

SECTION 1: Identification

1.1. Product identifier

Product name : VB 225™ Part A (Resin)
 Product code : Not available.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Epoxy binder.

1.3. Details of the supplier of the safety data sheet

Penetron Specialty Products Inc.
 45 Research Way, Suite 203
 East Setauket, New York 11733 - USA
 +1 (631) 941-9700
 info@penetransp.com - penetransp.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: US and Canada: 1-800-424-9300; International +1 703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irritation 2
 Eye Irritation 2A
 Skin Sensitization 1

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
 Hazard statements (GHS-US) : Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.
 Precautionary statements (GHS-US) : Wash hands thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear protective gloves/eye protection/face protection. Contaminated work clothing must not be allowed out of the workplace. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS-US)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

Name	Product identifier	%
Bisphenol A-epichlorohydrin polymer	(CAS No) 25068-38-6	50 - 100
Phenol, 2,2'-methylenebis-, polymer with (chloromethyl)oxirane	(CAS No) 55492-52-9	25 - 50
Alkyl (C12-14) glycidyl ether	(CAS No) 68609-97-2	10 - 25

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

VB 225™ Part A (Resin)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 4: First aid measures

4.1. Description of first-aid measures

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause sensitization by skin contact.
- Symptoms/injuries after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Extinguishing powder. Water jet. Alcohol resistant foam.
- Unsuitable extinguishing media : Full water jet.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon and toxic gases.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container. Clean contaminated surfaces thoroughly. Provide ventilation.

6.3. Reference to other sections

See Section 8 for further information on protective clothing and equipment and Section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in original container. Keep away from food, drink and animal feed.

7.3. Specific end use(s)

Not available.

VB 225™ Part A (Resin)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Bisphenol A-epichlorohydrin polymer (25068-38-6)	
ACGIH	Not applicable
OSHA	Not applicable

Phenol, 2,2'-methylenebis-, polymer with (chloromethyl)oxirane (55492-52-9)	
ACGIH	Not applicable
OSHA	Not applicable

Alkyl (C12-14) glycidyl ether (68609-97-2)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Protective gloves made of rubber or PVC.
Eye protection	: Wear safety glasses with side shields or goggles.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Yellowish fluid
Color	: Yellow
Odor	: Weak, characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 392 °F (> 200 °C)
Flash point	: > 302 °F (> 150 °C)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not flammable
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: 1.1 g/cm³ @ 73.4 °F (23 °C)
Relative vapor density at 20 °C	: No data available
Solubility	: Not miscible or difficult to mix
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 950 mPas @ 77 °F (25 °C)

VB 225™ Part A (Resin)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

Reacts with strong oxidizing agents, alkalis, amines and acids.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents. Alkalis. Amines. Acids.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon and toxic gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

VB 225™ Part A (Resin)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	No data available
Bisphenol A-epichlorohydrin polymer (25068-38-6)	
LD50 oral rat	11400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
Phenol, 2,2'-methylenebis-, polymer with (chloromethyl)oxirane (55492-52-9)	
LD50 oral rat	> 5000 mg/kg
Alkyl (C12-14) glycidyl ether (68609-97-2)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 4500 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause sensitization by skin contact.
Symptoms/injuries after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

VB 225™ Part A (Resin)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

12.2. Persistence and degradability

VB 225™ Part A (Resin)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

VB 225™ Part A (Resin)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

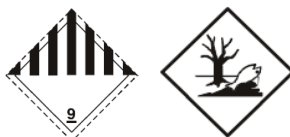
SECTION 14: Transport information

14.1 DOT

Non-regulated material

14.2 ADR

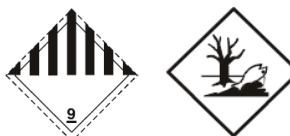
UN Number : UN3082
Proper shipping name : 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)
Transport hazard class(es) : 9 (M6) Miscellaneous dangerous substances and articles
Label 9



Packing group : III
Marine pollutant : Yes

14.3 IMDG

UN Number : UN3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)
MARINE POLLUTANT
Transport hazard class(es) : 9 Miscellaneous dangerous substances and articles
Label 9



Packing group : III
Marine pollutant : Yes

14.4 IATA

UN Number : UN3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)
Transport hazard class(es) : 9 Miscellaneous dangerous substances and articles
Label 9



Packing group : III

VB 225™ Part A (Resin)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

14.5. Additional information

Other information : No supplementary information available.
Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Alkyl (C12-14) glycidyl ether (68609-97-2)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

15.2. US State regulations

VB 225™ Part A (Resin)	
State or local regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other information

Date of issue : 06/25/2012
Revision date : 11/02/2016
Other information : None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

SECTION 1: Identification

1.1. Product identifier

Product name : VB 225™ Part B (Hardener)
Product code : Not available.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Epoxy resin hardening agent.

1.3. Details of the supplier of the safety data sheet

Penetron Specialty Products Inc.
45 Research Way, Suite 203
East Setauket, New York 11733 - USA
+1 (631) 941-9700
info@penetransp.com - penetransp.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: US and Canada: 1-800-424-9300; International +1 703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable Liquid 4
Acute Tox. 4 (Inhalation)
Skin Corrosion 1B
Serious Eye Damage 1
Skin Sensitization 1

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Combustible liquid. Harmful if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction.

Precautionary statements (GHS-US) :

Keep away from flames and hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Do not breathe dusts or mists. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing must not be allowed out of the workplace. If swallowed: rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

Hazards Not Otherwise Classified (HNOC) : Causes severe damage to the respiratory tract.

2.4. Unknown acute toxicity (GHS-US)

42% unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

VB 225™ Part B (Hardener)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

3.2. Mixture

Name	Product identifier	%
Fatty acids, C18-unsaturated, dimers, polymers with tall-oil fatty acids and triethylenetetramine	(CAS No) 68082-29-1	25 - 50
Benzyl alcohol	(CAS No) 100-51-6	10 - 25
2,4,6-Tri(dimethylaminomethyl)phenol	(CAS No) 90-72-2	2.5 - 10
N,N-Dimethyl-1,3-propanediamine	(CAS No) 109-55-7	2.5 - 10

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Immediately call a POISON CENTER or doctor/physician.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : Harmful if inhaled. Causes severe damage to the respiratory tract.
- Symptoms/injuries after skin contact : Causes severe skin burns. Symptoms may include redness, pain and blisters. May cause sensitization by skin contact.
- Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Extinguishing powder. Water jet. Alcohol resistant foam.
- Unsuitable extinguishing media : Full water jet.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible liquid. Products of combustion may include, and are not limited to: oxides of carbon and toxic gases.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use special care to avoid static electric charges. Eliminate sources of ignition. Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container. Clean contaminated surfaces thoroughly. Provide ventilation.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

VB 225™ Part B (Hardener)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from sources of ignition - No smoking. Do not get in eyes, on skin, or on clothing. Do not breathe dusts or mists. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Comply with applicable regulations.
- Storage conditions : Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Store away from sources of ignition.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Fatty acids, C18-unsaturated, dimers, polymers with tall-oil fatty acids and triethylenetetramine (68082-29-1)	
ACGIH	Not applicable
OSHA	Not applicable
Benzyl alcohol (100-51-6)	
ACGIH	Not applicable
OSHA	Not applicable
2,4,6-Tri(dimethylaminomethyl)phenol (90-72-2)	
ACGIH	Not applicable
OSHA	Not applicable
N,N-Dimethyl-1,3-propanediamine (109-55-7)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Hand protection : Protective gloves made of rubber or PVC.
- Eye protection : Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls : Maintain levels below Community environmental protection thresholds.
- Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Dark yellow fluid
- Colour : Yellow
- Odour : Amine-like
- Odour threshold : No data available
- pH : No data available
- Melting point : No data available
- Freezing point : No data available

VB 225™ Part B (Hardener)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Boiling point	: > 392 °F (> 200 °C)
Flash point	: > 168.8 °F (> 76 °C)
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Flammable
Explosive limits	: 1.3 - 13 vol %
Explosive properties	: No data available
Oxidising properties	: No data available
Vapor pressure	: No data available
Relative density	: 1.02 g/cm ³ @ 73.4 °F (23 °C)
Relative vapor density at 20 °C	: No data available
Solubility	: Not miscible or difficult to mix
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: 635 °F (335 °C)
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 1000 - 2000 mPa.s @ 77 °F (25 °C)

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Sources of ignition. Heat. Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon and toxic gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if inhaled.

VB 225H	
LD50 oral rat	No data available
LD50 dermal rabbit	No data available
LC50 inhalation rat	>10 but ≤20 mg/l/4h
Benzyl alcohol (100-51-6)	
LD50 oral rat	1230 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat	> 4.178 mg/l/4h
2,4,6-Tri(dimethylaminomethyl)phenol (90-72-2)	
LD50 oral rat	1670 mg/kg
LD50 dermal rabbit	1242 mg/kg
N,N-Dimethyl-1,3-propanediamine (109-55-7)	
LD50 oral rat	410 mg/kg
LD50 dermal rabbit	2139 mg/kg
LC50 inhalation rat	> 4.31 mg/l/4h

VB 225™ Part B (Hardener)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met
Carcinogenicity	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met
Aspiration hazard	: Based on available data, the classification criteria are not met
Symptoms/injuries after inhalation	: Harmful if inhaled. Causes severe damage to the respiratory tract.
Symptoms/injuries after skin contact	: Causes severe skin burns. Symptoms may include redness, pain and blisters. May cause sensitization by skin contact.
Symptoms/injuries after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

VB 225H	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

VB 225H	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information : Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

14.1 DOT, ADR, IMDG, IATA

UN Number : UN2735

Proper Shipping Name : Amines, liquid, corrosive, n.o.s. (N,N-Dimethyl-1,3-propanediamine; Fatty acids, C18-unsaturated, dimers, polymers with tall-oil fatty acids and triethylenetetramine), Marine Pollutant

Transport Hazard Class(es) : 8

Hazard labels :



Packing group : III

Marine pollutant : Yes

14.2. Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

VB 225™ Part B (Hardener)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. US State regulations

VB 225H	
State or local regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other information

Date of issue : 06/25/2012
Revision date : 11/02/2016
Other information : None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.