Davco

Davco Construction Materials Pty Limited
ABN 28 093 876 558

MATERIAL SAFETY DATA SHEET

1. Identification of Material and Supplier

Product Name	**Lanko 531 Epoxy Moisture Barrier Part A**
Other Names	n.all.
Recommended Use	Two part water-based epoxy barrier and coating system for use as a barrier coating for concrete which has a moisture content exceeding that specified in AS 1884-1985 (maximum moisture content 5.5 % or 70 % humidity). Must be mixed with Part B by hand or mixer and applied by hand, trowel, roller or spray system. Mix sufficient only for immediate use. Do not return unused portions to original containers.
Supplier Name	**Davco Construction Materials Pty Ltd**
Address	**67 Elizabeth St, Wetherill Park, NSW, Australia 2164**
Web Address	**www.davco.com.au**
Telephone	**61 2 9616 3000**
Facsimile	**61 2 9725 5551**
Emergency Telephone	**1800 807 001**
Technical Support	**1800 653 347**

2. Hazards Identification

Hazard Classification **This product is non-hazardous according to the criteria of the NOHSC. All components are listed on the AICS.** Not a DG substance according to the ADG Code. Not a scheduled poison according to the SUSDP.

Risk Phrases None allocated or required. (see also page 2)

Safety Phrases None allocated or required. (see also page 3)

3. Composition/Information on Ingredients

Chemical Identity	Proportion	CAS No
Water-based homogenous thixotropic dispersion of non-hazardous polyamide resins and inert pigments All ingredients have been determined to be non-hazardous or below cut off values	100 %	n.a.

4. First Aid Measures

4.1 Symptoms of Exposure by Route

SWALLOWED

Minor amounts ingested incidental to normal handling will have little or no effect. Larger amounts deliberately ingested will cause nausea, vomiting and stomach discomfort.

EYE

Will cause minor eye irritation and must be promptly removed by flushing.

SKIN

May cause minor irritation. Should be promptly removed by washing with soap and water.

INHALED

Inhalation is more likely at higher than normal temperatures, typically such vapours may be anticipated during curing. Vapour may cause slight to moderate irritation and discomfort to upper respiratory tract. It is possible that prolonged or repeated exposures could cause sensitisation or allergic reactions in those previously sensitised. May aggravate pre-existing conditions such as asthma, bronchitis and emphysema.

4.2 First Aid Instructions

SWALLOWED

Do not induce vomiting. Rinse mouth clear with water and give two 300 ml glasses of water to drink. If patient involuntarily vomits encourage to lean forward to avoid aspirating. If symptoms persist seek prompt medical help.

EYE

Immediately: Hold eye open and flush with clean water for at least 15 minutes. While flushing, gently pull upper and lower eyelids away from eyes and ensure carefully flushed. If symptoms persist seek prompt medical attention.

SKIN

Remove contaminated clothing and footwear (while under safety shower if appropriate). Flush affected area with water for 3-5 minutes followed by washing gently with soap and water for a further 5 minutes. Rinse well and pat dry. If symptoms persist seek

INHALED

Remove patient (while wearing SCBA if concentrations are high) to fresh air. Allow to rest. Rinse mouth and nose with water. Provide artificial respiration if breathing stops. Seek urgent medical attention unless recovery is virtually immediate.

FIRST AID FACILITIES

Provide normal industrial first aid facilities including eye-wash stations and safety showers as appropriate.

Notes to Physician (for symptoms of over-exposure to this product see above)

Possible symptoms of Chronic Health Effects

Prolonged or repeated skin exposure may cause drying and cracking of the skin. Prolonged or repeated inhalation of vapours may lead to sensitisation, Those persons previously sensitised may experience allergic responses to low level exposures.

Possible aggravated pre-existing conditions

Vapour inhalation at higher than normal temperatures may aggravate pre-existing conditions such as asthma, bronchitis and emphysema.

Suggested treatment for acute symptoms, known antidotes

Provide supportive care and treatment based on the patient's reaction to the exposure. For further information contact the :

POISONS INFORMATION CENTRE 13 11 26 in all States

5. Fire Fighting Measures

5.1 Flammability and Explosion Hazards

Containers may rupture in fire conditions due to steam pressure. Product is non-flammable as sold but may burn when water content has boiled off.

5.2 Hazardous Combustion Products

CO_x , amines and NO_x

5.3 Suitable Extinguishing Media

Select to suit surrounding fires or use water as fine spray or fog.
n.a.

5.4 Precautions for Fire Fighters and Special Equipment

Wear SCBA and full turn out clothing. Avoid bodily contact with substance or run-off. Contain run-off waters for later collection and controlled disposal.

6. Accidental Release Measures

6.1 Emergency Procedures – Spills and Leaks (See Section 13 for disposal considerations)

Prevent material entering drains or waterways. Send unnecessary personnel out of area. Wear full protective clothing including rubber boots and respirator. Spread sand, soil or other inert absorbent over the pool. When saturated collect into metal or plastic drums or pails. Fit lids, label and place containers in a safe area to await disposal.

7. Handling and Storage

7.1 Handling Advice

Wear suitable protective clothing. Avoid unnecessary bodily contact with product.

7.2 Storage Advice

Store in a cool, dry and well-ventilated area. Keep containers closed when not in use.

8. Exposure Controls/ Personal Protection

8.1 Exposure Standards

No exposure standards have been set by the NOHSC for this product or its ingredients in the proportions present in the product.

Substance	*TWA*	*STEL*

8.2 Engineering Control Methods

If used out doors natural ventilation is normally adequate. If used in enclosed spaces with poor ventilation provide mechanical ventilation to comfort levels.

8.3 Personal Protective Equipment

Respiratory Protection

Not usually required. If vapour concentration is uncomfortably high (typical during curing) use respirator fitted with an organic vapour filter to AS 1715 & 1716. Use SCBA in confined spaces.

Eye Protection

Not normally required. If mists or splashes are likely wear safety goggles or full face shield to AS 1337.

Gloves

When mixing and applying wear rubber, PVA or neoprene gloves to AS 2161.

Clothing

Wear cotton or Tyvec coveralls fastened at the neck and wrist. Supplement with a rubber or PVA apron if required.

9. Physical and Chemical Properties

Appearance:	White, clear or coloured thixotropic liquid	**Odour:**	mild ammonia odour
Freezing/ Melting Point:	n.d.	**Boiling Point:**	Initial 100 ºC
Density:	1.01 to 1.20	**Vapour Pressure:**	n.d.
Solubility in water :	insoluble	**Volatiles:**	n.d.
Flash Point:	n.a.	**Percent Flammability Limits:**	n.a.
Ignition Point:	n.a.		
Other Properties	An aqueous solution of polyamide resin with inert pigments and 10 - 50 % water		

10. Stability and Reactivity

Under all normal circumstances of use and handling the product is completely stable.

11. Toxicological Information

No relevant data.

12. Ecological Consideration

May have an adverse effect of aquatic organisms if large amount released to water. Slowly biodegrades.

13. Disposal Considerations

Disposal must be in accordance with local regulations for non-hazardous chemical wastes.

14. Transport Information

Requirements under the ADG Code, the IMDG Code or the IATA DG Regulations do not apply to this product.

15. Regulatory Information

No special labelling requirements under the Code of Practice for the labelling of Workplace Substances(NOHSC:2012[1994]), the ADG Code or the SUSDP apply to this product.

16. Other Information

Date Prepared/Amended: 15-08-04 New MSDS (Version 1.0) to comply with National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition NOHSC: 2011 (2003)

Data Sources used: in the preparation of this MSDS include: "*Chempendium*" published in CD format by CCOHS Canada 2003 - 4."*TOMES*" a CD database published by Micromedex, USA, "*Hazardous Properties of Industrial Materials*" Van Nostrand Rheinhold NY, USA . "*List of Designated Hazardous Substances"* NOHSC 10005:1999, *"National Exposure Standards"* NOHSC 1003:1995 . **Abbreviations used:** n.d = not determined, n.a = not applicable, n.all =not allocated, SUSDP = Standard for the Uniform Scheduling of Drugs and Poisons, ADG = Australian Dangerous Goods Code, IATA = International Air Transport Association, (Dangerous Goods Regulations), IMDG = International Maritime Dangerous Goods (Code)

Disclaimer

No representative of Davco Construction Materials Pty Ltd or any other person has authority to add to, or alter in any way, any MSDS or the information supplied thereon. Any alterations render this MSDS invalid. The information contained herein is believed by Davco Construction Materials Pty Ltd and SSC Pty Ltd to be accurate at the issue date shown and in accordance with information available to us. Persons dealing with the products referred to in this MSDS do so at their own risk since their actions are beyond our control. Davco Construction Materials Pty Ltd and SSC Pty Ltd accepts no liability whatsoever for damage or injury arising from the use of the information contained in this document

Davco

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ABN 28 093 876 558

MATERIAL SAFETY DATA SHEET

1. Identification of Material and Supplier

Product Name	**Lanko 531 Epoxy Moisture Barrier Part B**
Other Names	n.all.
Recommended Use	Two part water-based epoxy barrier and coating system for use as a barrier coating for concrete which has a moisture content exceeding that specified in AS 1884-1985 (maximum moisture content 5.5 % or 70 % humidity). Must be mixed with Part a by hand or mixer and applied by hand, trowel, roller or spray system. Mix sufficient only for immediate use. Do not return unused portions to original containers.
Supplier Name	**Davco Construction Materials Pty Ltd**
Address	**67 Elizabeth St, Wetherill Park, NSW, Australia 2164**
Web Address	**www.davco.com.au**
Telephone	**61 2 9616 3000**
Facsimile	**61 2 9725 5551**
Emergency Telephone	**1800 807 001**
Technical Support	**1800 653 347**

2. Hazards Identification

Hazard Classification **This product is hazardous according to the criteria of the NOHSC. All components are listed on the AICS.** Not a DG substance according to the ADG Code (see also Section 14). Not a scheduled poison according to the SUSDP.

Risk Phrases Xi R 36/38 Irritating to eye and skin, R 43 May cause sensitisation by skin contact

Safety Phrases S 2 Keep out of reach of children, S 28 After contact with skin, wash immediately with plenty of soap-suds, S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

3. Composition/Information on Ingredients

Chemical Identity	Proportion	CAS No
Bisphenol A- Epichlorohydrin resin	30 - 60 %	25068-38-6
Ingredients, including water which have been determined to be non-hazardous or below cut off values	to 100 %	n.a.

4. First Aid Measures

4.1 Symptoms of Exposure by Route

SWALLOWED

Minor amounts ingested incidental to normal handling will have little or no effect. Larger amounts deliberately ingested will cause nausea, vomiting and stomach discomfort.

EYE

Will cause moderate eye irritation, and reddening (inflammation) and must be promptly removed by flushing. Prolonged or repeated exposures may cause conjunctivitis.

SKIN

May cause discomfort and adhere to the skin. May cause sensitisation with an allergic dermatitis response on further exposures. Should be promptly removed by washing with soap and water. Those previously sensitised may experience an allergic response to low dose rates.

INHALED

Inhalation is more likely at higher than normal temperatures, typically such vapours may be anticipated during curing. Vapour may cause slight to moderate irritation and discomfort to upper respiratory tract. It is possible that prolonged or repeated exposures could cause sensitisation or allergic reactions in those previously sensitised. May aggravate pre-existing conditions such as asthma, bronchitis and emphysema.

4.2 First Aid Instructions

SWALLOWED

Do not induce vomiting. Rinse mouth clear with water and give two 300 ml glasses of water to drink. If patient involuntarily vomits encourage to lean forward to avoid aspirating. If symptoms persist seek prompt medical help.

EYE

Immediately: Hold eye open and flush with clean water for at least 15 minutes. While flushing, gently pull upper and lower eyelids away from eyes and ensure carefully flushed. If symptoms persist seek prompt medical attention.

SKIN

Remove contaminated clothing and footwear (while under safety shower if appropriate). Flush affected area with water for 3-5 minutes followed by washing gently with soap and water for a further 5 minutes. Rinse well and pat dry. If symptoms persist seek

INHALED

Remove patient (while wearing SCBA if concentrations are high) to fresh air. Allow to rest. Rinse mouth and nose with water. Provide artificial respiration if breathing stops. Seek urgent medical attention unless recovery is virtually immediate.

FIRST AID FACILITIES

Provide normal industrial first aid facilities including eye-wash stations and safety showers as appropriate.

Notes to Physician (for symptoms of over-exposure to this product see above)

Possible symptoms of Chronic Health Effects

Prolonged or repeated skin exposure may cause drying and cracking of the skin. Acute skin exposure may cause sensitisation with an allergic dermatitic response. Prolonged or repeated inhalation of vapours may lead to sensitisation, Those persons previously sensitised may experience allergic responses to low level exposures.

Possible aggravated pre-existing conditions

Skin contact will aggravate pre-existing dermatitis conditions. Vapour inhalation at higher than normal temperatures during curing may aggravate pre-existing conditions such as asthma, bronchitis and emphysema.

Suggested treatment for acute symptoms, known antidotes

Provide supportive care and treatment based on the patient's reaction to the exposure. For further information contact the :

POISONS INFORMATION CENTRE 13 11 26 in all States

5. Fire Fighting Measures

5.1 Flammability and Explosion Hazards

Containers may rupture in fire conditions due to steam pressure. Product is non-flammable as sold but may burn when water content has boiled off.

5.2 Hazardous Combustion Products

CO_x and aldehydes **,** when mixed with Part A, combustion by-products will include amines and NO_x

5.3 Suitable Extinguishing Media

Use water as fine spray or fog.
n.a.

5.4 Precautions for Fire Fighters and Special Equipment

Wear SCBA and full turn out clothing. Avoid bodily contact with substance or run-off. Contain run-off waters for later collection and controlled disposal.

6. Accidental Release Measures

6.1 Emergency Procedures – Spills and Leaks **(See Section 13 for disposal considerations)**

Prevent material entering drains or waterways. Send unnecessary personnel out of area. Wear full protective clothing including rubber boots and respirator. Spread sand, soil or other inert absorbent over the pool. When saturated collect into metal or plastic drums or pails. Fit lids, label and place containers in a safe area to await disposal.

7. Handling and Storage

7.1 Handling Advice

Wear suitable protective clothing. Avoid unnecessary bodily contact with product. Avoid contact with incompatibles (see page 4 and below)

7.2 Storage Advice

Store in a cool, dry and well-ventilated area. Keep containers closed when not in use. Keep away from amines, mercaptans, strong acids and strong oxidisers.

8. Exposure Controls/ Personal Protection

8.1 Exposure Standards

No exposure standards have been set by the NOHSC for this product or its ingredients in the proportions present in the product.

Substance	*TWA*	*STEL*

8.2 Engineering Control Methods

If used out doors natural ventilation is normally adequate. If used in enclosed spaces with poor ventilation provide mechanical ventilation to comfort levels.

8.3 Personal Protective Equipment

Respiratory Protection

Not usually required. If vapour concentration is uncomfortably high (typical during curing) use respirator fitted with an organic vapour filter to AS 1715 & 1716. Use SCBA in confined spaces.

Eye Protection

When mixing and apply use goggles or chemical safety glasses to AS 1337. Do not wear contact lenses while working with this product.

Gloves

When mixing and applying wear rubber, PVA or neoprene gloves to AS 2161.

Clothing

Wear cotton or Tyvec coveralls fastened at the neck and wrist. Supplement with a rubber or PVA apron if required.

9. Physical and Chemical Properties

Appearance:	White, clear or coloured thixotropic liquid	**Odour:**	mild ammonia odour
Freezing/ Melting Point:	n.d.	**Boiling Point:**	Initial 100 ºC
Density:	1.06 to 1.20	**Vapour Pressure:**	n.d.
Solubility in water :	insoluble, emulsifies, immiscible	**Volatiles:**	n.d.
Flash Point:	n.a.	**Percent Flammability Limits:**	n.a.
Ignition Point:	n.a.		
Other Properties	Incompatible with amines, mercaptans, strong acids and strong oxidisers.		

10. Stability and Reactivity

Under all normal circumstances of use and handling the product is completely stable. Note that during curing there is a small exothermic reaction which increases the vapours emitted.

11. Toxicological Information

No relevant to product data.

12. Ecological Consideration

May have an adverse effect of aquatic organisms if large amount released to water. Slowly biodegrades.

13. Disposal Considerations

Disposal must be in accordance with local regulations for hazardous chemical wastes.

14. Transport Information

Requirements under the ADG Code or the IATA DG Regulations do not apply to this product. Note that ISO have classified Bisphenol A-epichlorohydrin as a Marine Pollutant with the UN Number 3082, Shipping Name: Environmentally Hazardous Substance, Liquid N.O.S. (Contains Bisphenol A) DG: Class 9 PG III. if transporting under the requirements of the IMDG Code

15. Regulatory Information

Label in accordance with the "National Code of Practice for the Labelling of Workplace Substance" [NOHSC: 2012 (1994)] with the Risk and Safety Phrases given on page 1 of this MSDS and the word "Hazardous". Labelling under the SUSDP or the ADG Code is not required unless transporting by sea (see above).

16. Other Information

Date Prepared/Amended: 15-08-04 New MSDS (Version 1.0) to comply with National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition NOHSC: 2011 (2003)

Data Sources used: in the preparation of this MSDS include: "*Chempendium*" published in CD format by CCOHS Canada 2003 - 4."*TOMES*" a CD database published by Micromedex, USA, "*Hazardous Properties of Industrial Materials*" Van Nostrand Rheinhold NY, USA . "*List of Designated Hazardous Substances"* NOHSC 10005:1999, *"National Exposure Standards"* NOHSC 1003:1995 . **Abbreviations used:** n.d = not determined, n.a = not applicable, n.all =not allocated, SUSDP = Standard for the Uniform Scheduling of Drugs and Poisons, ADG = Australian Dangerous Goods Code, IATA = International Air Transport Association, (Dangerous Goods Regulations), IMDG = International Maritime Dangerous Goods (Code)