How to Tackle **Mouthwash** Formulation Challenges



Dr. Paul Lohmann®

High value mineral salts

www.lohmann-minerals.com

Looking for new and Innovative Formulations Including Mineral Salts for your next Product Launch?

This overview of prototype formulations with strategies and solutions for ensuring fast and functional formulation will help to overcome challenges when formulating with Mineral Salts.

Whether you`d like to formulate a new product, or modify an existing product, Dr. Paul Lohmann® can work with you to turn your product idea into a well-performing formulation that meets your needs. Take advantage of our in-house application team and the 135+ years' collective industry expertise.

As a long-standing manufacturer of high value Mineral Salts, we know: There is a suitable mineral salt for every application. It is all about the right choice! We use advanced processing technologies to modify our Mineral Salts – physically and chemically – to provide excellent products for your application.

Learn more about our products and solutions on **www.lohmann-minerals.com** or get in touch with our team.



Prototype Formulation COSMETIC

Mouthwash

with suitable Magnesium Potassium Salt B11 and suitable Magnesium Salt E83

Ingredients

Dosage: 15 mg of Mg and 30 mg K per 15 g of solution ~ 1 sip

Raw material	Metal content	Function	Weight per 1 sip	%
Suitable Magnesium Potassium Salt – B11	approx. 4 % Mg approx.. 26 % K	mineral source	117 mg	0.780
Suitable Magnesium Salt – E83	approx. 10 % Mg	mineral source	105 mg	0.700
Water		solvent	9,933 mg	66.220
Xylitol, E 967		sweetening agent	3,000 mg	20.000
Sorbitol, E 420		sweetening agent	750 mg	5.000
Glycerol, E 422		humectant	750 mg	5.000
Polyethylene Glycol 40, E 1521		stabilizer	150 mg	1.000
Ascorbic acid, E 300		acidifier	150 mg	1.000
Aroma (mint)		flavor agent	30 mg	0.200
Potassium Sorbate, E 202		preservative	15 mg	0.100
Total			**15,000 mg**	**100 %**

Procedure

- First, an aqueous solution of Potassium Sorbate was prepared.
- Polyethylene Glycol 40 was added and stirred until it was completely dissolved.
- All other solid ingredients were mixed and then added.
- Finally, glycerol was added and the mixture was stirred well

Dr. Paul Lohmann GmbH & Co. KGaA 31860 Emmerthal / Germany sales@lohmann-minerals.com www.lohmann-minerals.com

The information given in the document corresponds to our current knowledge. We warrant in the frame of our General Terms and Conditions of Sale that our products are manufactured in accordance with the specifications. However, we disclaim any liability with regard to the suitability of our products for a particular purpose or application or their compatibility with other substances. Tests have to be performed by the customer who also bears the risk in this respect. Nothing herein shall be construed as a recommendation to use our products in conflict with third parties' rights.

05/2023

Prototype Formulation COSMETIC

Mouthwash

with Suitable Zinc Salt E81

Ingredients

Dosage: 50 mg of Zn per 15 g of solution ~ 1 sip

Raw material	Metal content	Function	Weight per 1 sip	%
Suitable Zinc Salt – E81	approx. 27 % Zn	mineral source	186 mg	1.240
Water		solvent	10,104 mg	67.360
Xylitol, E 967		sweetening agent	3,000 mg	20.000
Sorbitol, E 420		sweetening agent	750 mg	5.000
Glycerol, E 422		humectant	750 mg	5.000
Polyethylene Glycol 40, E 1521		stabilizer	150 mg	1.000
Lactic acid, E 270		acidifier	15 mg	0.100
Aroma (mint)		flavor agent	30 mg	0.200
Potassium Sorbate, E 202		preservative	15 mg	0.100
Total			**15,000 mg**	**100 %**

Procedure

- First, an aqueous solution of Potassium Sorbate was prepared
- Polyethylene Glycol 40 was added and stirred until it was completely dissolved
- All other solid ingredients were mixed and then added
- Finally, glycerol was added and the mixture was stirred well

Dr. Paul Lohmann GmbH & Co. KGaA 31860 Emmerthal / Germany sales@lohmann-minerals.com www.lohmann-minerals.com

The information given in the document corresponds to our current knowledge. We warrant in the frame of our General Terms and Conditions of Sale that our products are manufactured in accordance with the specifications. However, we disclaim any liability with regard to the suitability of our products for a particular purpose or application or their compatibility with other substances. Tests have to be performed by the customer who also bears the risk in this respect. Nothing herein shall be construed as a recommendation to use our products in conflict with third parties' rights.

05/2023

Dr. Paul Lohmann GmbH & Co. KGaA
Hauptstrasse 2
31860 Emmerthal/Germany

www.lohmann-minerals.com

Dr. Paul Lohmann®

High value mineral salts

www.lohmann-minerals.com

© Dr. Paul Lohmann® – 05/2023