





Standard Delivery Specification

GRILLO MÁS

Substance name:	Sodium metabisulfite
Chemical formula:	Na ₂ S ₂ O ₅
IUPAC name:	SODIUM METABISULFITE
INCI name:	SODIUM METABISULFITE
Molar mass:	190.11
CAS-No:	7681-57-4
EC No (EINECS/ELINCS):	231-673-0
HS-Code:	2832 10 00 disodium disulfite
Country of origin:	Germany
Application:	For uses as a food additive (in the Shrimp Industry)

The post-harvest procedures for shrimp include adding sodium bisulfite to maintain product quality. Food safety is not a significant concern among shrimp handlers because shrimp do not normally contain toxins, are not usually eaten raw and pathogenic microorganisms are killed by cooking. Sodium bisulfite blocks an enzyme in shrimp that causes melanosis, also called black spot – a darkening of pigments in the membranes and meat under the shell that makes the product appear unappetizing. Shrimp farmers dip baskets of shrimp after they are caught into a solution of sodium bisulfite to maintain a healthy appearance.

Gültige Fassung

This document is valid until: 31.12.2028			
Date:	Date:	Date:	
Prepared by	Reviewed by		Approved by
			
Dr. Ingo Biertümpel Head of R & D	Thomas Hildering Product Manager	Christian Ehl Head of Quality	Daniel Haile Plant Manager

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We hereby declare that sodium metabisulfite produced by Grillo is in conformity with the EC-Regulation 2012/231/EU (specifications for food additives listed in Annexes II and III to Regulation (EC) No. 1333/2008). The quality of sodium metabisulfite is also in conformity with the FCC and the 53rd JECFA (1999) and the whole requirements of EP and USP.

Qualitative and quantitative composition			
Parameter	Unit	Specification	Test method
Assay* w(Na ₂ S ₂ O ₅)	%	≥ 98.7	arithmetical
Sodium sulfite w(Na ₂ SO ₃)	%	≤ 1	150.I02
Sulfur dioxide (total)* w(SO ₂)	%	≥ 66,5	150.I01
Thiosulfate w(S ₂ O ₃ ²⁻)	%	≤ 0.05	DIN 19080 part 84
Chloride w(Cl ⁻)	%	≤ 0.05	150.I05
Iron – Fe	mg/kg	≤ 5	DIN EN ISO 11885 (E22)
Selenium – Se	mg/kg	≤ 0.5	DIN EN ISO 17294-2
Arsenic – As	mg/kg	≤ 0.4	DIN EN ISO 17294-2
Lead – Pb	mg/kg	≤ 0.5	DIN EN ISO 11885 (E22)
Mercury - Hg	mg/kg	≤ 0.1	DIN EN ISO 12846
Heavy metals (as Pb)	mg/kg	≤ 10	arithmetical
pH-value (10 % aqueous solution at ambient temperature)	-	4.0 - 4.5	150.I06

* marked parameters and their value are stated in the test report

Microbiological specifications		
Bacteria	KBE/g	≤ 100
Yeasts	KBE/g	≤ 100
Moulds	KBE/g	≤ 100
Pseudomonas aeruginosa	KBE/g	could not be detected / g
Staphylococcus aureus:	KBE/g	could not be detected / g
Escherichia coli:	KBE/g	could not be detected / g
Entero bacteria:	KBE/g	could not be detected / g
Salmonella	KBE/g	could not be detected / 10 g

Nutritional and Dietary Information	
<ul style="list-style-type: none"> • suitable for vegetarians • suitable for vegans • does not contain genetically modified organisms • without ingredients of animal origin • manufactured using the current Good Manufacturing Practises (cGMP) 	

Storage, stability and shelf life	
Storage class 10 – 13 (Other liquids and solids). Only substances of the same storage class should be stored together:	
Storage temperature in °C:	10 up to 27
Relative air humidity in %:	10 up to 55
Product shelf-life is 2 years. Store only in approved containers that have been properly labeled. Protect containers from physical damage. Keep container tightly closed when not in use. Protect against heat / sun rays.	

Hereby we,

Grillo-Werke AG
Chemicals Division
Weseler Straße 1
47169 Duisburg

declare that we will inform the authorities, the certification bodies as well as our customers immediately of all important changes in the management system, in the production process, in the testing of finished products or in the specification of our products.

We invite our customers to perform full audits on our facility, procedures and integrated management system.

The above particulars do not release the customer from the obligation to carry out an inspection of goods received on arrival.

Emergency telephone (in case of poisoning)

InfraServ GmbH & Co. Höchst KG, Frankfurt, Germany

Phone: **+49 (0) 69 305-6418** (24 hrs/day in German and English)

Emergency telephone (in case of product recall actions)

Grillo-Werke AG, Duisburg, Germany

Phone: **+49 (0) 203 5557-1** (24 hrs/day)

Phone: **+49 (0) 203 5557-297** (Office hours are Monday to Friday, 9 (a.m.)
to 5 (p.m.) (Central European Time)