


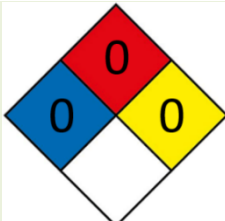
SAFETY DATA SHEET (HDS)

NCh2245:2015

SECTION 1: IDENTIFICATION OF THE CHEMICAL AND THE COMPANY*.

Identification of the chemical product:	Anphoterol®.
Recommended uses:	External medical use, non-flammable, non-toxic.
Restrictions on use:	In food.
Name of supplier:	Kasem SpA.
Supplier's address:	Av. La Dehesa 1201, Torre Oriente, Of. 533 - Lo Barnechea, Santiago, Chile.
Provider's telephone number:	(56) 2 – 2951 6982
Emergency telephone number in Chile:	(56) 9 – 9506 3358
Toxicology information telephone number in Chile:	(56) 9 – 9506 3358
Manufacturer's Information:	Kasem SpA.
Supplier's e-mail address:	info@anphoterol.com

SECTION 2: IDENTIFICATION OF HAZARDS

Classification according to NCh382:	Class 2. Division 2.2: Non-flammable, non-toxic gases.
Distinctive according to NCh2190:	
Classification according to GHS (GHS):	See section 14.
Word of Caution:	Attention.
Indication of Danger:	H229 Contains gas under pressure: may burst if heated.
Caution Indication:	<u>Prevention:</u> P210A Keep away from heat, open flame, hot surfaces or sparks. Do not smoke. <u>Storage:</u> P410 + P412 Protect from sunlight. Do not expose to temperatures above 50°C/122°F.
SGA label:	No pictogram.
Safety sign according to NCh1411/4:	

Specific classification:	None.
Specific badge:	None.
Hazards description:	It does not represent any risk for people, since it is a class II medical device for external use.
Description of specific hazards:	May burst if heated.
Other hazards:	It does not have.

SECTION 3: COMPOSITION / INFORMATION ON COMPONENTS*.

This product is a blend.

It does not contain hazardous ingredients.		
	Component 1	Component 2
Systematic chemical name	Broad spectrum multipolar salts	H ₂ O
Common or generic name	Amphoteric salt mixture	Water
Concentration range	confidential	balanced
CAS Number	N/A	7732-18-5 + Ozone
No dangerous impurities.		

SECTION 4: FIRST AID*.

The product is used in first aid for corrosive or irritant chemical contaminations, therefore, it is not appropriate to apply first aid measures for Anphoterol®.	
Inhalation:	The product does not release dangerous vapors. In case of discomfort breathe fresh air.
Skin contact:	The product is intended for use on the skin. Seek medical attention in case of persistent discomfort.
Eye contact:	The product is intended for use in the eyes. Seek medical attention in case of persistent discomfort.
Ingestion:	This is not the primary route of exposure. The product is not toxic by oral exposure. Seek medical attention in case of discomfort.
Expected acute effects:	No acute effects are expected. No risks.
Expected delayed effects:	Not relevant. No risk.
Most important symptoms / effects:	No symptoms expected. No risks.
Protection of first aid providers:	Product for medical use, specially created to eliminate or reduce injuries caused by eye or skin contact with an irritating or corrosive chemical substance with acid and/or alkaline characteristics. Emergency responders or emergency brigades should wear protective equipment appropriate for the chemical that contaminated the person.
Special notes for a treating physician:	Anphoterol® solution, contained in class II medical devices, is for external use. It is a product of Chilean origin specially created to eliminate or reduce injuries caused by ocular or cutaneous contact with an irritating or corrosive chemical substance.

SECTION 5: FIRE-FIGHTING MEASURES*.

Extinguishing agents:	Foam, pressurized water, dry chemical powder, carbon dioxide or any other "ABC" class device.
Inappropriate extinguishing agents:	Not applicable.

Hazardous products released from combustion and thermal degradation:	It does not have.
Specific associated hazards:	This product is not flammable or combustible.
Specific extinguishing methods:	Attack the fire from as far away as possible and with the wind at your back.
Precautions for emergency personnel and/or firefighters:	In case of fire, wear flame-protective clothing, gloves, neoprene boots and self-contained breathing apparatus.

SECTION 6: MEASURES TO BE TAKEN IN CASE OF ACCIDENTAL SPILLAGE*.

Personal precautions:	In case of eye contact or for eye comfort, rinse with isotonic saline solution or water as a secondary rinsing solution.
Personal protective equipment:	Not required.
Emergency procedures:	Not applicable.
Environmental precautions:	No specific precautions. Only absorb the spilled product.
Cleaning methods and materials Recovery: Neutralization: Final provision:	No specific precautions. This product can be absorbed with any inert material. Disposition in accordance with Decree No. 148 of 2004 of the Ministry of Health.
Additional disaster prevention measures (collateral effects):	No specific additional measures.

SECTION 7: HANDLING AND STORAGE*.

HANDLING	
Precautions for safe handling:	Do not eat, drink or smoke when handling the product. Do not handle the product near food. Do not expose to high temperatures or humidity.
Operational and technical measures:	Read the label completely before handling the product.
Other precautions:	Not required.
Contact prevention:	Not required.
STORAGE	
Safe storage conditions:	Store only in original, tightly closed, labeled container in a dry and ventilated place, under cover. Keep away from heat sources. Protect from freezing. Do not store together with food. Do not store in corrosive environments without its protective case. Store in places free of dust accumulation.
Technical measurements:	The product should be handled and stored in secure warehouses with good ventilation. Storage temperature between 2 to 50°C.
Incompatible substances and mixtures:	Stable product under normal conditions of handling, use and storage.
Packaging material:	Sterile product to be kept in the original container. Shelf life is 24 months if the container remains closed.

SECTION 8: EXPOSURE CONTROL / SPECIAL PROTECTION

Maximum allowable concentration:	Not Applicable.
Personal protective equipment	
Respiratory protection:	Not required.
Hand protection:	Not required.

Eye / face protection:	Not required.
Skin and body protection:	Not required.
Engineering measures:	Not required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical condition:	Liquid.
Form in which it is presented:	Aqueous.
Color:	Colorless.
Odor:	Toilet.
pH at 20°C:	7,05.
Melting point / freezing point:	-1 °C.
Boiling point, initial boiling point and boiling range:	99 °C.
Flash point:	Non-flammable.
Explosive limits:	Not applicable.
Vapor pressure at 25°C:	24 mmHg
Relative vapor density (air = 1):	0.6 Kg/m ³ at 100°C.
Density at 20°C:	1,038 g/cm ³
Solubility(ies):	At 25°C 10g / 100ml of water.
Partition coefficient n-octanol / water:	Miscible with water.
Auto-ignition temperature:	605°C.
Decomposition temperature:	Possible thermal decomposition above 605°C.
Odor threshold:	Not applicable since the mixture is odorless.
Evaporation rate:	Not registered.
Flammability:	Non-flammable.
Viscosity:	Similar to the viscosity of water.

SECTION 10: STABILITY AND REACTIVITY*.

Chemical stability:	Stable under recommended handling and storage conditions.
Dangerous reactions:	None known to date. No decomposition, condensation and self-reactivity expected.
Conditions to avoid:	Do not expose to temperatures below 2°C or above 50°C. For DCM foggers, do not pierce or expose to sunlight. For DMT, avoid temperatures above 50°C.
Incompatible materials:	No record to date.
Hazardous decomposition products:	Carbon monoxide gases, carbon dioxide, sodium oxides, phosphorus oxides and organic vapors.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity (LD50 and LC50):	Not determined.
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Skin irritation / corrosion:	It is not irritating to the skin.
Serious eye damage / eye irritation:	Non-irritant and non-corrosive (<i>in vitro</i> tests on human tissue fibroblasts).
Respiratory or skin sensitization:	Not determined.
Reproductive cell mutagenicity / <i>in vitro</i>	Not determined.
Carcinogenicity:	Not determined.
Reproductive toxicity:	Not determined.
Specific target organ toxicity - single exposure:	Not determined.
Specific target organ toxicity - repeated exposures:	Not determined.
Inhalation hazard:	Not determined.
Toxicokinetics:	Not determined.
Metabolism:	Not determined.
Distribution:	Not determined.
Acute pathogenicity and infectivity (oral, dermal and inhalation):	Not determined.
Endocrine disruption:	Not determined.
Neurotoxicity:	Not determined.
Immunotoxicity:	Not determined.
"Related symptoms."	Not registered.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity (EC, IC and LC):	No adverse effects are known.
Persistence and degradability:	The product can decompose in the short term in the environment into simple inorganic salts.
Bioaccumulative potential:	Does not bioaccumulate (miscible in water and poorly miscible in organic solvents).
Mobility on the ground:	Not determined.

SECTION 13: FINAL DISPOSITION CONSIDERATIONS

Waste:	No precautions should be taken to this effect.
Contaminated container and packaging:	Dispose of waste and residues according to local regulations. Avoid unauthorized disposal. Do not illegally dump on land or into water.
Contaminated material:	Eliminate in accordance with Decree No. 148 of 2004 of the Ministry of Health.

SECTION 14: TRANSPORT INFORMATION* SECTION 14: TRANSPORT INFORMATION* SECTION 14: TRANSPORT INFORMATION* SECTION 14: TRANSPORT INFORMATION* SECTION 14: TRANSPORT INFORMATION

DCM100 and DM200 devices	MODE OF TRANSPORT		
Regulations:	Land (ADR/RID)	Maritime (IMDG)	Air (IATA)
NU Number	1950	1950	1950

Official designation of the transport:	Aerosols.	Aerosols.	Aerosols.
UN primary hazard classification:	2.2	2.2	2.2
UN secondary hazard classification:	-	-	-
Packaging group:	-	-	-
Environmental hazards:	No	No	No
Special precautions:	-	-	-
DMT2L, DMT35L and DMT5L devices	MODE OF TRANSPORT		
Regulations:	Land (ADR/RID)	Maritime (IMDG)	
NU Number	1066	1066	
Official designation of the transport:	Compressed nitrogen.	Compressed nitrogen.	
UN primary hazard classification:	2.2	2.2	
UN secondary hazard classification:	-	-	
Packaging group:	It does not have.	It does not have.	
Environmental hazards:	-	-	
Special precautions:	No	No	
Bulk transport in accordance with MARPOL 73/78 Annex II, and with IBC code:	As the products are delivered conditionally (packaged products), this subsection is not applicable.		

Transportation classifications are provided as a service to the customer. For shipments, YOU are responsible for complying with all applicable laws and regulations, including proper shipping and packaging classification. Transportation classifications are based on product formulation, packaging, Laboratorio Kasem SpA policies and Laboratorio Kasem SpA's knowledge of the appropriate regulations in force. Laboratorio Kasem SpA does not guarantee the accuracy of this classification information. This information applies only to shipping classification and does not apply to packaging, labeling or marketing requirements. The above information is for reference only. If shipping by air or sea, YOU are advised to review and comply with applicable regulatory requirements.

SECTION 15: REGULATORY INFORMATION

National regulations:	<p>SUPREME DECREE No. 148 (2003): Sanitary regulations on hazardous waste management.</p> <p>SUPREME DECREE No. 594 (2001): Regulation on basic sanitary and environmental conditions in workplaces.</p> <p>SUPREME DECREE No. 609 (1998): Emission standard for the regulation of pollutants associated with the discharge of liquid industrial waste to sewage systems.</p> <p>NCh 382:2017: Dangerous goods - Classification.</p> <p>NCh 1411/4:2000: Hazard prevention - Part 4: Safety signs for the identification of material hazards.</p> <p>NCh 2190:2019: Transport of hazardous substances. Distinctive signs for hazard identification.</p> <p>NCh 2245:2015: Safety data sheet for chemical products - Contents and order of sections.</p>
International regulations:	<p>United Nations Recommendations for the Transport of Dangerous Goods. IAEA Model Regulations. Volume I and II. ADR, IMDG, IATA.</p>
<p>The recipient should verify the possible existence of local regulations applicable to the chemical.</p>	

SECTION 16: OTHER INFORMATION*

Specific use:	Use Anphoterol® solution immediately and as a primary action to wash the skin or eyes in case of chemical splashes (acids, bases, oxidants, reducing agents, chelating agents or solvents). The protocol for use of Anphoterol® solution is available and downloadable on our website www.anphoterol.com .								
Risk phrases (R):	Not Applicable.								
Safety phrases (S):	Keep the container tightly closed and in a well-ventilated place. Keep away from food and beverages. Do not eat or drink during use. Do not smoke during use. Do not generate dust near the container. Check the specific instructions in the safety data sheet.								
HMIS: (Hazardous Materials Information System)	<table border="1"> <tr> <td style="background-color: #0070c0; color: white;">HEALTH</td> <td style="background-color: #0070c0; color: white;">0</td> </tr> <tr> <td style="background-color: #ff0000; color: white;">FLAMMABILITY</td> <td style="background-color: #ff0000; color: white;">0</td> </tr> <tr> <td style="background-color: #ffff00;">DANGER</td> <td style="background-color: #ffff00;">0</td> </tr> <tr> <td style="background-color: #ffffff;">EPP</td> <td style="background-color: #ffffff;">E</td> </tr> </table>	HEALTH	0	FLAMMABILITY	0	DANGER	0	EPP	E
HEALTH	0								
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<p>Note: Basically, this SDS has been prepared based on the background information that the Electrometallurgy and Corrosion Laboratory of the Metallurgical Engineering Department of the University of Santiago obtains from internationally recognized sources, which are used to issue a technical opinion according to the format stipulated in NCh2245:2015 and in the information oriented to compliance with national and international standards governing the matters contained therein.</p> <p>In this sense, the SDS of this product represents an independent opinion of the manufacturer in a context of risk assessment with emphasis, mainly, on the occupational health of workers involved in the life cycle of the industrial use of chemicals, in the care of the environment, in safeguarding the assets of the principal and in the faithful compliance with national legislation, each client who requests that the SDS has the corporate logo does so under his responsibility and in no way involves the University of Santiago who assumes that it is a matter of internal regime and not marketing of the product in question. Likewise, Universidad de Santiago is not responsible for the information provided by the service applicant in terms of the validity of the documentation provided by the latter.</p>									
<p><i>Abbreviations and acronyms can be found at www.wikipedia.org.</i></p>									
<p>Change control: Information is updated in sections 2, 4, 14, and 15.</p>									
<p>Date of creation: January 14, 2019. Next revision date: April 01, 2021.</p>									
<p>References: manufacturer's SDS. HDS 10-38 3M Cleaning Air, 36-4283-2.</p>									