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1.


: , (HYDROGEN CHLORIDE, ANHYDROUS)
 / :
 , (HYDROCHLORIC ACID, ANHYDROUS); (HYDROGEN CHLORIDE);
 (SPIRITS OF SALT); (MURIATIC ACID); (HYDROCHLORIC ACID);
 가 (HYDROCHLORIC ACID GAS); (ANHYDROUS HYDROCHLORIC ACID);
 (HCL)(HYDROGEN CHLORIDE (HCL)); STCC 4904270; UN 1050; CLH; OHS11150;
 RTECS MW4025000
 : ,
 : (AL Japan)
 : Izumi Garden Tower 10F, 1-6-1 Roppongi Minato-ku, Tokyo 106-6010, Japan
 :
 :
 : 538 J-Tower, A 6
 : (02) 3019-2500 FAX : (02) 525-9770
 : ALK HSE

2.

: , (HYDROGEN CHLORIDE, ANHYDROUS)
 CAS : 7647-01-0
 (EC) (EINECS): 231-595-7
 EC : 017-002-00-2
 (%): 100

3.

NFPA (0-4): =3 =0 =1
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(OSHA):
 (NTP):
 (IARC):

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5.

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8.


:
 , (HYDROGEN CHLORIDE, ANHYDROUS):
 () (HYDROGEN CHLORIDE (HYDROCHLORIC ACID)):

- TWA : C5ppm, C7mg/m3
- STEL : -
- 5 ppm (7 mg/m3) OSHA ceiling
- 5 ppm ACGIH ceiling
- 5 ppm (7 mg/m3) NIOSH ceiling
- 7.6 mg/m3 (5 ml/m3) DFG MAK (peak limitation category-I)

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 (" ")
 (NIOSH) / (OSHA)
 50 ppm
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 - (가) ()
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9.

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: 36.46
 : H-CL
 : -121 F (-85 C)
 : -175 F (-115 C)
 : 3040 mmHg @ 17.8 C
 (=1): 1.268
 (=1): 1.187 @ -85 C
 : 82.3% @ 0 C
 (pH):
 :
 : 1-5 ppm
 :
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 가 :
 가 : , , ,

10.

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11.

, (HYDROGEN CHLORIDE, ANHYDROUS):
 :
 5 mg/30 -
 :
 3124 ppm/1 - LC50; 900 mg/kg - LD50
 : (IARC): ,
 , 3
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12.

:
 : 21900 ug/L 96 LC50 ()
 : 560 ug/L 48 EC50 ()
 : 800 ug/L 1600 EC50 ()
 : 1000 ug/L 4-48 ()
 () :
 : 1000 M 24 BCF () 1E-6.5 M

13.


: U.S. EPA 40 CFR 262. : D002.

14.

U.S. DOT 49 CFR 172.101. -UN ; ; ; :
 : ,
 ID : UN1050
 U.S. DOT 49 CFR 172.101 : 2.3
 U.S. DOT 49 CFR 172.101 E : 가 ;
 U.S. DOT 49 CFR 172.101 :
 : 1
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15.

, (HYDROGEN CHLORIDE, ANHYDROUS)
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CERCLA 103 (40CFR302.4):

() (HYDROGEN CHLORIDE (HYDROCHLORIC ACID)):

5000 LBS RQ ()

SARA 302 (40CFR355.30):

() (HYDROGEN CHLORIDE (HYDROCHLORIC ACID)): 500

LBS TPQ (가)

SARA 304 (40CFR355.40):

() (HYDROGEN CHLORIDE (HYDROCHLORIC ACID)):

5000 LBS RQ (가)

SARA , SARA 311/312 (40CFR370.21):

:
:
:
:

:

SARA 313 (40CFR372.65):

() (HYDROGEN CHLORIDE (HYDROCHLORIC ACID)):

OSHA (29CFR1910.119):

() (HYDROGEN CHLORIDE (HYDROCHLORIC ACID)):

5000 LBS TQ (가)

:

65 ():

:

(EC) :

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C

/ :

T

(EC) :


R 2 3 .

R 3 5 .

S 1 / 2 .

S 9 .

S 2 6 .

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S 36/37/39 / .

S 45 가

. (가

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:

C>=5% T; C R 23-35

1%<=C<5% C R 20-35

0.5%<=C<1% C R 20 -34

0.2%<=C<0.5% C R 34

0.02%<=C<0.2% Xi R 36/37/38

가

:

(TSCA):

TSCA 12(b)

:

16.

가

(Compatibility)

MSDS

(European Directives)

,

가

AIR LIQUIDE S.A.

MSDS

ALK