



Saltidin® Aerosol 20 % water-based

Saltidin® (known as Picaridin in the US)

Issued in February 2011

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.



Summary

	Page
1. Preliminary remarks	3
2. Physical and chemical properties	4
3. Formulation	6
3.1 Aerosol formulation	6
3.2 Premix formulation	7
3.3 Premix preparation	7
3.4 Premix physical data	7
3.5 Aerosol preparation	8
3.6 Packaging material	8
4. Information	9

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.



1. Preliminary Remarks

The use of repellents by application to skin and clothing is an important means of human protection against blood-sucking insects and ticks as well as arthropod-borne disease transmission.

Saltidin® belongs to a new generation of synthetic repellents developed as an alternative to DEET.

Developed by Bayer AG using molecular modelling techniques, Saltidin® showed the best performance among more than 800 substances against a variety of arthropods and the best characteristics as far as safety and compatibility with skin and plastic materials are concerned.

Presently, this molecule is owned by Saltigo GmbH (LANXESS Group) and is marketed by LANXESS Corporation (previously a Division of Bayer Corporation) in the USA.

Saltidin® is a safe and reliable insect repellent and stands for effective protection against various diseases transmitted by:

- ✓ Mosquitoes
- ✓ Ticks
- ✓ Flies
- ✓ Horseflies
- ✓ Sandflies
- ✓ Biting midges
- ✓ Fleas
- ✓ Ants
- ✓ Cockroaches

Due to its broad spectrum of efficacy, its favourable toxicological and cosmetic properties, Saltidin® can be safely used by consumers.

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.



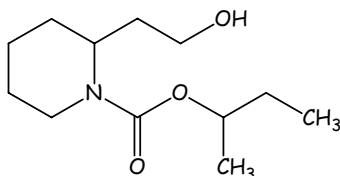
2. Physical and Chemical Properties

Chemical Name: 1-PIPERIDINECARBOXYLIC ACID, 2-(2-HYDROXY-ETHYL), 1-METHYLPROPYLESTER

Commercial Name: Saltidin®

Other Names: Icaridin, KBR 3023, Bayrepel™, Picaridin, (US EPA Registration)

Structure:



Empirical Formula: C₁₂H₂₃NO₃

ELINCS Number 423-210-8

CAS Number 119515-38-7

Molecular weight: 229.3 g/mol

Melting point: < -170 °C

Boiling point: 272 °C at 1013 hPa

Viscosity: 30.7 sec. flow time accord. To DIN 53211, Dynamic: 129 mPa.s at 20 °C

Vapour pressure: 3.4 x 10⁻⁴ hPa at 20 °C
5.9 x 10⁻⁴ hPa at 25 °C
7.1 x 10⁻³ hPa at 50 °C

Flash point: 142 °C

Density: 1.036 g/m³ at 20 °C

Solubility: In water: 8.6 g/L at 20 °C
In propane-2-ol: > 250 g/L at 20 °C
In acetone: > 250 g/L at 20 °C
In n-heptane: > 250 g/L at 20 °C
In xylene: > 250 g/L at 20 °C

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.



Appearance:	Clear liquid, colourless to brownish
Odour:	Slightly odorous
Storage conditions:	Store at room temperature

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.



3. Formulation

Saltidin® Aerosol 20% water-based

3.1 Aerosol formulation:

No	Ingredient	CAS no	Supplier	Content %
1	Saltidin®	119515-38-7	Saltigo GmbH	20,30
2	Polyethylene glycol 400	25322-68-3		9,90
3	Ethanol denatured	64-17-5		17,50
4	Perfume Floral D 12889 G	Not available	Symrise	0,60
5	Water deionised			21,70
6	Dimethylether (DME)	Propellant		30,00

Cosmetic additives: Saltidin® is compatible with many cosmetic additives such as Dexpanthenol (Pro-vitamine B5) , Glycerine or Aloe Vera in formulations.

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.



3.2 Premix formulation:

No	Ingredient	CAS no	Supplier	Content %
1	Saltidin®	119515-38-7	Saltigo GmbH	29,00
2	Polyethylene glycol 400	25322-68-3		14,20
3	Ethanol denatured	64-17-5		25,00
4	Perfume Floral D 12889 G	Not available	Symrise	0,80
5	Water deionised			31,00

3.3 Premix preparation

Mix all ingredients of the premix phase at room temperature and stir for 15 min

3.4 Premix physical data:

pH-value	7.0 – 9.0
Oudor	Perfume conform
Appearance	Clear, light yellow liquid
Content Saltidin® [%]	28 - 30

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.



3.5 Aerosol preparation:

Can filling: 70% Saltidin® premix and 30% propellant DME

3.6 Packaging material:

Can	Material	Valve	Supplier valve	Supplier can
Monoblock	Aluminium	2x.020 360° Buthyl SH74 gasket Activator: Kosm. + Aqua	DPV Hattersheim	Tubex
Necked in	Tin plate gold coated	2x.020 360° Buthyl SH74 gasket Activator: Kosm. + Aqua	DPV Hattersheim	Tubex

The above formulation is intended solely as a guide for our business partners and others interested in our product. As the conditions of use and application of the suggested formulation are beyond our control, it is imperative that it be tested to determine, to your satisfaction, whether it is suitable for your intended use(s) and application(s). This application-specific analysis at least must include testing to determine suitability from a technical, as well as health, safety and environmental standpoints. Further, although the ingredients, quantities thereof and properties of compounds or finished goods mentioned herein reflect our recommendation at the time of publication, this guide may not be subject to continuous review and/or updating, and you agree that use is undertaken at your sole risk. All information is given without warranty or guarantee, and it is expressly understood and agreed that you assume, and hereby expressly release us from all liability, in fort contract or otherwise, incurred in connection with the use of this guide.

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.



4. Customer information

Further information on toxicity tests and effectiveness of Saltidin® formulations are listed in the table "Possible formulations" under the link "All Family Insect Repellent Spray 20%" and "All Family Insect Repellent Cream 20%".

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.