



: EC 304
(MEK+EA+IPA +AC+NPAC)

(Emergency Telephone Number)
032-574-1989 (24 hours)

1.

가.

: EC 304

UN : 1993

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: 032-574-1989

: 가 37 17 (가)

2.

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H225
H304
H315
H319
H336
H361
H371
H372
H373

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P201
P202
P210
P233
P240
P241
P242 가
P243
P260 가 ()
P261 가
P264
P271 가
P280

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P301 + P310 ()
P302 + P352
P303 + P361 + P353 () /
P304 + P340 가
P305 + P351 + P338 . 가
P308 + P313
P312 ()
P314
P321
P331
P332 + P313
P337 + P313
P362 + P364
P370 + P378 ,

-

P403 + P233 가
P403 + P235 가
P405 가

P501 ()

	NFPA		
/ N-PROPYL ACETATE	1	3	0
/ ETHYL ACETATE	1	3	0
/Methyl Ethyl Ketone	1	3	0
/ Acetone	1	3	0
/ Iso propyl alcohol	2	3	0

[2017.7.20.] [2017-12 , 2017.7.20.,] 5 ()_ 4

4 [2016.4.6] [2016-19 , 2016.4.6,] < 1> 3.3 . / 2 [2017.7.20.] [2017-12 , 2017.7.20.,] 5 ()
4

3.

	CAS No.	(W%)
	109-60-4	37%
	141-78-6	24%
	78-93-3	24%
	67-64-1	10%
	67-63-0	5%

4. 가.

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5.

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8.

가.			
		ACGHI	
N-propyl acetate	TWA 200ppm, STEL 250ppm,	TWA 200ppm, STEL 250ppm,	
Ethyl acetate	TWA 400ppm,	TWA 400ppm	
Methyl ethyl ketone	TWA 200ppm STEL 300ppm	TWA 200ppm STEL 300ppm	2mg/L() MEK,
Acetone	TWA 500ppm STEL 750ppm	TWA 500ppm STEL 750ppm	50mg/L() Acetone,
Isopropyl alcohol	TWA 200ppm STEL 400ppm	TWA 200ppm STEL 400ppm	

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9.

pH	
/	-95 ~ -84
	77 ~ 111

	-9 ~ -4
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(,)	
/	MIN : 1.4%, MAX : 12%
	80 g/L (Ethyl acetate), 223 g/L(MEK) (Acetone) 18900 mg/L (NPAC) , (IPA)
()	
	93.2 mmHg (Ethyl acetate),90.6 mmHg(Methylethylketone)24kPa (Acetone) , 35.9 mmHg (NPAC) , 33mmHg (IPA)
	0.9003(Ethyl acetate),0.8054(Methyl ethyl ketone)0.8(Acetone) 0.882 (NPAC) , 0.85 (IPA)
N- /	2.7
	427
	3.04(Ethyl acetate), 2.5(Methyl ethyl ketone) 2(Acetone) 3.5 (NPAC) , 2.07~2.10 (IPA)
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10.

가. 가

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11.

가. 가

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PRODUCT :
- : LD50 > 87000 / LD50 > 5620 /LD50 > 2737(mg/kg
- : LD50>5280 / LD50 > 5280
PRODUCT :
- : LD50 > 17800 / LD50 > 18000 / LD50>6480(mg/kg)
- : LD50 > 12870 / LD50 > 12870
(가) PRODUCT :
- : / LD 50 > 100 / :
- : / :
() PRODUCT :
- : : / LC50 > 32mg/l 4 hr mouse
- : LC50 > 76mg/l 4hr rat :
(/) PRODUCT :
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- : : :
PRODUCT : 2 : / :
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PRODUCT : 2 : 2/ :
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PRODUCT :
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· OSHA :
· NTP :
· IARC : 3
· EU CLP :
· ACGIH : A4
PRODUCT :
- / Mouse lymphoma cells
PRODUCT : 2

(1) PRODUCT : 3()

() PRODUCT : 2

- : 2 / 가 . 가 .
PRODUCT : 1

12.

가. PRODUCT - : , :

- : LC50 60 mg/L LC50=230 LC50=3220
- : LC50 >100 mg/L LC50=9640

- : EC50 91.5 mg/L EC50=717 EC50 > 5091
- : EC50=10000

- : EC50 672 mg/L EC50=1800~3200 EC50 > 500
- :

- : : BOD 5 /COD 0.81 :
- :

- : log Kow 1.4 : 0.73 : 0.29
- : : log Kow 0.05

- : BCF : 30 :
- : BCF:1

- : 62 % 5day 100% 28 day 89% 20 day
- : :BODS = 49%

- (Koc)
- : :
- : Koc >=25

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13.

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14.

가. : 1993
. : Flammable liquid, n.o.s (contains N-Propyl acetate, Ethyl acetate, Methyl ethyl Acetone , Isopropyl alcohol)
. : 3
. : PG II
. :
. 가 가 :
. : F-E
. : S-D

15.

가.
- (1 wt% , :6 , : 30),
(1 wt% , :12 , :6)
- (25%) (25%)
- : :
- , : 4 1 (200L)
- : 4 1 (400L) , : 4 (200L)
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가

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- - EU ()
 - F; R11 ,Xi; R36, R38 Xn; R48/20-65 Repr.Cat.3; R63 R66 R67
 - EU ()
 - R11, R36, R38, R48/20-65, R63, R65, R66, R67
 - EU ()
 - S2 S9 S16 S26 S33 S36 S37 S46 S62
 - 2006/507/EC
 -
 - 689/2008/EC
 -
 - Designation, Reportable Quantities, and Notification
 - : : :
 - : :
 - Emergency Planning and Notification
 -
 - Toxic Chemical Release Reporting - Community Right-to-Know
 - : : :
 - : : :
 - Process Safety Management of Highly Hazardous Chemicals
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16.

가.

- ACGIH
 - ATSDR
 - American Chemical Society, Washington DC.
 - American Industrial Hygiene Association Journal 30, 470-476
 - Chemosphere 14 (10). 1589-1616.
 - EHC
 - EHCA
 - Ecotoxicol. Environ. Saf. 39, 136-146.
 - HSDB
 - IARC
 - IUCLID
 - Marine Biology 31, 305-310
 - Publication
 - RTECS
 - Study report
-

- Toxicology 4, 5-15
- Transactions A. Fish. Soc. 110, 430-436.
- Water Research 13, 627-630

. : 2018.12.01

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MSDS 가

가

MSDS

가

MSDS : RGB ()