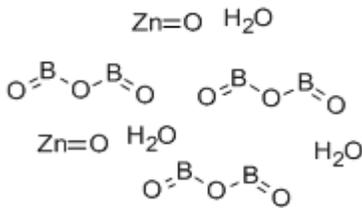




Chemicals Corp.

Technical Data Sheet

Zinc Borate



Zinc Borate 2335

CAS Number: 1332-07-6

Molecular weight: 313.79

Molecular formula: 2ZnO·3B₂O₃·5H₂O

PRODUCT INFORMATION

PRODUCT SPECIFICATIONS		POWDER
Appearance		White powder
Surface Water	% ≤	0.5
Particle size	um	3~5
ZnO	%	37-40
B ₂ O ₃	%	45-48
H ₂ O (hydrate)	%	13.5-15.5
Fineness (Residue on 45 μm sieve)	% ≤	0.1
Specific Gravity	g/cm ³	2.67
Melting Point	°C	980
Temp. of dehydration	°C>	320
Refractive index		1.58
<u>Typical properties</u>		
Density	g/cm ³	2.67
<u>Packaging</u>		
Bag		25kg (55 lbs) or 500kg (1102 lbs)

FUNCTION

Zinc Borate is an environmentally friendly halogen-free flame retardant. There are some formulations of $XZnO \cdot YB_2O_3 \cdot ZH_2O$, in which Zinc Borate with 3.5 hydrate is called ZB-2335 ($2ZnO \cdot 3B_2O_3 \cdot 5H_2O$) is the most common used grade. It is practically non-toxic, has slight solubility in water, good thermal stability, fine particle size, low specific gravity and good free-flowing properties. It is a highly efficient flame retardant and is widely used in plastic, rubber, coatings etc.

APPLICATIONS AND PROPERTIES

- Zinc Borate can be used as a multi-functional synergistic additive with antimony oxides or other halogenated flame retardants to significantly improve performance, remove smoke emissions and adjust the balance on chemical, mechanical and electrical properties.
- Used as an environmentally protective substitute for antimony oxides or halogen flame retardants.
- Effectively used in PVC, PE, Polyolefin, Epoxy Polyamide, resins and rubbers.
- Widely used in textile, fiber, flooring, leather, wall paper, carpeting, paint and other decorative materials to improve flame retardant performance.
- Based on its chemical properties, Zinc Borate is also used as an anti-corrosive, for infra red absorption and as a fungicide for wood preservation.
- Zinc Borate is not regulated for use in food contact applications under FDA 21 CFR.

STORAGE

Material should be stored in a tightly closed container in a cool, dry, well ventilated area.

HANDLING PRECAUTIONS

For detailed information on toxicological properties and handling precautions, please refer to the current Safety Data Sheet. This information is available by request from **SunBoss Chemicals Corp.**

[Revised: November 6, 2014 by kk]