISO 6341: EC50, 48 h 693.2 mg / l

	<p>Growth inhibition test for freshwater chlorococcal algae <i>Desmodesmus subspicatus</i> Walker (Chlorococcales, Chlorophyta, Chlorophyceae):</p> <p>Methodology: OECD 201 according to ČSN EN ISO 8692:</p> <p>ErC50, 72 h 887.3 mg / l</p> <p>Based on the above results, <b>the product does not show ecotoxicity.</b></p>
12.2	<p>Persistence and degradability</p> <p>OECD 301D test according to ČSN EN ISO 10707, 28 days 66.1%</p> <p>Based on the above result, <b>the product is degradable</b></p>
12.3	<p>Bioaccumulative potential</p> <p>It is not expected</p>
12.4	<p>Mobility in soil</p> <p>N.A., the product is very soluble in water</p>
12.5	<p>Results of PBT and vPvB assessment</p> <p>Not available</p>
12.6	<p>Other adverse effects</p> <p>Not available</p>

SECTION 13	Disposal considerations
13.1	Waste treatment methods
	Code and type of waste                      The final assignment determines the originator in terms of use
	The recommended method of disposal of the substance/ preparation: Rinse affected area with water spray. Waste is not dangerous
	The recommended method of disposal of contaminated product packaging: Specifies the originator by the packaging method
	Waste legislation                                      Directive No. 2008/98/ES

SECTION 14	Transport information
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Land transport (road / rail) ADR/RID :

For the transport is a product/mixture **not** classified as a dangerous thing (goods).

SECTION 15	Regulatory information
15.1	<p>Safety, health and environmental regulations/legislation specific for the substance or mixture</p> <p>Regulation (EC) No 1907/2006, registration, evaluation, autorisation, restriction chemicals (REACH)</p> <p>Regulation (EC) No 830/2015</p> <p>Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures</p>

	Act No. 350/2011 Coll. On chemical substances and mixtures Commission Directive No. 2000/39 / EC, 2006/15 / EC - EU exposure limits Decree No. 381/2001 Coll. Establishing the Waste Catalogue. Government Regulation No. 361/2007 Coll. On the health conditions of workers at work European Agreement concerning the international carriage of dangerous goods (ADR) as amended by No. 11/2015 Coll.  European Agreement concerning the International Maritime Dangerous Goods (IMDG)
15.2	Chemical safety assessment
	The chemical safety assessment for the mixture has not been (need be) performed

SECTION 16	OTHER INFORMATIONS
	THE MIXTURE IS NOT CLASSIFIED, SHOWS NO HAZARDOUS PROPERTIES, NO OCCUPATIONAL HYGIENE LIMITS FOR IT. A SAFETY DATA SHEET FOR THIS SUBSTANCE MAY NOT BE PROCESSED
Abbreviations, symbols	
CLP	Regulation (ES) No. 1272/2008
PBT	Persistent, bioaccumulation, toxic
vPvB	High persistent, high bioaccumulation
LD50	lethal dose for 50%
LC50	fatal concentration for 50%
ErC50	50% growth rate inhibition
Materials used for the processing of safety data sheet:	
Information provided by the manufacturer	
Ecotoxicity tests performed by the accredited laboratory EMPLA AG spol. s r.o.	
Registration dossier (dossier)	
ECHA decision on registration	
Database of registered substances ECHA	
H-phrases :	
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#### Guidance regarding the training of workers:

Workers coming into contact with hazardous chemicals or products must have access to data which are presented in this MSDS and be familiar with them clearly.

Person transporting hazardous chemicals and preparations must be familiar with guidelines for emergency response in accordance with regulations on hazardous goods within the meaning of ADR / RID.

The information contained in this MSDS are currently valid data and best practices for use and handling of this substance under normal conditions. Any other use or handling of this substance, which is not consistent with those of MSDS, excludes liability for defects, respectively damage, which would otherwise meet the producer, importer or retailer.