Issued 28/04/2008

Revision No: 1 TECSEAL 100FR

Page 1 of 4

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION & OF THE COMPANY / UNDERTAKING

Product name: Tecseal 100FR

Use of substance / preparation: Sealant

Company name: Lindab Ltd.

Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Tel: 01604 788350 Fax: 01604 788351

2. HAZARDS IDENTIFICATION

Main hazards: Highly flammable. Irritating to skin. Harmful: danger of serious damage to health by prolonged exposure

through inhalation. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of harm to the unborn child. Vapours may cause drowsiness & dizziness.

Other hazards: In use, may form flammable / explosive vapour-air mixture.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients: • TOLUENE 27.50%

EINECS: 203-625-9 CAS: 108-88-3 [F] R11; [Xi] R38; [Xn] R63; [Xn] R65; [-] R67

MIXED ALIPHATIC HYDROCARBONS 16.60%

• ACETONE 1.70%

EINECS: 200-662-2 CAS: 67-64-1 [F] R11; [Xi] R36; [-] R66; [-] R67

BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT} 0.16%

EINECS: 500-033-5 CAS: 25068-38-6 [Xi] R36/38; [Sens.] R43; [N] R51/53

• ZINC OXIDE 0.80%

CAS: 1314-13-2 [N] R50/53

4.0 FIRST AID MEASURES (SYMPTOMS)

Skin contact: There may be irritation & redness at the site of contact. Onset of symptoms may be delayed.

Eye contact: There may be irritation & redness. The eyes may water profusely.

Ingestion: There may be soreness & redness of the mouth & throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause

coughing or wheezing. Onset of symptoms may be delayed.

4.1 FIRST AID MEASURES (ACTION)

Skin contact: Remove from skin with paper or towel. Wash effected area thoroughly with soap & water. Seek medical

advice if symptoms persist.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor if

symptoms persist.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Alcohol resistant foam. Carbon Dioxide. Dry chemical powder. Use water spray to cool containers.

Exposure hazards: Highly flammable. In combustion emits toxic fumes. Forms explosive air-vapour mixture. Vapour may

travel considerable distance to source of ignition & flash back.

Protection of fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin & eyes.

Lindab Ltd.

Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Phone 01604 788350
Fax 01604 788351
e-mail lindab@lindab.com
Internet www.lindab.com
Company Registered No. 1641399



Issued 28/04/2008 Revision No: 1 **TECSEAL 100FR**

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Refer to section 8 of MSDS for personal protection details. If outside do not approach from downwind.

If outside keep bystanders upwind & away from danger point. Mark out the contaminated area with signs & prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the

escape of liquid. Eliminate all sources of ignition.

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

Clean up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an

appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

7. HANDLING & STORAGE

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle

in a confined space. Avoid the formation or spread of mists in the air. Smoking is forbidden. Use non-

sparking tools.

Storage conditions: Store in cool well ventilated area. Keep container tightly closed. Keep away from sources of ignition.

Prevent the build up of electrostatic charge in the immediate area. Ensure lighting & electrical

equipment are not a source of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

WEL (8hr exposure limit): 5mg/m3 WEL (15 minute exposure limit): 10mg/m3

> Hazardous ingredients: TOLUENE WEL (8hr exposure limit): 191mg/m3 WEL (15 min exposure limit): 574 mg/m3

ACETONE WEL (8hr exposure limit): 1210 mg/m3 WEL (15 min exposure limit): 3620 mg/m3

ZINC OXIDE WEL (8hr exposure limit): 5 mg/m3 WEL (15 min exposure limit): 10 mg/m3

Ensure there is sufficient ventilation of the area. Ensure lighting & electrical equipment are not a Engineering measures; source of ignition.

Respiratory protection: If exposure levels are likely to be exceeded, use a full face mask fitted with an organic AXP3 filter for

short term low level exposures. For long term or high level exposures, compressed airline breathing

apparatus should be used.

Hand protection: Avoid skin contact. For repeated exposure use Viton or 4H chemical gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

9. PHYSICAL & CHEMICAL PROPERTIES

State: Liquid

Colour: Grey

Odour: Pungent

Evaporation rate: Moderate

> Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Insoluble

> Viscosity: Highly viscous

56°C Boiling point / range

Flammability limits; lower: 0.6%

> upper: 13%

-35°C Flash point:

Auto flammability: 200°C

Relative density: 1.15

Lindab Ltd.

Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Phone 01604 788350 01604 788351 Fax e-mail lindab@lindab.com www.lindab.com Internet

Company Registered No. 1641399



Page 2 of 4

Issued 28/04/2008
Revision No: 1 TECSEAL 100FR

10. STABILITY & REACTION

Stability: Stable under normal conditions. Stable at room temperature.

Conditions to avoid: Heat. Hot surfaces. Sources of ignition. Flames.

Materials to avoid: Strong oxidising agents. Strong acids.

Hazardous combustion products: In combustion emits toxic fumes.

11. TOXICOLOGICAL INFORMATION

Hazardous ingredients: • TOLUENE—IVN RAT LD50 1960 mg/kg ORL MUS LD50 2 gm/kg ORL RAT LD50 6900 mg/kg

ACETONE—IVN RAT LD50 5500 mg/kg ORL MUS LD50 3 gm/kg ORL RAT LD50 5800 mg/kg

BISPHENOL A-(EPICHLORHYDRIN){REACTION PRODUCT}—ORL MUS LD50 15600 mg/kg

ORL RAT LD50 11400 mg/kg SKN RBT LD50>20 ml/kg

ZINC OXIDE—IPR RAT LD50 240 mg/kg ORL MUS LD50 7950 mg/kg
 Refer to section 4 of MSDS for routes of exposure & corresponding symptoms.

12. ECOLOGICAL INFORMATION

Routes of exposure;

Mobility: Volatile.

Persistence & degradability: Biodegradable in part only.

Bio accumulative potential: No data available.

13. DISPOSAL CONSIDERATIONS

Disposal operations: Arrange for disposal by a licensed waste disposal company.

Disposal of packaging: Arrange for disposal by a licensed waste disposal company.

B: The user's attention is drawn to the possible existence of regional or national regulations regarding

disposal.

14. TRANSPORT INFORMATION

14.1 ADR / RID

UN number: 1133 ADR Class: 3

Packing group: $\dot{I}\dot{I}$ Classification code: F1

Shipping name: ADHESIVES Hazard ID number: 33

Labelling: 3

14.2 IMDG / IMO

UN number: 1133 Class: 3

Packing group: İİ EmS: F-E,S-D

Labelling: 3 Marine pollutant: Yes

14.3 IATA / ICAO

UN number: 1133 Class: 3

Packing group: İİ Packing instructions: 305(P&CA): 307(CAO)

Labelling: 3

Lindab Ltd.

Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Phone 01604 788350
Fax 01604 788351
e-mail lindab@lindab.com
Internet www.lindab.com
Company Registered No. 1641399



Page 3 of 4



Issued 28/04/2008 Revision No: 1

TECSEAL 100FR

Page 4 of 4

15. REGULATORY INFORMATION

Hazard symbols:

Highly Flammable



Harmful

R11: Highly flammable. Risk phrases:

R38: Irritating to skin.

R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R63: Possible risk of harm to the unborn child. R67: Vapours may cause drowsiness & dizziness.

Safety phrases: S16: Keep away from sources of ignition - No smoking.

S23: Do not breathe vapour.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

S24/25: Avoid contact with skin & eyes.

S36/37: Wear suitable protective clothing & gloves.

S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

Precautionary phrases: Contains bisphenol a-(epichlorhydrin) {reaction product}, rosin. May produce an allergic reaction.

Restricted to professional users.

The regulatory information given above only indicates the principal regulations specifically applicable to

the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international

& local regulations or provisions.

16. OTHER INFORMATION

Risk phrases used in sec. 3 R11: Highly flammable.

R38: Irritating to skin.

R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R63: Possible risk of harm to the unborn child.

R65: Harmful: may cause lung damage if swallowed.

R67: Vapours may cause drowsiness & dizziness.

R36: Irritating to eyes.

R66: Repeated exposure may cause skin dryness or cracking.

R36/38: Irritating to eyes & skin.

R43: May cause sensitisation by skin contact.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

The above information is believed to be correct but does not purport to be all inclusive & shall be only Legal disclaimer:

used as a guide. The company shall not be held liable for any damage resulting from handling or from

contact with the above product.

Lindab Ltd.

Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Phone 01604 788350 01604 788351 Fax e-mail lindab@lindab.com Internet www.lindab.com Company Registered No. 1641399



Issued 01/01/2006

Revision No: 1

TECSEAL 200FRA

Page 1 of 2

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION & OF THE COMPANY / UNDERTAKING

Product name: Tecseal 200FRA

Use of substance / preparation: Sealant

Company name: Lindab Ltd.

Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Tel: 01604 788350 Fax: 01604 788351

2. HAZARDS IDENTIFICATION

Main hazards: The product is non-hazardous. General cleanliness should be observed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients: • ETHYLENE GLYCOL < 0.3% [Xn] R22: Harmful if swallowed.

• SILANE <0.1% [Xi] R36/38: Irritating to eyes & respiratory system.

BIOCIDE <0.1% [Xi] R43: May cause sensitisation by skin contact.

• WHITE SPIRIT <3.5% R10: Flammable.

4. FIRST AID MEASURES

Skin contact: Wipe off excess with a paper towel, then clean with resin removing cream or hand cleanser. DO NOT

use solvents. Finally wash with soap & water.

Eye contact: Irrigate thoroughly with water & seek medical advise.

Ingestion: DO NOT induce vomiting. Seek medical advice.Inhalation: Provide patient with fresh air & seek medical advice.

5. FIRE-FIGHTING MEASURES

Extinguishing media: The material is incombustible in emulsion form.

Use appropriate extinguisher for the surrounding conditions.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions: Do not discharge into drains or rivers.

Clean up procedures: Absorb into dry earth or sand. Collect up by shovel or scraper, and then scrub affected area

immediately with detergent & water.

7. HANDLING & STORAGE

Storage conditions: Avoid frost & freezing conditions in storage & transport.

Store in a dry place in the temperature range of 5°C to 30°C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection: Safety glasses / goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

9. PHYSICAL & CHEMICAL PROPERTIES *

Appearance: White paste.

Relative density: 1.6 g/ml

Miscibility: Miscible with water.

Solids: Approximately 75%.

Lindab Ltd.

Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Phone 01604 788350
Fax 01604 788351
e-mail lindab@lindab.com
Internet www.lindab.com
Company Registered No. 1641399





 Issued
 01/01/2006
 Page 2 of 2

 Revision No: 1
 TECSEAL 200FRA

10. STABILITY & REACTION

Conditions to avoid: Avoid freezing conditions.

Hazardous combustion products: In a fire, smoke & fumes with carbon dioxide & carbon monoxide will be generated with a small amount

of acid gases

11. TOXICOLOGICAL INFORMATION

Hazardous ingredients: The product is non-hazardous.

Routes of exposure: Ingestion may cause obstruction. Contact with eyes may cause physical damage.

12. ECOLOGICAL INFORMATION

Contamination: Contamination of both terrestrial & marine environments should be avoided.

13. DISPOSAL CONSIDERATIONS

Waste disposal: This material is not such as to be classified as "special waste" as the term is defined by the Control of

Pollution (Special Waste) Regulations 1980 & may be disposed of by landfill tipping.

14. TRANSPORT INFORMATION

Regulations: Not applicable.

15. REGULATORY INFORMATION

Note: Co-polymer emulsion with fillers & additives which is not dangerous as the term is defined in the

Chemicals (Hazard Information & Packaging for Supply) Regulations 1994.

16. OTHER INFORMATION

Legal disclaimer:

- This product should be used as directed by Lindab Ltd. For further information consult the
 application instructions.
- This Material Safety Data Sheet was compiled using the current safety information supplied by the distributors of the components materials.
- This Material Safety Data Sheet supersedes all previous issues, & users are cautioned to ensure it
 is current. Destroy all previous data sheets, & if in any doubt, contact Lindab Ltd; quoting the
 information at the top of all pages of this document.

Lindab Ltd.

Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Phone 01604 788350
Fax 01604 788351
e-mail lindab@lindab.com
Internet www.lindab.com
Company Registered No. 1641399



<u>-</u>

Issued 01/01/2006
Revision No: 1 TECSEAL 300HM

Page 1 of 2

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION & OF THE COMPANY / UNDERTAKING

Product name: Tecseal 300HM Clear

Use of substance / preparation: Sealant

Company name: Lindab Ltd.

Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Tel: 01604 788350 Fax: 01604 788351

2. HAZARDS IDENTIFICATION

Main hazards: Indirect toxicity hazard Lachrymatory.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous ingredients: • Dimethypolysiloxane.

Filters.

Auxiliaries.

Acetoxysilane cross linker.

4. FIRST AID MEASURES

Skin contact: Immediately rinse with plenty of soap & water.

Eye contact: Immediately irrigate thoroughly with water for 10-15 minutes & seek medical advise.

Ingestion: DO NOT induce vomiting. Rinse mouth with water. Seek medical advice.

Inhalation: Provide patient with fresh air & seek medical advice.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Dry powder, foam, carbon dioxide. Extinguishing media which must not be used for safety reasons:

None known.

Exposure hazards: Exposure hazards arising from the substance or preparation itself, combustion products, resulting

gases: None known.

Protection of fire-fighters: Special protective equipment for fire fighting: None known.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions: Observe local bye-laws.

Clean up procedures: Absorb mechanically & dispose of according to regulations.

7. HANDLING & STORAGE

Handling requirements: Ensure adequate ventilation. Ensure general rules for fire prevention in partly used containers liberation

of explosive gases is possible.

Storage conditions: Protect against moisture. Store in a cool dry place. Keep container tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection: Safety glasses / goggles. Ensure eye bath is to hand. Avoid contact.

Skin protection: PVC / rubber gloves recommended. Avoid contact.

Respiratory protection: Compressed air / oxygen apparatus. Do not breath vapour.

Lindab Ltd. Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Phone 01604 788350 Fax 01604 788351

e-mail lindab@lindab.com Internet www.lindab.com Company Registered No. 1641399



Issued 01/01/2006 Page 2 of 2
Revision No: 1 TECSEAL 300HM

9. PHYSICAL & CHEMICAL PROPERTIES *

Appearance: Transparent paste with strong-irritating / pungent odour.

Relative density: 1.03 g/ cm3 at 20°C.

Ignition temperature: Approximately 460°C.

Solubility in water: Virtually insoluble.

10. STABILITY & REACTION

Stability: If stored & handled in accordance with standard industrial practices, no reactions are known.

Materials to avoid: Halogens.

Hazardous decomposition At the temperature of approximately 150°C a small amount of formaldehyde can be released by

products: oxidative degradation. Under the effect of humidity: acetic acid.

11. TOXICOLOGICAL INFORMATION

Hazardous ingredients: Under effects of humidity product separates a small quantity of acetic acid (64-19-7) which irritates

skin & mucous membranes.

Routes of exposure: Refer to section 4 of MSDS for routes of exposure & corresponding symptoms>

12. ECOLOGICAL INFORMATION

Contamination: May cause long term adverse effects in the marine environments. Contamination should be avoided.

Degradability: In terrestrial environment not or barely biodegradable.

13. DISPOSAL CONSIDERATIONS

Waste disposal: Use appropriate containment to avoid environmental contamination. Do not discharge into the sewer /

drain or the environment, dispose of at authorised waste collection point.

14. TRANSPORT INFORMATION

14.1 ADR / RID & GGVS / GGVE

Land transport: Non-hazardous material. Transport permitted.

14.2 IMDG / GGV

Sea transport: Non-hazardous material. Transport permitted.

14.3 ICAO-TI / IATA-DGR

Air transport: Non-hazardous material. Transport permitted.

15. REGULATORY INFORMATION

Identification: According to EEC directives: EEC / R EEC / S

16. OTHER INFORMATION

Legal disclaimer:

- This product should be used as directed by Lindab Ltd. For further information consult the
 application instructions.
- This Material Safety Data Sheet was compiled using the current safety information supplied by the distributors of the components materials.
- This Material Safety Data Sheet supersedes all previous issues, & users are cautioned to ensure it
 is current. Destroy all previous data sheets, & if in any doubt, contact Lindab Ltd; quoting the
 information at the top of all pages of this document.

Lindab Ltd. Unit 9-10 Carousel Way, Riverside Business Park, Northampton, NN3 9HG

Phone 01604 788350 Fax 01604 788351

e-mail lindab@lindab.com Internet www.lindab.com Company Registered No. 1641399



<u>0</u>