MSDS

(Posted 9/11/2012)

The attached MSDS sheets supersede all other MSDS sheets. Please file accordingly.

VENDOR: **DEVCON C246**

STOCK#	MFG# DESCRIPTION
G22-333	31345 30-MINUTE EPOXY

Material Safety Data Sheet

ITW Consumer - Devcon/Versachem

2 TON/CLEAR WELD EPOXY RESIN

This product appears in the following stock number(s):
23145, 31345, 33345, 35345, 47609

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: 2 TON/CLEAR WELD EPOXY RESIN
General use: This information applies to the resin component of the two-part kit. Handle freshly mixed resin and hardener as recommended for the hardener. After curing, the product is not hazardous
Chemical family: Epoxy resin

MANUFACTURER
ITW Consumer - Devcon/Versachem
2107 West Blue Heron Blvd.
Riviera Beach, Florida 33404

EMERGENCY INFORMATION
Emergency telephone number
(CHEMTEL): (800) 255-3924
(CHEMTEL International): (+01) 813-248-0585
Other Calls: (561) 845-2425

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Abbr.	Weight%	ACGIH; TLV-TWA	OSHA PEL:	Other Limits
BISPHENOL A/EPICHLOROHYDRIN BASED EPOXY RESIN 25068-38-6	DGEBPA	>90	Not listed	n/e	n/e
TRADE SECRET (Non-hazardous) MIXTURE	n/e	balance	Not listed	n/e	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identify is a trade secret of our supplier and unknown to us.

3. HAZARDOUS IDENTIFICATION

Emergency Overview

Appearance, form, odor: Clear viscous liquid with little odor

WARNING!. Eye and skin irritant. Potential skin sensitizer.

Potential health effects

Primary Routes of Exposure: Eye, skin

Symptoms of acute overexposure
Skin: Moderate skin irritant Contact at elevated temperatures can cause thermal burns which may result in permanent damage May cause skin sensitization (itching, redness, rashes, hives, burning, swelling)
Eyes: Moderate eye irritant (stinging, burning sensation, tearing, redness, swelling). Contact at elevated temperatures can cause thermal burns which may result in permanent damage or blindness
Inhalation: The low vapor pressure of the resin makes inhalation unlikely in normal use. In applications where vapors (caused by high temperature) or mists (caused by mixing) are created, breathing may cause a mild burning sensation in the nose, throat and lungs.
Ingestion: Acute oral toxicity is low. May cause gastric distress (nausea, vomiting, diarrhea).
Effects of Chronic Exposure: Prolonged or repeated skin contact may cause sensitization, with itching, swelling or rashes on later exposure.

Medical Conditions Recognized as Being Aggravated by Exposure:
Preexisting eye, skin and respiratory disorders may be aggravated by overexposure to this product.

Other:
See Section 11

4. FIRST AID MEASURES

Eye Contact: Flush eyes with clean water for at least 20 minutes while gently holding eyelids open, lifting upper and lower lids.

Skin Contact: Immediately remove contaminated clothing and excess contaminant. Flush with water for at least 15 minutes. Wash thoroughly with soap and water. Consult a physician if irritation develops.

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion: Do NOT induce vomiting unless directed by medical personnel. Rinse mouth with water several times. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. If spontaneous vomiting occurs, hold the victim´s head lower than hips to prevent aspiration. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Recommended Extinguishing Media: Carbon dioxide, Dry chemical, Foam

Flash point: >400°F (204.4°C) **Method:** PMCC

Lower Explosive Limit: n/d **Upper Explosive Limit:** n/d

Special Fire-Fighting Procedures: Material will not burn unless preheated. Do not enter confined space without full bunker gear. Firefighters should wear self-contained breathing apparatus. Use water spray to cool exposed containers.

Unusual Fire/Explosion Hazards:
Heating above 149°C (300°F) in the presence of air may cause slow oxidation decomposition and above 260°C (500°F) may cause polymerization. Personnel in vicinity and downwind should be evacuated.

Hazardous Products of Combustion:
When heated to decomposition it emits fumes of Cl-, carbon monoxide, other fumes and vapors varying in composition and toxicity

6. ACCIDENTAL RELEASE MEASURES

Spill Control: Avoid personal contact. Eliminate ignition sources. Ventilate area.

Containment: Dike, contain and absorb with clay, sand or other suitable material

Cleanup: For large spills, pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly. Flush area with water.

Special procedures: Prevent spill from entering drainage/sewer systems, waterways and surface water.

7. HANDLING AND STORAGE

Handling precautions: Avoid contact with the skin and the eyes. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics or using toilet facilities. Launder contaminated clothing and protective gear before reuse. Discard contaminated leather articles. Handle mixed resin and hardener in accordance with the potential hazard of the curing agent used. Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.

Storage: Store in a cool, ventilated area away from ignition sources. Keep containers closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:

Ventilation:
Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits (or to the lowest feasible levels when limits have not been established). Although good general mechanical ventilation is usually adequate for most industrial applications, local exhaust ventilation is preferred (see ACGIH - Industrial Ventilation). Local exhaust may be required for confined areas (see OSHA CFR29 1910.146).

Other engineering controls: Have emergency shower and eye wash available.

Personal protective equipment

Eye and face protection: Chemical goggles if liquid contact is likely, or safety glasses with side shields

Skin protection: Chemical-resistant gloves (i.e. butyl) and other gear as required to prevent skin contact.

Respiratory protection: With good ventilation, none required. In poorly ventilated areas use NIOSH-approved organic vapor cartridge respirator for uncured resin, dust/particle respirators during grinding/sanding operations for cured resin, or fresh airline respirator as exposure levels dictate (see OSHA CFR29 1910.134).

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity: 1.17

Boiling Point: >500°F

Melting point: n/d

Vapor Density (Air=1): >1

Vapor Pressure: 0.03 mmHg @ 171°F

Evaporation Rate: <1 (butyl acetate = 1)

VOC: None

Solubility in water: Negligible

pH (5% solution or slurry in water): Neutral

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to Avoid: Keep away from heat, sparks and open flame.

Incompatabilities: Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines)

Hazardous Products of Combustion: When heated to decomposition it emits fumes of Cl-, carbon monoxide, other fumes and vapors varying in composition and toxicity

Conditions under which hazardous polymerization may occur: Heat is generated when resin is mixed with curing agents; Run-away cure reactions may char and decompose the resin, generating unidentified fumes and vapors which may be toxic.

11. TOXICOLOGICAL INFORMATION

Eye Contact: DGEBPA: Draize - 2 (rabbit).

Subchronic effects: No data available.

Carcinogenicity, tertogenicity and mutagenicity: 1) MUTAGENICITY: Liquid resins based on diglycidyl ether of Bisphenol A (DGEBPA), have proved to be inactive when tested by in-vivo mutagenicity assays. These resins have shown activity in in-vitro microbial mutagenicity scriining and have produced chromosomal aberrations in cultured rat liver cells. The significance of these tests to man is unknown. 2) CARCINOGENICITY: Recent 2-year bioassays in rats and mice exposed by the dermal route to DGEBPA yielded no evidence of carcinogenicity to the skin or any other organs. This study clarifies prior equivocal results from a 2-year mouse skin painting study, which were suggestive, but not conclusive, for weak carcinogenic activity. 3) The International Agency for Research on Cancer (IARC) concluded that DGEBPA is not classifiable as a carcinogen (IARC Group 3), that is human and animal evidence of carcinogenicity is inadequate.

Other chronic effects: Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure. Studies have shown bisphenol A diglycidyl ether resin to cause allergic contact dermititis.

Toxicological information on hazardous chemical constituents of this product:

Component	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr (rat)
BISPHENOL A/EPICHLOROHYDRIN BASED EPOXY RESIN 25068-38-6	11400 mg/kg	n/d	n/d
TRADE SECRET (Non-hazardous) MIXTURE	n/d	n/d	n/d

'n/d' = not determined

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12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available.

Mobility and persistence: No data available.

Environmental fate: No data available.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Recommended Method of Disposal: If resin becomes a waste, it would not be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state and local regulations. Incineration is the preferred method of disposal.

US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material.

14. TRANSPORT INFORMATION

Proper shipping name: Not regulated

Technical name: N/A

Hazard class: N/A

UN/ID Number: N/A

Packing group: N/A

Emergency Response Guide no: N/A

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA:
All ingredients of this product are listed or are exempt from listing on the TSCA Inventory.

The following RCRA code(s) applies to this material if it becomes waste:
None

Regulatory status of hazardous chemical constituents of this product:

Component	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	12B EXPORT NOTIFICATION:
BISPHENOL A/EPICHLOROHYDRIN BASED EPOXY RESIN 25068-38-6	No	No	0.0	Not required
TRADE SECRET (Non-hazardous) MIXTURE	No	No	0.0	Not required

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance List.
**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: Immediate health hazard, Delayed health hazard

California regulations: For purposes of the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop 65), this product does not contain any chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Canadian Regulations
WHMIS Hazard Class: D2B TOXIC MATERIALS,
All components of this product are on the Domestic Substances List

16. OTHER INFORMATION

Hazardous Material Information System (HMIS) rating:
Health 2* Flammability 1 Physical Hazard 1

HMIS is a registered trademark of the National Paint and Coatings Assn.

Revision Date: December 16, 2010
Revision Number: 4

The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.

Material Safety Data Sheet

ITW Consumer - Devcon/Versachem

2 TON/CLEAR WELD EPOXY HARDENER

This product appears in the following stock number(s):
23145, 31345, 33345, 35345, 47609

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tradename: 2 TON/CLEAR WELD EPOXY HARDENER
General use: The following health hazard data pertain to the hardener only. When fully cured, the mixed product is non-hazardous
Chemical family: Aliphatic amines

MANUFACTURER
ITW Consumer - Devcon/Versachem
2107 West Blue Heron Blvd.
Riviera Beach, Florida 33404

EMERGENCY INFORMATION
Emergency telephone number
(CHEMTEL): (800) 255-3924
(CHEMTEL International): (+01) 813-248-0585
Other Calls: (561) 845-2425

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Abbr.	Weight%	ACGIH; TLV-TWA	OSHA PEL:	Other Limits
NONYLPHENOL 25154-52-3	n/e	75-85	Not listed	n/e	n/e
AMINOETHYLPIPERAZINE 140-31-8	AEP	15-25	Not listed	n/e	n/e
TRADE SECRET (Non-hazardous) MIXTURE	n/e	balance	Not listed	n/e	n/e

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identify is a trade secret of our supplier and unknown to us.

3. HAZARDOUS IDENTIFICATION

Emergency Overview

Appearance, form, odor: Amber liquid with ammonia-like, fishy odor

DANGER!. Corrosive. Causes eye and skin burns. Eye, skin and respiratory irritant. Toxic by skin absorption. Potential skin sensitizer.

Potential health effects

Primary Routes of Exposure: Eye and skin contact, ingestion, inhalation, skin absorption

Symptoms of acute overexposure
Skin: Severe irritation or burns, necrosis, blistering and permanent injury Product can be absorbed through the skin and may cause nausea, headache and general discomfort
Eyes: Severe irritation or burns Overexposure may cause lacrimation, conjunctivitis, corneal damage and may cause permanent injury (i.e. blindness)
Inhalation: If the hardener is poorly ventilated, strongly heated or atomized, the vapor or mist can cause severe irritation of the respiratory tract, damage contacted tissue and produce scarring. Coughing and chest pain may result, nausea and vomiting in severe cases.

Ingestion: Causes severe damage to mucous membranes if swallowed. May cause malaise, headache, discomfort, bleeding and vomiting of blood.
Effects of Chronic Exposure: Prolonged or repeated skin contact may cause sensitization, with itching, swelling or rashes on later exposure. Repeated or prolonged exposure may cause adverse eye effects (conjunctivitis, corneal damage), or skin effects (rash, irritation, corrosion). Nonylphenol has caused allergic sensitization in humans.

Medical Conditions Recognized as Being Aggravated by Exposure:
Asthma, eczema or skin disorders and allergies, eye disease.

4. FIRST AID MEASURES

Eye Contact: Flush eyes with clean water for at least 20 minutes while gently holding eyelids open, lifting upper and lower lids.

Skin Contact: Immediately remove contaminated clothing and excess contaminant. Flush with water for at least 15 minutes. Wash thoroughly with soap and water. Consult a physician if irritation develops.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Ingestion: If swallowed, DO NOT induce vomiting. Drink water or milk. Seek medical attention immediately. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. If spontaneous vomiting occurs, hold the victim´s head lower than hips to prevent aspiration.

Notes to Physician: Highly injurious to all tissues, similar to that of ammonia or ammonia gas. Chemical pneumonitis, pulmonary edema, laryngeal edema and delayed scarring of the airway or othere affected tissues may occur following overexposure. Give supportive treatment similar to thermal burns.

5. FIRE FIGHTING MEASURES

General fire and explosion characteristics: Class IIIB.
Recommended Extinguishing Media: Carbon dioxide, Dry chemical, Alcohol foam

Flash point: >200°F (93.3°C) **Method:** CC

Lower Explosive Limit: n/d **Upper Explosive Limit:** n/d

Special Fire-Fighting Procedures: Do not enter confined space without full bunker gear. Firefighters shoud wear self-contained breathing apparatus and protective clothing to prevent all skin and eye contact. Use water spray to cool exposed containers.

Unusual Fire/Explosion Hazards:
Sudden reaction and fire may result if product is mixed with an oxidizing agent. Personnel in vicinity and downwind should be evacuated.

Hazardous Products of Combustion:
Acrid fumes, Amines, Ammonia, Oxides of nitrogen, Oxides of carbon

6. ACCIDENTAL RELEASE MEASURES

Spill Control: Avoid personal contact. Evacuate area. Eliminate ignition sources. Ventilate area.

Containment: Dike, contain and absorb with clay, sand or other suitable material

Cleanup: Using butyl rubber protective clothing and self-contained breathing apparatus, neutralize and reduce vapors with sodium bisulfate. Absorb spillage on inert material and discard in closed, nonporous containers.

Special procedures: Prevent spill from entering drainage/sewer systems, waterways and surface water. Collect run-off water and transfer to drums or tanks for later disposal. Notify local health authorities and other appropriate agencies if such contamination occurs.

7. HANDLING AND STORAGE

Handling precautions: Avoid breathing vapors or mists. Avoid contact with the skin and the eyes. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics or using toilet facilities. Launder contaminated clothing and protective gear before reuse. Discard contaminated leather articles. Handle mixed resin and hardener in accordance with the potential hazard of the curing agent used. Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product. DO NOT mix with sodium nitrite or other nitrosating agents as cancer-causing nitrosamines could be formed.

Storage: Store in a cool, ventilated area away from ignition sources. Do not store in reactive metal containers. Keep away from acids and oxidizers. Keep containers closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:

Ventilation:
Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits (or to the lowest feasible levels when limits have not been established). Although good general mechanical ventilation is usually adequate for most industrial applications, local exhaust ventilation is preferred (see ACGIH - Industrial Ventilation). Local exhaust may be required for confined areas (see OSHA CFR29 1910.146).

Other engineering controls: Have emergency shower and eye wash available.

Personal protective equipment

Eye and face protection: Full face shield with chemical goggles if liquid contact is likely, or safety glasses with side shields

Skin protection: Chemical-resistant gloves (i.e. butyl) and other gear as required to prevent skin contact. The breakthrough time of the selected gloves must be greater than the intended use period.

Respiratory protection: With good ventilation, none required. In poorly ventilated areas use NIOSH-approved organic vapor cartridge respirator for uncured resin, dust/particle respirators during grinding/sanding operations for cured resin, or fresh airline respirator as exposure levels dictate (see OSHA CFR29 1910.134).

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity: 0.97

Melting point: n/d

Vapor Pressure: <1 mmHg @ 70°F

VOC: 0

pH (5% solution or slurry in water): Alkaline

Boiling Point: >390°F

Vapor Density (Air=1): Heavier than air

Evaporation Rate: <1 (butyl acetate = 1)

Solubility in water: Soluble

10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to Avoid: Keep away from heat, sparks and open flame. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.

Incompatabilities: Strong oxidizers, Acids, Reactive metals (e.g. Na, Ca, zinc), Chlorinated organic compounds, Sodium/calcium hypochlorite, Peroxides, Materials reactive with hydroxyl compounds

Hazardous Products of Combustion: Acrid fumes, Amines, Ammonia, Oxides of nitrogen, Oxides of carbon

Conditions under which hazardous polymerization may occur: Heat is generated when resin is mixed with curing agents; Run-away cure reactions may char and decompose the resin, generating unidentified fumes and vapors which may be toxic.

11. TOXICOLOGICAL INFORMATION

Eye Contact: No data available.

Subchronic effects: No data available.

Carcinogenicity, tertogenicity and mutagenicity: No data available.

Other chronic effects: Nonylphenol has caused allergic sensitization in humans.

Toxicological information on hazardous chemical constituents of this product:

Component	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr (rat)
NONYLPHENOL 25154-52-3	580 mg/kg	2031 mg/kg	n/d
AMINOETHYLPIPERAZINE 140-31-8	2140 uL/kg	880 uL/kg	n/d
TRADE SECRET (Non-hazardous) MIXTURE	n/d	n/d	n/d

'n/d' = not determined

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12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available.

Mobility and persistence: No data available.

Environmental fate: No data available.

13. DISPOSAL CONSIDERATIONS

Please see also Section 15, Regulatory Information.

Recommended Method of Disposal: If this hardener becomes a waste, it would not be a hazardous waste by RCRA criteria (40 CFR 261). Dispose of according to applicable federal, state and local regulations. Incineration if the preferred method of disposal.

US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material.

14. TRANSPORT INFORMATION

Proper shipping name: *Corrosive liquid, basic, organic, n.o.s.

Technical name: N-Aminoethylpiperazine and Nonylphenol

Hazard class: 8

UN/ID Number: UN 3267

Packing group: III

Emergency Response Guide no: 153

Other: Marine Pollutant. (nonylphenol).

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA:
All ingredients of this product are listed or are exempt from listing on the TSCA Inventory.

The following RCRA code(s) applies to this material if it becomes waste:
None

Regulatory status of hazardous chemical constituents of this product:

Component	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	12B EXPORT NOTIFICATION:
NONYLPHENOL 25154-52-3	No	No	0.0	Not required
AMINOETHYLPIPERAZINE 140-31-8	No	No	0.0	Not required
TRADE SECRET (Non-hazardous) MIXTURE	No	No	0.0	Not required

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance List.
**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: Immediate health hazard, Delayed health hazard

California regulations: For purposes of the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop 65), this product does not contain any chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Canadian Regulations
WHMIS Hazard Class: E CORROSIVE MATERIAL, D2B TOXIC MATERIALS

16. OTHER INFORMATION

Hazardous Material Information System (HMIS) rating:
Health 3* Flammability 1 Physical Hazard 0

HMIS is a registered trademark of the National Paint and Coatings Assn.

Revision Date: December 22, 2010
Revision Number: 4

The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.