SAFETY DATA SHEET
KORROBOND 65 COMPONENT B

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME KORROBOND 65 COMPONENT B
PRODUCT NO. KORRO65B
SUPPLIER ITW Korroflex
Bay 150, Shannon Industrial Estate
Shannon, Co Clare, Ireland
T:00 353(61)471299
F:00 353(61)471285
Business Hours: 8:00am - 5:00pm

2 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-PIPERAZIN-1-YLETHYLAMINE</td>
<td>205-411-0</td>
<td>140-31-8</td>
<td>60-100%</td>
<td>C;R34 Xn;R21/22 R43 R52/53</td>
</tr>
<tr>
<td>TRIETHYLENETETRAMINE</td>
<td>203-950-6</td>
<td>112-24-3</td>
<td>10-30%</td>
<td>C;R34 Xn;R21 R43 R52/53</td>
</tr>
</tbody>
</table>

The Full Text for all R-Phrases are Displayed in Section 16

3 HAZARDS IDENTIFICATION

Causes burns. May cause sensitisation by skin contact. Harmful in contact with skin and if swallowed. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION Xn;R21/22. C;R34. R43. R52/53.

HUMAN HEALTH
Corrosive to skin and eyes.

4 FIRST-AID MEASURES

GENERAL INFORMATION
Avoid inhalation of vapours and contact with skin and eyes. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

INHALATION
Move the exposed person to fresh air at once. Contact physician if discomfort continues.

INGESTION
Do not induce vomiting. Drink plenty of water. Get medical attention immediately!

SKIN CONTACT
Remove affected person from source of contamination. Wash skin thoroughly with soap and water for several minutes. Contact physician if irritation persists.

EYE CONTACT
Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Contact physician if irritation persists.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
Fire can be extinguished using: Water spray, carbon dioxide, dry powder or polar resistant foam.

SPECIAL FIRE FIGHTING PROCEDURES
Keep up-wind to avoid fumes. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.

SPECIFIC HAZARDS
Avoid breathing fire vapours.

PROTECTIVE MEASURES IN FIRE
Self contained breathing apparatus and full protective clothing must be worn in case of fire.
6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke, use naked flames or other sources of ignition. Avoid contact with skin and eyes. Do not breathe vapour/spray.

ENVIRONMENTAL PRECAUTIONS
Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS
Absorb spillage with non-combustible, absorbent material. Transfer to a container for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS
Use only in well-ventilated areas. Provide good ventilation. Avoid spilling, skin and eye contact. Avoid inhalation of vapours. Keep away from heat, sparks and open flame. Avoid eating, drinking and smoking when using the product. Do not use in confined spaces without adequate ventilation and/or respirator. Observe good industrial hygiene practices.

STORAGE PRECAUTIONS
Store in tightly closed original container in a cool, dry well-ventilated place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT

PROCESS CONDITIONS
Provide eyewash, quick drench.

ENGINEERING MEASURES
Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT
If ventilation is insufficient, suitable respiratory protection must be provided.

HAND PROTECTION
Use protective gloves made of: Rubber or plastic.

EYE PROTECTION
Wear approved chemical safety goggles where eye exposure is reasonably probable.

HYGIENE MEASURES
Keep away from food, drink and animal feeding stuffs. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving work place.

SKIN PROTECTION
Wear apron or protective clothing in case of contact.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Liquid
COLOUR Black
ODOUR Ammonia
SOLUBILITY Miscible with water.

BOILING POINT (°C) >200
RELATIVE DENSITY 0.98 20 °C
pH-VALUE, CONC. SOLUTION 12 @ 20 °C
AUTO IGNITION TEMPERATURE (°C) >150
MELTING POINT (°C) -18
VAPOUR PRESSURE 0.07 mmHg
FLASH POINT (°C) >100
2 / 5
**10 STABILITY AND REACTIVITY**

**STABILITY**
Stable under normal temperature conditions and recommended use.

**CONDITIONS TO AVOID**
Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

**MATERIALS TO AVOID**
Avoid contact with oxidising agents. Nitrous acid and other nitrosating agents.

**HAZARDOUS DECOMPOSITION PRODUCTS**

**11 TOXICOLOGICAL INFORMATION**

**TOXIC DOSE 1 - LD 50**
1470-2140 mg/kg (oral rat)

**INGESTION**
Harmful if swallowed. Corrosive. Even small amounts may cause serious damage.

**SKIN CONTACT**
Causes burns. Corrosive. Prolonged contact causes serious tissue damage. Harmful in contact with skin. May cause sensitisation by skin contact.

**EYE CONTACT**
Causes burns. Risk of corneal damage. Risk of serious damage to eyes.

**HEALTH WARNINGS**
This substance is corrosive. This chemical may cause skin/eye irritation and burns (corrosive).

**ROUTE OF ENTRY**
Inhalation. Skin absorption. Ingestion.

**TARGET ORGANS**

**12 ECOLOGICAL INFORMATION**

**ECOTOXICITY**
Avoid release to the environment. The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

**MOBILITY**
Do not allow ANY environmental contamination. Do not discharge into drains, water courses or onto the ground.

**WATER HAZARD CLASSIFICATION**
WGK 2

**13 DISPOSAL CONSIDERATIONS**

**GENERAL INFORMATION**
When handling waste, consideration should be made to the safety precautions applying to handling of the product.

**DISPOSAL METHODS**
Dispose of waste and residues in accordance with local authority requirements.

**WASTE CLASS**
08 04 99

**14 TRANSPORT INFORMATION**

![Corrosive Symbol](image)
KORROBOND 65 COMPONENT B

UK ROAD CLASS 8
PROPER SHIPPING NAME AMINES, LIQUID, CORROSIVE, N.O.S or POLYAMINES, LIQUID, CORROSIVE, N.O.S (2-PIPERAZIN-1-YLETHYLAMINE, TRIETHYLENETETRAMINE)
UN NO. ROAD 2735 UK ROAD PACK GR. II
ADR CLASS NO. 8 ADR CLASS Class 8: Corrosive substances.
ADR PACK GROUP II HAZARD No. (ADR) 80
ADR LABEL NO. 8 HAZCHEM CODE 3X
CEFIC TEC(R) NO. 80GC7-II+III RID CLASS NO. 8
RID PACK GROUP II UN NO. SEA 2735
IMDG CLASS 8 IMDG PAGE NO. 8
IMDG PACK GR. II EMS F-A, S-B
MFAG See Guide MARINE POLLUTANT No.
UN NO. AIR 2735 ICAO CLASS 8
AIR PACK GR. II

15 REGULATORY INFORMATION

LABELLING

![Corrosive]

CONTAINS

2-PIPERAZIN-1-YLETHYLAMINE
TRIETHYLENETETRAMINE

RISK PHRASES

R34 Causes burns.
R43 May cause sensitisation by skin contact.
R21/22 Harmful in contact with skin and if swallowed.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

16 OTHER INFORMATION

REVISION DATE 14/07/2005
REV. NO./REPL. SDS GENERATED 9
DATE 16.03.2005
RISK PHRASES IN FULL
R21 Harmful in contact with skin.
R21/22 Harmful in contact with skin and if swallowed.
R34 Causes burns.
R43 May cause sensitisation by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.