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1.


: (HYDROGEN PEROXIDE)
 1) CAS NO.(Chemical Abstracts Service Registration Number) : 7722-84-1
 2) RTECS NO.(Registry of Toxic Effects of Chemical Substances) : MX0900000
 3) UN NO.(United Nations Number) : 2015
 4) / : (HYDROGEN DIOXIDE);
 (HYDROGEN PEROXIDE, H₂O₂); (ALBONE); (ALBONE DS);
 (INHIBINE); (PERHYDROL); (PEROXAN); T-STUFF;
 (SUPEROXAL); (HYDROGEN OXIDE); MICRO ETCH 50(Delta
 ENTERPRISES INC.)
 5) : H₂O₂
 6) :
 :
 . : 740-27
 . : (063)830-7777
 :
 :
 : 538 J-Tower, A 6
 : (02) 3019-2500 FAX : (02) 525-9770
 :
 : (063)830-7770~6

2.

1) :
 2) CAS : 7722-84-1
 3) (%) : 30.0% ~ 70.0%
 4) : 가

3.

1) CERCLA (Comprehensive Environmental Response Compensation and Liability Act
 (0~3) : = 3, = 0, = 3, = 0
 2) NFPA (National Fire Protection Association (0~4) :
 =2, = 0, = 3

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Vapor mist

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1)

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2)

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3)

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1)

2) OSHA (Occupational Safety and Health Agency) :

3) NTP (National Toxicology Program) :

4) IARC (International Agency for Research on Cancer) :

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4.

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. (15~20)

. Gurse

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. (15~20)

. pH 가 (30~60)

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. 가 2~4


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(Dreisbach, Handbook of Poisoning, 12th ED)

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5.

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- 가
- 가
- 가
- 가
- 가
- (1993 Emergency Response Guidebook, RSPA P 500.6)
-
- 가
- 가
- 가
- 가
- 가
- (1993 Emergency Response Guidebook, RSPA P.5800.6 Guide page 45)
- 가
- :
- :
- :
- :
-
- 1)

6.

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. Vapor

RQ (Reportable Quantity) : 1.0 (0.45kg)

. SARA(The Superfund amendment and Reauthorization AOA) 304

(, ,)

7.

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. Oent 가 가 가
. 가 , ,

. (NFPA 49, Hazardous Chemicals Data 1975)

(: NFPA 43A)

■ TPQ (Threshold Planning Quantity)

. SARA 302 TPQ The State
Emergency Response Commission ,

. SARA 303

8.

-


. TWA : 1ppm(1.4 mg/m³)

. STEL : -

- OSHA (Occupational Safety and Health Agency)

. TWA : 1ppm(1.4 mg/m³)

. STEL : -

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- ACGIH (American Conference of Governmental Industrial Hygienists)

. TWA : 1ppm(1.4 mg/m³)

. STEL : -

. NIOSH (National Institute for Occupational Safety and Health)

. TWA : 1ppm(1.4 mg/m³) : 10

. STEL : -

- DFG MAK

. TWA(10) : 1ppm(5 mg/m³)

. 5minute peak, momentary value, 8times/shift : 2ppm(2.8 mg/m³)

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- NOISH NOISH

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. NOISH MSHA

. 10ppm -

. 25ppm -


. 50ppm -

. 75ppm -

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9.

. :
 . : 34.01
 . : H-O-O-H
 . : 108 (226)
 . : -25 (-13)
 . : 2mmHg (30)
 . : 117
 . : 1.11 (25)
 . ():
 . pH :
 . :
 . : <1 (butyl acetate = 1)
 . : 1.245Cp(20)

10.

. 가
 . 가
 . 141 가 , ,
 metal 가
 .
 . (, , Oil)가
 .
 . Tank Hipper Car 가 Gas 가
 . :
 . :
 . :
 . :

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11.

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- 90%

. LC₅₀ : 2 mg/m³/4 , -

- LCL0 : 227ppm -

. LDL0 : 50 mg/kg, -

- LD₅₀ : 460 mg/kg, -

. LDL0 : 2 mg/kg, -

- LD₅₀ : 2 mg/kg, -

. LC₅₀ : 15 mg/kg, -

. LC₅₀ : 20000ppm /8 , - (Van Waters & Rogers MSDS)

. : RTECS

- : RTECS

- 75%

. LC50 : 75 mg/kg, - (Van Waters & Rogers MSDS)

- 70%

. LD50 : 9200 mg/kg, - (Van Waters & Rogers MSDS)

- 35%

. LC50 : 2000 mg/m³/4 , -

- 30%

. LDL0 : 1429 mg/kg, -

- LDL0 : 2626 µg/kg, -

. TDL0 : 1200 mg/kg, -

- LD50 : 50 mg/kg , -

. : RTECS

- : RTECS

- 27~52%

. LCLO : 100ppm, -

- 8~20%

. LD50 : 1518 mg/kg, -


. : RTECS

- 3%

. LC50 : 2000mg/m³/4 , -

. LD50 : 2g/kg, -

■ (CARCINOGEN)

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 .
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- :
 ○
 . Vapor 가 , , 가
 . 가
 .
 . 0.5% 가 24
 , 5% ,
 , 4~5
 . 5~30% 10%


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 .
 .
 .
 . 7ppm 10
 - : / /

○
 . , 가 ,
 .
 . 75% 75 mg/kg

○
 . 1.5% 8 ,
 , 가
 . 0.15% 35
 , , 가 ,
 , 1% , 2

12.

1) (0~4) :

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- 2) :
- 3) :
- 4) (BCF) :
- 5) / :

13.


- 1)
- 2) EPA D002
- 3) CERCLA 103 RQ : 100 Pound)

14.

- 1) UN DOT (Department Of Transportation) IDqjs (49 CFR 172.101)
: , UN2014
- 2) UN DOT (40CFR 172.101) : 5.1 -
- 3) UN DOT (49 CFR 172.101) : PG
- 4) UN DOT (49 CFR 172.101 & Subpart E) : ,
- 5) UN DOT (49 CFR 172.101 AND SUBPART E ,)
. :
. : 49CFR 173.201
. : 49CFR 173.243
- 6) US DOT (40CFR 172.101)
. :
. :

15.

- - 1) : " "
 - 2) : "6wt% "
 - 3) : "36wt% 6 "
- - 1) TSCA :
 - 2) CERCLA 103 (40CFR 302.4) :
 - 3) SARA 302 (40CFR 355.30) : , TPQ = 450 kg
SARA 304 (40CFR 355.40) : , RQ = 0.45 kg
 - 4) SARA 313 (40CFR 372.65) :
 - 5) OSRA (29CFR 1910.119) : 52% ,TQ = 3375kg

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6) California 65 :

7) SARA : SARA 311/312 (40CFR 370.21)

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- :
- :
- :
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16.

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(Compatibility)

MSDS (European Directives) , 가

AIR LIQUIDE S.A. MSDS ALK