1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND THE COMPANY
   1.1 CHEMICAL PRODUCT CALABOND VM
   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 A DISPERSION OF VINYL BASED RESIN
   2.2 HAZARDOUS INGREDIENTS
      VINYL ACETATE N.A 108-05-4 N.A <1%
      MONOMER
3. **HAZARDS IDENTIFICATION**

   **EYE CONTACT**    MAY CAUSE EYE IRRITATION

   **SKIN CONTACT**    MAY CAUSE SKIN IRRITATION

   **INGESTION**    MAY CAUSE IRRITATION OF THE GASTROINTESTINAL TRACT

   **INHALATION**    AT ROOM TEMPERATURE, VAPORS ARE NOT EXPECTED TO FORM. IF MATERIAL IS HEATED VAPOR CONCENTRATION MAY BECOME SUFFICIENT TO CAUSE RESPIRATORY IRRITATION.

4. **FIRST AID MEASURES**

   **4.1 EYE CONTACT**    IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING THE UPPER AND LOWER EYELIDS. GET MEDICAL AID IF IRRITATION PERSIST

   **4.2 SKIN CONTACT**    IMMEDIATELY FLUSH SKIN WITH PLENTY OF SOAP AND WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.

   **4.3 INGESTION**    IMMEDIATELY CALLS PHYSICIAN. IF SWALLOWED, INDUCE VOMITING IMMEDIATELY AS DIRECTED BY MEDICAL PERSONNEL. IF PERSON VOMITS WHILE LYING ON HIS BACK, PLACE HIM IN AN UPRIGHT POSITION.

   **4.4 INHALATION**    IF DIFFICULTIES OCCUR AFTER VAPOUR/AEOSOL HAS BEEN INHALED, REMOVE TO FRESH AIR AND SEEK MEDICAL ATTENTION.

5. **FIRE EXTINGUISHING MEDIA**

   **GENERAL INFORMATION**    AS IN ANY FIRE, WEAR A SELF-CONTAINED BREATHING APPARATUS WITH PRESSURE ON DEMAND, MSHA/NIOSH (APPROVED OR EQUIVALENT), AND FULL PROTECTIVE GEAR. PRODUCT WILL BURN IF INVOLVED IN A FIRE.
5.1 EXTINGUISHING MEDIA
WATER, MIST, CO2, DRY POWDER

5.2 FIRE AND EXPLOSION HAZARDS
THE PRODUCT IS NOT FLAMMABLE

5.3 PROTECTIVE MEASURES
A SELF FULL OXYGEN BOTTLE CONTAINED BREATHING SHOULD BE USED TO QUENCH FIRE. SUGGESTED PROTECTIVE CLOTHING.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS
AVOID DIRECT CONTACT WITH EYES.

6.2 ENVIRONMENTAL
DO NOT ALLOW CHEMICAL TO ENTER PRECAUTIONS WATER SOURCES AND SEWER SYSTEMS.

6.3 CLEANING UP
CONTAIN SPILLAGES WITH SAND, EARTH OR ANY SUITABLE ADSORBENT MATERIAL. TRANSFER TO A CONTAINER FOR DISPOSAL. WASH THE SPILLAGE AREA. CLEAN WITH WATER AND DETERGENT.

7. STORAGE AND HANDLING

7.1 STORAGE
KEEP ONLY THE ORIGINAL CONTAINER IN A WELL-VENTILATED PLACE AWAY FROM EXCESS HEAT AND COOL. KEEP CONTAINER TIGHTLY CLOSED. STORE AT ROOM TEMPERATURE. AVOID CONTACT WITH DIRECT SUNLIGHT.

7.2 RECOMMENDED SHELF LIFE
06 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
10 PPM TWA 8(ACGIH)
15 PPM STEL (ACGIH)

8.2 ENGINEERING MEASURES
ENSURE ADEQUATE VENTILATION

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         WHITE VISCOUS DISPERSION
9.2       ODOUR                    NOT APPLICABLE
9.3       Ph    5-7 (10% SOLUTION)
9.4       VISCOSITY              40 - 60 POISE @ 30 oC (AT ROTO THINNER)
9.5       FREEZING POINT  NOT ASSESSED
9.6       FREEZE THAW RECOVERY               NOT ASSESSED
9.7       BOILING POINT      NOT APPLICABLE
9.8       MELTING POINT      NOT APPLICABLE
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         DISPERSIBLE IN WATER.
9.16      PARTITION COEFFICIENT       NOT APPLICABLE
10. STABILITY AND REACTIVITY

10.1 STABILITY
STABLE UNDER NORMAL WORKING CONDITIONS.

10.2 CONDITIONS TO AVOID
NONE KNOWN

10.3 MATERIALS TO AVOID
IGNITION SOURCES

10.4 HAZARDOUS DECOMPOSITION PRODUCTS
OXIDES OF CARBON, SULPHUR AND NITROGEN

11. TOXICOLOGICAL INFORMATION

11.1 SHORT TERM EFFECTS

EYE CONTACT
IRRITANT TO EYES

SKIN CONTACT
IRRITANT TO SKIN

INGESTION
VERY LOW TOXICITY

INHALATION
NOT APPLICABLE

11.2 CHRONIC EFFECTS
PROLONGED USE MAY CAUSE DERMATITIS

11.3 CARCINOGENICITY
NOT LISTED BY ACGIH, IARC, NIOSH, NTP, OR OSHA

12. ECOLOGICAL INFORMATION

12.1 LC 50
NOT ASSESSED

12.2 BOD
NOT ASSESSED

12.3 COD
NOT ASSESSED

12.4 OTHER
NOT ASSESSED

THE PRODUCT, BY ANALOGY, IS EXPECTED TO BE PARTIALLY BIODEGRADABLE. EXPECTED TO BE OF LOW TOXICITY TO AQUATIC LIFE. THE PRODUCT IS SUBSTANTIALLY REMOVED IN BIOLOGICAL TREATMENT PROCESSES.
13 DISPOSAL CONSIDERATIONS

DISPOSAL SHOULD BE IN ACCORDANCE WITH LOCAL, STATE OR NATIONAL LEGISLATION.

14. TRANSPORT INFORMATION

14.1 PACKAGING 200 Kg IRON DRUM OPEN MOUTH.

14.2 FREIGHT CLASSIFICATIONS NOT APPLICABLE
UN NUMBER NOT APPLICABLE
ADR NUMBER NOT APPLICABLE
IMDG NUMBER NOT APPLICABLE
PACKING GROUP NOT APPLICABLE
TERM CARD NOT APPLICABLE

15 REGULATORY INFORMATION

15.1 C.P.L CLASSIFICATION NOT APPLICABLE
HAZARD PICTOGRAM Xi (IRRITANT)

RISK PHRASES R-36, R-38
SAFETY PHRASES S-24, S-25, S-26

15.2 OTHER LEGISLATION NOT APPLICABLE

16 OTHER INFORMATION

ISSUE NUMBER 4 DATE FEB 2016