

HEMOSAB TIGRE DOO	MATERIAL SAFETY DATA SHEET In accordance with the Rulebook on the content of the safety data sheet Official Gazette of RS, 100/2011	Number of pages:11
		Creation date:
		Version number:3 VALID VERSION 3
		Revision:06/12/2016
		Date of the previous version: 11.12.2014.
SILVER SAB	Silver Sab – antibacterial liquid with silver	Biocide product

SECTION 1: IDENTIFICATION OF THE CHEMICALS AND OF THE COMPANY/UNDERTAKING

Subsection	1.1 Identification of the chemicals	
Product name:	Silver Sab – antibacterial liquid with silver	
CAS-number:	/	
EC-number:	/	
Index number:	/	
Subsection	1.2 Relevant identified uses of the chemicals AS BIOCIDES PRODUCT:	
<p>Liquid disinfectant with high level of efficacy against bacteria and fungi: Staphylococcus aureus (ATCC 6538), Salmonella typhimurium (ATCC 14028), Pseudomonas aeruginosa (ATCC 15442), Proteus hauseri (ATCC13315), Escherichia coli (ATCC 10536), Enterococcus hirae (ATCC 10541), Klebsiella pneumoniae (ATCC 4352), Candida albicans (ATCC 10231)</p> <p>Silver Sab is an antibacterial liquid based on silver zeolite for fast disinfection of surfaces, implements, clothes, equipment in: public health facilities (clinics, hospitals, health centers, nursing homes), public facilities and institutions (kindergartens, schools, universities ...), food industry (dairy, oil, sugar, milling and baking industry, eggs, fruit and vegetables, confectionery industry, starch and gluten industry, production of mushrooms, malt production, the industry of meat and meat products,</p>	<p>INSTRUCTION OF USE: The recommended dose for all surfaces: spraying: 20ml of product per m2 (should be enough for moisturizing the whole surface); sweeping: 100 ml per m2; immersion: depends on the size of the object. The treatment should be repeated in accordance with instructions for use. The treatment of floors in houses should be repeated twice a month. The treatment of floors in public institutions - once to three times a week, depending on the working process and the area of the application. Treated surfaces and objects leave for 30 min. Treated surfaces which are in contact with food should be rinsed before use, after drying.</p> <p>Stability: The product is stable under normal storage conditions. Do not dilute the product for the intended use, because the product would reduce or lose its benefits.</p> <p>Contact with materials: Avoid contact with metal (except stainless steel).</p>	

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<p>animal husbandry and poultry farming, industry of alcoholic and non-alcoholic beverages, refrigerated, etc.), industrial buildings, public transport, hospitality industry (hotels, motels, restaurants, public kitchens, canteens), pharmaceutical industry, cosmetic industry, mobile toilets, air conditioners. In households: for sinks, work surfaces in the kitchen, sponges, rags, bathrooms, refrigerators, freezers, cutting boards, plastic containers, shoes, beds for pets, sunglasses, mobile and cell phones, computers and laptops, sports bags , door handles, garbage cans, bags for vacuum cleaners ...</p> <p>The test report of the antimicrobial activity of the product is done by MMA, sector of Preventive Medicine, Belgrade.</p>	<p>Technical dossier No 532-01-616 / 2014-19 under which the biocide product is placed on the market.</p>
Subsection	1.3 Details of the supplier:
a) Name of the supplier	EVRO-PAN-INSTITUT DOO ,PANČEVO
b) Manufacturer, importer, distributor or user?	DISTRIBUTOR AND MANUFACTURER on behalf of Hemosab Tigre
v) Address and telephone number	Svetozara Markovića br 106,26000 Pančevo Tel/fax:+38113366163, e-mail: evropaninstitut@gmail.com
MANUFACTURER: HEMOSAB TIGRE DOO	FILLED AND PACKED: TEHNOHEMIJA A.D. BEOGRAD
Subsection	1.4 Emergency telephone numbers:
	National Poison Control Center, MMA, Belgrade, Serbia, Crnotravska 17, + 381(0) 11 360 8440 (24h)

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SECTION 2: HAZARDS IDENTIFICATION

Subsection	2.1 Classification of the chemicals		
	Rulebook on classification, packaging, labeling and advertising of chemicals and certain products (“Official Gazette of RS” 59/10, 25/11 and 5/2012)	Rulebook on the classification, packaging, labeling and advertising of chemicals and certain products, in accordance with Globally Harmonized System of Classification and Labeling of the UN (“Official Gazette of RS” 64/10, 26/11 and 105/2013)	

Subsection	2.2 Label elements:			
	Rulebook on the classification, packaging, labeling and advertising of chemicals and certain products, in accordance with Globally Harmonized System of Classification and Labeling of the UN (“Official Gazette of RS” 64/10, 26/11 and 105/2013)			
Hazard pictogram:	/			
Signal word:	/			
Hazard statements :	/			
Precautionary statements:	/			
Subsection	2.3 Other hazards			
	/			

Full text of warnings codes : see section 16.

SECTION 3: INFORMATION ON INGREDIENTS

Subsection	3.1 Information on mixture ingredients:
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Chemical or trade name:	CAS-number	EC number	Index number	Concentration [%]	Classification CLP/GHS
Silver zeolite	/	/		2,5%	Causes serious eye irritation 2 H319 Harmful if inhaled 4 H332 May cause respiratory irritation 3 H335
Ionic silver in sage and monocarboxylic acid extract	/	/		< 1,7%	May intensify fire; oxidizer 2 H 272 Causes severe skin burns and eye damage 1B H314 Very toxic to aquatic life 1 H400 Very toxic to aquatic life with long lasting effects 1 H410
Stabilizers and blockers	/	/		< 0,45%	/
Potassium sulfate	231-915-5	7778-80-5		< 0,15%	/
Demineralized water	/	7732-18-5		to 100%	/

SECTION 4: FIRST AID MEASURES

Subsection	4.1 Description of first aid measures - The product is not classified as hazardous
Inhalation:	Product evaporates in very small amounts (when evaporating, water is the only product), therefore it has no harmful effects on respiratory system.
Skin contact:	/
Eye contact:	In case of contact with eyes rinse immediately with plenty of water for 2

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	minutes, seek medical attention if necessary.
Ingestion:	Drink plenty of water, seek medical attention if necessary.
Subsection	4.2 Most important symptoms and effects, both acute delayed:
	There are neither anticipated nor recorded symptoms or effects.
Subsection	4.3 Indication of any immediate medical attention and special treatment needed:
	/

SECTION 5: FIREFIGHTING MEASURES

Subsection	5.1 Extinguishing media:
	Extinguish fire with the extinguishing media suitable for extinguishing other endangered areas, dry powder, carbon dioxide and water spray. Unsuitable extinguishing media: none.
Subsection	5.2 Special hazards arising from the substance or mixture:
	Use water spray for cooling the containers.
Subsection	5.3 Advice for fire-fighters:
	Water solution is not flammable.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Subsection	6.1 Personal precautions, protective equipment and emergency procedures:
	Wear personal protective equipment.
Subsection	6.2 Environmental precautions:
	No hazard.
Subsection	6.3 Methods and material for containment and cleaning up:
	Pick up with absorption material (e.g. sand, diatomaceous earth, universal binders). Remove it mechanically. Pick up the sturdy material and deposit it in containers for disposal.
Subsection	6.4 Reference to other sections:
	Section 8 and 13

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SECTION 7: HANDLING AND STORAGE

Subsection	7.1 Precautions for safe handling:
	Keep packages well closed and away from heat.
Subsection	7.2 Conditions for safe storage including incompatibilities:
	Keep the product in sealed containers on cold and dark place. (SECTION 10) Keep the product in its original packaging at ambient temperature, away from direct sunlight.
Subsection	7.3 Specific end use(s):
	/

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limit values are checked based on CAS number from ACGIH chemical list. The maximum allowable concentration for the Republic of Serbia is defined in standard SRPS Z.BO.001 / 1: 2007.

Subsection	8.1 Control parameters:
DNEL: Exposure limit values (of workers)	
	/
	/
	/
Subsection	8.2 Exposure controls:
Hand protection:	Protective gloves.
Eye protection:	Glasses with side shields. Standard EN-166
Environmental exposure control:	In accordance with local/regional/national regulations.
Respiratory protection:	

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Subsection	9.1 Information on basic physical and chemical properties:	
a)	State of matter	Clear, colorless liquid
b)	Odor	Odourless
c)	Odor threshold	Not specified
d)	pH	5,05
e)	Melting point/freezing point	0°C
f)	Initial boiling point and boiling range	100°C
g)	Flash point	Not specified
h)	Evaporation rate	Not specified
i)	Flammability	inflammable liquid
j)	Upper/lower flammability or explosive limits	Not specified
k)	Vapor pressure	
l)	Vapor density	Not specified
m)	Relative density	1,00 on 20°C
n)	Solubility	Completely
o)	Partition coefficient: n-octanol/water (log Pow)	Not specified
p)	Auto-ignition temperature	Not specified
q)	Decomposition temperature:	Not specified
r)	Viscosity	Not specified
s)	Explosive properties	None
t)	Oxidizing properties	None
Subsection	9.2 Other information:	

SECTION 10: STABILITY AND REACTIVITY

HEMOSAB TIGRE DOO	MATERIAL SAFETY DATA SHEET In accordance with the Rulebook on the content of the safety data sheet Official Gazette of RS, 100/2011	Number of pages:11
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Subsection	10.1 Reactivity:
	The product is stable under recommended storage and transport conditions.
Subsection	10.2 Chemical stability:
	The product is stable under normal conditions
Subsection	10.3 Possibility of hazardous reaction:
	There is no hazardous reaction under normal storage and transport conditions.
Subsection	10.4 Conditions to avoid:
	Do not dilute the product for the intended use, because the product would reduce or lose its benefits.
Subsection	10.5 Incompatible materials:
	Avoid contact with metal (except stainless steel).
Subsection	10.6 Hazardous decomposition products:
	/

SECTION 11: TOXICOLOGICAL INFORMATION

Subsection	11.1 Information on toxicological effects, for substance, the list of hazard categories:	
a)	Acute toxicity	/
b)	Skin corrosion / Irritation	no
c)	Eye corrosion / Irritation	no
d)	Sensitization of respiratory system or skin:	no
e)	Mutagenicity <i>in-vitro</i>:	No evidence
f)	Carcinogenicity:	No evidence
g)	Toxicity for reproductive organs:	No evidence
h)	Specific target organ toxicity – single exposure:	Not specified
i)	Specific target organ toxicity – repeated exposure:	No
j)	Danger of aspiration:	Not specified

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SECTION 12: ECOTOXICITY INFORMATION

Subsection	12.1 Toxicity:		
Toxicity to freshwater fish	/		
Toxicity to invertebrates	/		
Subsection	12.2 Persistence and degradability:		
	Air:	No data	
	Soil:	No data	
	Water:	No data	
Subsection	12.3 Bioaccumulation potential:		
	not bioaccumulative		
Subsection	12.4 Mobility in soil:		
	No data		
Subsection	12.5 Results of PBT and vPvB assessment		
	No data		
Subsection	12.6 Other adverse effects		
	No negative effects on the ozone layer		

SECTION 13: Disposal consideration

Subsection	13.1 Waste treatment methods:
	<p><u>Product</u></p> <p>Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste residues should not be disposed over the sewer but should be treated in an appropriate treatment facility. Disposal of excess and non-recyclable products is done through a licensed waste contractor. Disposal of this product, solutions and any by-products should be in accordance with the requirements of the local</p>

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	<p>legislation on environmental protection and waste disposal. <u>Hazardous waste</u>: The classification of the product should be in accordance with the criteria of hazardous waste. <u>Packaging</u> <u>Methods of disposal</u>: The generation of waste should be avoided or minimized wherever possible. Packaging waste must be recycled. Incineration or landfilling should only be considered when recycling is not feasible. Special precautions: none.</p>
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SECTION 14: TRANSPORT INFORMATION

Subsection	14.1
1. UN number:	The product is not classified as hazardous.
2. H.I.N. –Kemler code	-
Road transport (ADR)/ Railway transport (RID):	
Subsection	14.2 UN proper shipping name:
Subsection	14.3
Transport hazard class	
ADR/RID classification code:	
Subsection	14.4 Packing group:
Subsection	14.5 Environmental hazards:
Subsection	14.6 Special precautions for user:
Transport in bulk.	Ensure the container. Pay attention to regulations.

SECTION 15: REGULATORY INFORMATION

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Subsection	15.1 Safety, health and environmental regulation:
	<p>This material safety data sheet is made in accordance to :</p> <p>Law on chemicals, "Official gazette of RS", no. 36/09, 88/10, 92/2011 and 93/12.</p> <p>List of classified substances "Official gazette of RS" (no. 82/10 and 48/2014)</p> <p>Regulation on storage, packaging and labeling of hazardous waste (Official gazette of RS no. 92/10)</p> <p>Law on environmental protection, "Official gazette of RS" no. 135/04, 36/09, 72/09 and 43/2011.</p> <p>Law on transport of dangerous load, "Official gazette of RS", no. 88/2010.</p>
Subsection	15.2 Chemical safety assessment:
	A chemical safety assessment has not been carried out for this product.

SECTION 16: OTHER INFORMATION

Advice for training:	Personnel must be familiar with hazardous characteristics of the product, with principles of health and environmental protection related to the product and first aid principles.
Recommendation for use:	Safety Data Sheet contains important information for the health and safety of users and the protection of the environment. Contact with liquid may cause cold burns. Ensure that operators/users are informed about the dangers. The product should not be used for purposes other than those specified in the instruction manual. This safety data sheet has been established in accordance with the European Directives and is applicable in all countries that directly or indirectly carry out the implementation of the Directive in their national laws. The information contained in this document corresponds to the current knowledge of the product and the corresponding specifications. And if care has been taken in the preparation of this document, we cannot accept responsibility for any injury or damage resulting from its use.
Text:	
R – phrases:	
H – phrases:	/

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P – phrases: prevention:	/
P – phrases: reaction:	/
P – phrases: storage:	/
VALIDITY	With this newest version of SDS all previous versions are not valid.
	VALID VERSION 3 FROM 06/12/2016
Key / Legend	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstract Service
EU	European Union
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous
IMO	International Maritime
RID	International Rule for Transport of Dangerous Substances by
DNEL	Derived No Effect Levels
EC number	EC number, European Commission number
LC50	Lethal concentration 50%
LD50	Lethal Dose 50%
MDK	Maximum allowable concentration
PNEC	Predicted No Effect Concentration
STEL	Short-Term Exposure Limit / 15 min/
TWA	Time Weighted Averages / for 8h /

The end of SDS
