

# SULFAMET

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## TECHNICAL DATA SHEET

Name of product	Zinc borate 223
Molecular formula:	$2\text{ZnO}.2\text{B}_2\text{O}_3.3\text{H}_2\text{O}$
Class No.:	Flame retardant
Item (%)	Standard (%)
Whiteness	97
Surface water % <	0.5
ZnO %	44.0-48.0
B <sub>2</sub> O <sub>3</sub> %	35.5-40.0
H <sub>2</sub> O (hydrate) %	13.0-18.0
Particle size, um	7-12
Fineness(Residue on 45um sieve) % <	0.1
Specific gravity, g/cm <sup>3</sup>	2.85
Melting point °C	980
temp, of dehydration °C >	200
Refractive index	1.58
CAS NO.	1332-07-6

### Introduction

Zinc Borate is one environmental-friendly halogen-free flame retardant. There are some formulations of  $x\text{ZnO}.y\text{B}_2\text{O}_3.z\text{H}_2\text{O}$ , in which Zinc Borate with 3 hydrate is called ZB-223 ( $2\text{ZnO}.2\text{B}_2\text{O}_3.3\text{H}_2\text{O}$ ). It has owned some excellent properties on non-toxicity, slight solubility in water, good thermal stability, fine particle size, low specific gravity etc.

### Applications

ZB-223 is a good flame retardant synergist and smoke suppressant in halogenated polymers to partially replace Antimony Oxide, and can be used in certain applications as afterglow suppressant and anti-arcing agent. Due to its high Zinc content, ZB-223 is mainly recommended for PVC, EVA etc and also has applications in polyolefin, polyurethanes, thermoplastic elastomers and rubbers.

### Package

Packed and transported as normal chemical goods.  
Standard package is 25 kg/bag.