

SAFETY DATA SHEET

IMVIXA Premix

Section 1. Identification

Product identifier	: IMVIXA Premix
Product code	: 12400000380
Other means of identification	: A-20209 A; AH2178; AH-2178 10% Premix; IMVIXA Premix; Lufenuron Premix 10%
Relevant identified uses of t	he substance or mixture and uses advised against
Identified uses	: Veterinary product.
Uses advised against	: None known.
Company Name	 Elanco Deutschland GmbH Rathausplatz 12, 61348 Bad Homburg v. d. Höhe National Poison Center - Nacionalni centar za kontrolu trovanja
	+381 11 360 84 40 +381 11 3608 234
Telephone number	: +49 (0) 4721 747 0
Emergency telephone number	: CHEMTREC International: 00 1 703-527-3887 (24 hours)
Email	: elanco_sds@elancoah.com
Transportation Emergency telephone number	: CHEMTREC International: 00 1 703-527-3887 (24 hours)

Section 2. Hazard identification

Classification of the substance or mixture	:	AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1
GHS label elements		
Hazard pictograms	:	¥2
Signal word	:	Warning
Hazard statements	:	Very toxic to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Avoid release to the environment.
Response	:	Collect spillage.
Storage	:	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	:	May form combustible dust concentrations in air.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	%	CAS number
lufenuron (ISO)	≥10 - ≤25	103055-07-8

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures				
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. 			
Inhalation	 Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. 			
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. 			
Ingestion	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.			

Most important symptoms/effects, acute and delayed

Potential acute health effe	<u>cts</u>
Eye contact	: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
Inhalation	 Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sym	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: irritation redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical powder.
Unsuitable extinguishing media	: Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.
Specific hazards arising from the chemical	: May form explosible dust-air mixture if dispersed. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.		
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".		
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.		
Methods and materials for co	onta	ainment and cleaning up		
Small spill	:	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.		
Large spill	:	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent		

wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	
Protective measures :	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid release to the environment. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general : occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, : including any incompatibilities	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits	
lufenuron (ISO)		Elanco OEL (ELANCO). TWA: 0.15 mg/m ³ 8 hours.	
Biological exposure indice	<u>es</u>		
None known.			
Appropriate engineering controls	vapor or mist, use pro controls to keep worke recommended or state	te ventilation. If user operations generate dust, fumes, gas, icess enclosures, local exhaust ventilation or other engineering er exposure to airborne contaminants below any utory limits. The engineering controls also need to keep gas, rations below any lower explosive limits. Use explosion-proof	
Environmental exposure controls	they comply with the r cases, fume scrubber	: Emissions from ventilation or work process equipment should be checked to ensu they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	
Individual protection measure	ures		
Hygiene measures	: Wash hands, forearm	s and face thoroughly after handling chemical products, before	

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
 Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 8. Exposure controls/personal protection

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Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Ap	pea	ran	ce
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Physical state	1	Solid. [Powder.]
Color	1	White to yellowish.
Odor	1	Not available.
Odor threshold	1	Not available.
рН	1	Not available.
Melting point/freezing point	1	Not available.
Boiling point, initial boiling point, and boiling range	:	Not available.
Flash point	1	Not applicable.
Evaporation rate	1	Not available.
Flammability	1	Not available.
Lower and upper explosion limit/flammability limit	:	Not applicable.
Vapor pressure	1	Not available.
Relative vapor density	4	Not applicable.
Relative density	1	Not available.
Solubility(ies)	4	Not available.
Solubility in water	:	Not available.
Partition coefficient: n- octanol/water	:	Not applicable.
Auto-ignition temperature	:	Not applicable.
Decomposition temperature	4	Not available.
Viscosity	4	Not applicable.

Section 9. Physical and chemical properties and safety characteristics

Flow time (ISO 2431)	: Not available.
Particle characteristics	
Median particle size	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
lufenuron (ISO)	LD50 Dermal LD50 Oral	Rat Rat	>2000 mg/kg >2000 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

•••••••••••••••••••••••••••••••••••••••	Route of exposure	Species	Result
lufenuron (ISO)	skin	Guinea pig	Sensitizing

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure	:	Not available.
Potential acute health effects	<u>s</u>	
Eye contact	:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
Inhalation	:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
Skin contact	1	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the phy	<u>/sic</u>	al, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: irritation redness
Inhalation	:	Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	1	No specific data.
Ingestion	:	No specific data.
Deleved and immediate offer		and also chronic effects from short and long term exposure
Short term exposure		and also chronic effects from short and long term exposure
Potential immediate	:	Not available.
effects		
Potential delayed effects	1	Not available.
<u>Long term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Potential chronic health eff	ects	<u>s</u>
Not available.		
General	:	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	1	No known significant effects or critical hazards.
Reproductive toxicity	:	No known significant effects or critical hazards.
Numerical measures of toxic	itv	
	ny	

Acute toxicity estimates

N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
lufenuron (ISO)	NOEC 0.000026 mg/l NOEC 0.02 mg/l	Daphnia Fish - Pimephales promelas	21 days (Full life cycle)
	Acute EC50 0.0011 to 0.0013 mg/l Acute LC50 0.58 mg/l Fresh water	Daphnia Fish - Colossoma macropomum - Juvenile (Fledgling, Hatchling, Weanling)	48 hours 96 hours
	Chronic NOEC 1 µg/l Fresh water	Crustaceans - Isopoda	21 days

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
lufenuron (ISO)	5.12	-	high

<u>Mobility in soil</u>	
Soil/water partition	: Not available.
coefficient (Koc)	
Other adverse effects	: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and
	runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

UN	IMDG	ΙΑΤΑ
UN3077	UN3077	UN3077
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Lufeneron)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Lufeneron)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Lufeneron)
9	9	9
Ш		
Yes.	Yes.	Yes.
	UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Lufeneron) 9 9 111	UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Lufeneron) 9 9 9 111 111 111 111 111 111

Additional information

Section 14. Transport information UN This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. IMDG : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤ 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. ΙΑΤΑ This product is not regulated as a dangerous good when transported in sizes of $\leq 5 L$ ÷ or \leq 5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8. Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Transport in bulk according : Not available.

to IMO instruments

Section 15. Regulatory information

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

No additional information.

Section 16. Other information

History

Date of issue/Date of	: 2/14/2023
revision	
Date of previous issue	: 8/8/2022
Version	: 0.05
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations

Procedure used to derive the classification

Section 16. Other information

AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1

Justification

Calculation method Calculation method

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

For additional information contact: Elanco Animal Health 0011+1-877-352-6261 0011+1-800-428-4441