LICISOL AN-HD
ICI PAKISTAN LTD.
5 WEST WHARF KARACHI
EMERGENCY TELEPHONE: 111-100-200

SECTION NUMBER AND HEADING

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1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND THE COMPANY

1.1 CHEMICAL PRODUCT LICISOL AN-HD
1.2 APPLICATION TEXTILE AUXILIARY
1.3 COMPANY IDENTIFICATION I.C.I Pakistan Ltd.
1.4 EMERGENCY TELEPHONE 111-100-200

2. COMPOSITION/ INFORMATION ON INGREDIENTS

2.1 CHEMICAL DESCRIPTION SURFACTANT BLEND CONTAINING AN ORGANIC SOLVENT

2.2 HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENTS</th>
<th>C.P.L CLASS</th>
<th>CAS No.</th>
<th>EINECS NO</th>
<th>WT %</th>
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<td>NONE</td>
<td>N.A</td>
<td>NA</td>
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3. HAZARDS IDENTIFICATION

THIS PRODUCT CONTAINS NO HAZARDOUS MATERIAL
4. **FIRST AID MEASURES**

4.1 EYE CONTACT    FLUSH EYE LIBERALLY WITH WATER IF IRRITATION PERSIST, OBTAIN MEDICAL ATTENTION.
4.2 SKIN CONTACT    WASH SKIN WITH WATER, USING SOAP
4.3 INGESTION    TREAT SYMPTOMATICALLY
4.4 INHALATION    NOT APPLICABLE

5. **FIRE EXTINGUISHING MEDIA**

5.1 EXTINGUISHING MEDIA    WATER, MIST, CO2, DRY POWDER
5.2 FIRE AND EXPLOSION HAZARDS    THE PRODUCT IS NOT FLAMMABLE
5.3 PROTECTIVE MEASURES    NOT APPLICABLE

6. **ACCIDENTAL RELEASE MEASURES**

6.1 PERSONAL PRECAUTIONS    NONE
6.2 ENVIRONMENTAL PRECAUTIONS    NONE
6.3 CLEANING UP    ABSORB ONTO SAND OR SAW DUST AND SWEEP UP

7. **STORAGE AND HANDLING**

7.1 STORAGE    STORE AT ROOM TEMPERATURE
7.2 RECOMMENDED SHELF LIFE    12 MONTHS
7.3 HANDLING    HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE PRACTISES AND USUAL SAFETY MEASURES

8. **EXPOSURE CONTROLS/ PERSONAL PROTECTION**

8.1 OCCUPATIONAL EXPOSURE LIMITS    CHEMICAL 50 PPM TLV (ACGIH)
8.2 ENGINEERING MEASURES    NONE
8.3 PERSONAL PROTECTIVE EQUIPMENT
   RESPIRATORY PROTECTION    NOT REQUIRED
HAND PROTECTION   WEAR GLOVES
EYE PROTECTION    WEAR GOGGLES
SKIN PROTECTION   AVOID CONTACT WITH SKIN

9.  PHYSICAL/ CHEMICAL PROPERTIES

9.1 APPEARANCE     COLOURLESS CLEAR LIQUID
9.2 ODOUR          PRODUCT SPECIFIC
9.3 PH             6 - 8
9.4 VISCOSITY      N.A
9.5 FREEZING POINT NOT ASSESSED
9.6 FREEZE THAW RECOVERY NOT ASSESSED
9.7 BOILING POINT  NOT ASSESSED
9.8 MELTING POINT  NOT ASSESSED
9.9 FLASH POINT    NOT ASSESSED
9.10 AUTOFLAMMABILITY NOT APPLICABLE
9.11 EXPLOSIVE PROPERTIES NOT APPLICABLE
9.12 VAPOUR PRESSURE NOT ASSESSED
9.13 VAPOUR DENSITY NOT ASSESSED
9.14 RELATIVE DENSITY NOT ASSESSED
9.15 SOLUBILITY     SOLUBLE IN WATER.
9.16 PARTITION COEFFICIENT NOT ASSESSED

10.  STABILITY AND REACTIVITY

10.1 STABILITY       STABLE UNDER NORMAL WORKING CONDITIONS.
10.2 CONDITIONS TO AVOID NONE KNOWN
10.3 MATERIALS TO AVOID                      NONE KNOWN
10.4 RECOMMENDED MATERIALS FOR EQUIPMENT      COMPATIBLE WITH MOST MATERIALS
10.5 HAZARDOUS DECOMPOSITION PRODUCTS         NONE KNOWN

11.   TOXICOLOGICAL INFORMATION

11.1 SHORT TERM EFFECTS

  EYE CONTACT          IRRITANT TO EYES
  SKIN CONTACT         IRRITANT TO SKIN
  INGESTION            VERY LOW TOXICITY
  INHALATION           CONTAINS TRICHLOROETHYLENE EXCESSIVE VAPOURS MAY CAUSE GIDDINESS & UNCONSCIOUSNESS

11.2 CHRONIC EFFECTS  PROLONGED CONTACT WITH SKIN MAY LEAD TO DERMATITIS

12.   ECOLOGICAL INFORMATION

12.1 LC 50             N.A.
12.2 BOD               N.A.
12.3 COD               N.A.
12.4 OTHER             N.A.

13.   DISPOSAL CONSIDERATIONS

   DISPOSE IN ACCORDANCE WITH LOCAL REGULATIONS i.e. TIPPING

14.   TRANSPORT INFORMATION

14.1 PACKAGING         200 & 50 Kg PACKING.
14.2 FREIGHT CLASSIFICATIONS NOT APPLICABLE
                      UN NUMBER              NOT APPLICABLE
                      ADR NUMBER              NOT APPLICABLE
                      IMDG NUMBER              NOT APPLICABLE
15. REGULATORY INFORMATION

15.1 C.P.L CLASSIFICATION NOT APPLICABLE
HAZARD PICTOGRAM XI (IRRITANT)
RISK PHRASES R-20, R-21, R-36, R-38
SAFETY PHRASES S-23, S-24, S-25, S-26, S-28, S-51

15.2 OTHER LEGISLATION NOT APPLICABLE

16. OTHER INFORMATION

WATER POLLUTING CLASS (WGK) 2
ISSUE NUMBER 4 DATE FEB 2016