

BEA362 INTERSMOOTH 360 SPC BLUE

5

02/11/15

1.

1.1. INTERSMOOTH 360 SPC BLUE
BEA362

1.2.

1.3.

626-6

(8-6)

1.4.

055-632-6286(),055 586 2310()

055 587 6276()

055 586 2310()

055 586 2310()

2.

2.1.

2;H225

- 4;H302

/

2;H315

/

1;H318

-1 ;H335

1;H410

2.2.

11 , 12



H225
H302
H315
H318
H335
H410

[]:

P210 / / /
P261 / /가 / / /
P264
P270
P271 가
P273
P280 / / /

[]:

P301+310 : /
P302+352 :
P303+361+353 () :
/
P304+312 : /
P305+351+338 가 : .가

P312 /
P321 ().
P330
P340 가
P362
P370 :
P378 , , ,
P391

[]:

P403+233 가
P405 가

[]:

P501 ()

2.3. PBT (,) vPvB (,)

3.

/	%	GHS	
Copper oxide (Cu2O) CAS No: 0001317-39-1	30-40	- 4;H302 - 1;H400 - 1;H410	[1]
xylene CAS No: 0001330-20-7	20-30	3; H226 - 4;H312 - 4;H332 / 2;H315 / 2;H319 -1 ;H336	[1][2]

		- 1;H372	
Acrylic Copper Polymer CAS No:	10-20		[1]
n-Butanol CAS No: 0000071-36-3	5-10	3; H226 - 4;H302 -1 ;H335 / 2;H315 / 1;H318 -1 ;H336	[1][2]
Methyl isobutyl ketone CAS No: 0000108-10-1	5-10	2;H225 - 4;H332 / 2;H319 -1 ;H335	[1][2]
Titanium dioxide CAS No: 0013463-67-7	2.5-5		[1][2]
Zinc oxide CAS No: 0001314-13-2	2.5-5	- 1;H400 - 1;H410	[1][2]
Zinc pyridinethione CAS No: 0013463-41-7	2.5-5	- 4;H302 - 1;H330 / 2;H315 / 1;H318 - 1;H400	[1]
Methyl isoamyl ketone CAS No: 0000110-12-3	1-2.5	3; H226 - 4;H332	[1][2]
Copper oxide CAS No: 0001317-38-0	1-2.5	- 4;H302 - 1;H400 - 1;H410	[1]
polyamide dispersion CAS No: 0055349-01-4	<1	1;H317 - 4;H413	[1]
	5-10	---	---

- 1)
- 2) 가
- 3) PBT vPvB
16

4.

4.1.

가

가

4.2. 가 /

4.3.

5. ,

5.1.

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Note; 가

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5.2.

가

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5.3.

가

가

6.

6.1.

가

가

가 가

6.2.

가

6.3.

.8

, , 가 . (13 .)

가

가

, 가

가

7.

7.1.

가
, 가 (LEL) (OEL)

가
, 가 (LEL) (OEL)

7.2. ()

, 8

가 , 가
가 , 61
1

7.3. Specific end use(s)

가
, 가 . 3

Hot surfaces, Sparks,

가 (60% ,)

8.

8.1. , (OEL) (ACGIH)

(ACGIH)

ppm mg/m³ ppm mg/m³

Methyl isoamyl ketone 50 240

Methyl isobutyl ketone 50 205

n-Butanol			C50	C150
Titanium dioxide				10
xylene	150	655	100	434
Zinc oxide		10		5

(P) (Peak exposure limit)
(R)
(Sk)
(Sen)
(Cat 1)
(Cat 2) 가
(Cat 3)

DNEL/PNEC

8.2.

가

가 , (visor)

(overall)

가

가 .가 가

pH

/ (°C)

(°C)

65

22

(= 1)

(,)

/

: 1.4 (n-Butanol)

: 6.6 (xylene)

(Pa)

1.57

n-

/

(Log Kow)

9.2.

10.

10.1.

10.2.

.(Section 7)

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10.3.

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10.4.

10.5.

10.6.

가

11.

(OEL)

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	LD50, mg/kg	LD50, mg/kg	LD50, mg/L/4hr	/ LD50, mg/L/4hr
Acrylic Copper Polymer - ()				
Copper oxide - (1317-38-0)	470.00,			
Copper oxide (Cu2O) - (1317-39-1)	470.00,	2,000.00,		50.00,
Methyl isoamyl ketone - (110-12-3)	3,200.00,	8,110.00,		
Methyl isobutyl ketone - (108-10-1)	2,080.00,	16,000.00,		
n-Butanol - (71-36-3)	2,292.00,	3,430.00,		
polyamide dispersion - (55349-01-4)				
Titanium dioxide - (13463-67-7)	10,000.00,	10,000.00,		6.82,
xylene - (1330-20-7)	4,299.00,	1,548.00,		20.00,
Zinc oxide - (1314-13-2)	5,000.00,			2.50,
Zinc pyridinethione - (13463-41-7)	774.00,	2,000.00,		1.03,

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/	2	
/	1	
(1)	3	
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12.

12.1.

Dangerous Preparations Directive 1999/45/EC

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(3)

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	96 hr LC50 mg/l	49 hr EC50 mg/l	ErC50 mg/l
Copper oxide (Cu2O) - (1317-39-1)	0.075, Danio rerio	0.042, Daphnia	0.03 (96 hr), Pseudokirchneriella

		similis	subcapitata
xylene - (1330-20-7)	3.30, Oncorhynchus mykiss	8.50, Palaemonetes pugio	100.00 (72 hr), Chlorococcales
Acrylic Copper Polymer - ()			
n-Butanol - (71-36-3)	1,376.00, Pimephales promelas	1,328.00, Daphnia magna	500.00 (96 hr), Scenedesmus subspicatus
Methyl isobutyl ketone - (108-10-1)	505.00, Pimephales promelas	1,550.00, Daphnia magna	980.00 (48 hr), Scenedesmus subspicatus
Titanium dioxide - (13463-67-7)			
Zinc oxide - (1314-13-2)	1.10, Oncorhynchus mykiss	0.098, Daphnia magna	0.042 (72 hr), Pseudokirchneriella subcapitata
Zinc pyridinethione - (13463-41-7)	0.0026, Pimephales promelas	0.0082, Daphnia magna	0.028 (96 hr), Selenastrum capricornutum
Methyl isoamyl ketone - (110-12-3)	159.00, Pimephales promelas	560.00, Daphnia magna	920.00 (72 hr), Chlorococcales
Copper oxide - (1317-38-0)	25.40, Oncorhynchus mykiss	0.011, Daphnia magna	0.014 (72 hr), Pseudokirchneriella subcapitata
polyamide dispersion - (55349-01-4)			

12.2.

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12.3.

12.4.

12.5.

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PBT (,) vPvB (,) .

12.6.

13.

13.1.

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14.

14.1.

1263

14.2.

14.3.

UN1263, Paint, CLASS 3, PG II, HAZCHEM *3YE

IMDG

Class/Div. 3

EmS

F-E,S-E

ICAO/IATA 3

14.4. II

14.5.

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IMDG : (Copper(i)oxide)

14.6. 가 가

14.7. MARPOL73/78 Annex II IBC Code .

15.

4 , 2 , III

MSDS 8 .

- n-Butanol (0000071-36-3)
- Methyl isobutyl ketone (0000108-10-1)
- Titanium dioxide (0013463-67-7)
- Zinc oxide (0001314-13-2)

(CMR):

- ethanol (0000064-17-5)
- Ethylbenzene (0000100-41-4)
- Titanium dioxide (0013463-67-7)

:

- n-Butanol (0000071-36-3)
- Methyl isobutyl ketone (0000108-10-1)
- Titanium dioxide (0013463-67-7)
- xylene (0001330-20-7)

:

- n-Butanol (0000071-36-3)
- Methyl isobutyl ketone (0000108-10-1)
- xylene (0001330-20-7)
- Zinc oxide (0001314-13-2)

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Group I:

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Group II:

- C.I. Pigment Blue 15 (0000147-14-8)
- Copper oxide (0001317-38-0)
- Copper oxide (Cu₂O) (0001317-39-1)
- Ethylbenzene (0000100-41-4)
- xylene (0001330-20-7)
- Zinc oxide (0001314-13-2)
- Zinc pyridinethione (0013463-41-7)

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16.

: 11/02/2015

: 5

: 18/11/2005

MSDS KOSHA, NITE, ESIS, NLM, SIDS, IPCS, NCIS

This product complies with IMO Antifouling Systems Convention (AFS 2001).

Antifouling Type - Organotin-free self-polishing.

Dicopper oxide (1317-39-1)

Zinc pyrithione (13463-41-7)

SDS

Section 3 Phrases

H225

H226

H302

H312

H315

H318

H319

H330

H332

H335

H336

H372

H400

H410

SDS



Akzo Nobel

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