

Prepared according to 29 CFR 1910.1200

Date prepared: **JUNE 2010**
Date revised:

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MSDS No V-20 PLUS.A1

Section I

IDENTITY: *As Used on Label and List:* **V-20 PLUS "A-COMPONENT"**
Chemical Characterization: EPOXY RESIN (IRRITANT)

CMP Specialty Products
P.O. Box 213
Horsham, PA 19044

24 hr Emergency Phone: Chem-Tel **(800) 255-3924**
Information Phone No: **(215) 672-6364**

Section II - Hazardous Ingredients/Identity Information

HAZARDOUS COMPONENTS	CAS NUMBER	OSHA PEL	ACGIH TLV	WEIGHT %
Bisphenol A Epichlorhydrin	25068-38-6	Not Estab.	Not Estab.	50-100%
1,6-Hexandioldiglycidylether	16096-31-4	Not Estab.	Not Estab.	10-25%
Bisphenol F-Epichlorhydrin	9003-36-5	Not Estab.	Not Estab.	2.5-10%

Section III - Physical/Chemical Characteristics

Boiling Point:	Not Determined	Specific Gravity: (BULK DENSITY)	1.12 g/cm ³
Vapor Pressure (mm Hg.):	0.1 hPa	Melting Point:	Not Determined
Vapor Density (AIR = 1):	N.A.	Evaporation Rate (Butyl Acetate = 1):	N.A.
Solubility in Water:	Not Miscible	VOC:	0 g/L
Viscosity:	495 mPas at 20°C (495 CPS at 68°F)		
Appearance and Odor:	CLEAR LIQUID – WEAK CHARACTERISTIC ODOR		

Section IV - Fire and Explosion Hazard Data

Flash Point (Method used): **>100° C (>212° F)** Flammable Limits: **NONE** LEL: **N/A** UEL: **N/A**
PRODUCT DOES NOT SELF IGNITE AND WILL NOT EXPLODE.

Extinguishing Media: **CO₂, EXTINGUISHING POWDER OR WATER JET. FIGHT LARGER FIRES WITH A WATER JET.**

Special Fire Fighting Procedures: **WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS.**

Unusual Fire and Explosion Hazards: **BURSTING AND EXPLOSION OF CONTAINER POSSIBLE DUE TO INCREASE OF PRESSURE WHEN EXPOSED TO INCREASING HEAT. IN CASE OF FIRE, COOL NEARBY CONTAINERS WITH WATER FOG. FORMATION OF POISONOUS GASES DURING HEATING OR IN FIRES.**

Section V - Reactivity Data

Stability: Unstable: Stable: **X** Conditions to Avoid: **NONE**
Incompatibility (*Materials to Avoid*): **ACID AND OXIDIZING AGENTS**
Hazardous Decomposition or Byproducts: **REACTS VIOLENTLY WITH OXIDIZING AGENTS. REACTS WITH STRONG ACIDS AND OXIDIZING AGENTS.**
Hazardous Polymerization: May Occur: Will Not Occur: **X** Conditions to Avoid:

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation?: **N/A** Skin?: **X** Ingestion?: **X**

Health Hazards (*Acute and Chronic*): **IRRITATING TO EYES AND SKIN. MAY CAUSE SENSITISATION BY SKIN CONTACT.**

Carcinogenicity: **N/A** NTP?: **-NO** IARC Monographs?: **-NO** OSHA Regulated?: **-NO**

“A-COMPONENT” (Resin) - IRRITANT

Signs and Symptoms of Exposure: **SYMPTOMS OF POISONING MAY OCCUR AFTER SEVERAL HOURS; THEREFORE MEDICAL OBSERVATION FOR AT LEAST 48 HOURS AFTER THE ACCIDENT.**

Medical Conditions - Generally Aggravated by Exposure: **ALLERGY, ECZEMA, OR SKIN CONDITIONS**

Emergency and First Aid Procedures:

SKIN: **AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH SOAP (DO NOT USE SOLVENTS) & PLENTY OF WATER. REMOVE SOILED CLOTHING.**

EYES: **IN CASE OF CONTACT WITH THE EYES, RINSE IMMEDIATELY OPEN EYES WITH PLENTY OF WATER (10 - 15 MIN.) AND CONSULT A PHYSICIAN.**

INGESTION: **DO NOT INDUCE VOMITTING. RINSE MOUTH AND DRINK PLENTY OF WATER IN SMALL SIPS. DO NOT GIVE HOUSEHOLD REMEDIES (MILK, ALCOHOL, ETC.). CONSULT IMMEDIATELY A PHYSICIAN.**

INHALATION: **MOVE TO FRESH AIR IF FEELING ILL OR EXPERIENCING TROUBLE WITH BREATHING. CONSULT A PHYSICIAN. IN CASE OF UNCONSCIOUSNESS BRING PATIENT INTO STABLE SIDE POSITION FOR TRANSPORT.**

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled:

CONTAIN AND COLLECT SPILLAGE WITH NON-COMBUSTIBLE, ABSORBENT MATERIALS, I.E. SAND, EARTH, VERMICULITE, DIATOMACEOUS EARTH, UNIVERSAL BINDERS, SAWDUST, AND PLACE IN CONTAINER FOR DISPOSAL. EMERGENCY PROCEDURES ARE NOT REQUIRED.

Waste Disposal Method: **DISPOSE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.**

Ecological Information: **DO NOT ALLOW PRODUCT TO REACH GROUND WATER, BODIES OF WATER, OR SEWAGE SYSTEMS.**

Precautions to Be Taken in Handling and Storing:

AVOID CONTACT WITH SKIN AND EYES. OBSERVE NORMAL PRECAUTIONS WHEN HANDLING WITH CHEMICALS. DO NOT STORE IN COMMON ROOMS. DO NOT LEAVE OPEN CONTAINERS.

Other Precautions:

NONE - NO DANGEROUS MATERIALS ARE RELEASED. STORE CONTAINERS TIGHTLY CLOSED IN A COOL (FROST FREE), WELL VENTILATED PLACE. KEEP OUT OF REACH OF CHILDREN.

Section VIII - Control Measures

Respiratory Protection (*Specify Type*): **NONE, BUT AVOID BREATHING VAPORS IF POSSIBLE.**

Ventilation:	Local Exhaust:	PROVIDE GOOD VENTILATION.	Special: NONE
	Mechanical (<i>General</i>):	RECOMMENDED	Other: NONE

Protective Gloves: **NITRILE RUBBER OR NEOPRENE** Eye Protection: **SAFETY GOGGLES**
EYE WASH BOTTLE MUST BE AVAILABLE

Other Protective Clothing or Equipment: **IMPERVIOUS PROTECTIVE CLOTHING**

Work/Hygienic Practices: **WASH HANDS BEFORE BREAKS AND AFTER WORK, AND BEFORE EATING, DRINKING OR SMOKING.**

Section IX - Shipping Information

DOT (Surface & Air): **NOT REGULATED per 49CFR 171.4(c) (Marine pollutant)**
 IMO (Ocean): **Environmentally hazardous substances, liquid, NOS, 9, UN 3082, PG III**
 IATA (Air): **Environmentally hazardous substances, liquid, NOS, 9, UN 3082, PG III**

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any loss, damage, expense, direct or consequential, arising from their use.

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Date prepared: **JUNE 2010**
Date revised:

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MSDS No V-20 PLUS.B1

Section I

IDENTITY: *As Used on Label and List:* **V-20 PLUS "B-COMPONENT"**
Chemical Characterization: EPOXY HARDENER (CORROSIVE)

CMP Specialty Products
P.O. Box 213
Horsham, PA 19044

24 hr Emergency Phone: Chem-Tel
Information Phone No:

(800) 255-3924
(215) 672-6364

Section II - Hazardous Ingredients/Identity Information

HAZARDOUS COMPONENTS	CAS NUMBER	OSHA PEL	ACGIH TLV	WEIGHT %
Polyamineadduct	TRADE SECRET	N/A	N/A	50-100%
4-Tert-Butylphenol	98-54-4	N/A	N/A	10-25%
m-Phenylenebis (Methylamine)	1477-55-0	N/A	N/A	2.5-10%
Aliphatic Polyamine	TRADE SECRET	N/A	N/A	2.5-10%
2,4,6-tris(Dimethylaminomethyl)phenol	90-72-2	N/A	N/A	2.5-10%
Trimethylhexane-1,6-diamine	25620-58-0	N/A	N/A	< 2.5%

Section III - Physical/Chemical Characteristics

Boiling Point:	Not Determined	Specific Gravity: (BULK DENSITY)	0.990 g/cm³
Vapor Pressure (mm Hg.):	N.A.	Melting Point:	Not Determined
Vapor Density (AIR = 1):	N.A.	Evaporation Rate (Butyl Acetate = 1):	N.A.
Solubility in Water:	Not Miscible	VOC:	0 g/L
Viscosity:	1400 mPas at 20°C (1400 CPS at 68°F)		
Appearance and Odor:	YELLOWISH LIQUID – CHARACTERISTIC ODOR (AMINE LIKE)		

Section IV - Fire and Explosion Hazard Data

Flash Point (Method used): **> 120°C (> 248°F)** Flammability Limits : **N/A** LEL: **N/A** UEL: **N/A**
PRODUCT IS NOT SELF-IGNITING AND NOT EXPLOSIVE.

Extinguishing Media: **CO₂, EXTINGUISHING POWDER OR WATER JET. FIGHT LARGER FIRES WITH A WATER JET.**

Special Fire Fighting Procedures: **WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS.**

Unusual Fire and Explosion Hazards: **BURSTING AND EXPLOSION OF CONTAINER POSSIBLE DUE TO INCREASE OF PRESSURE WHEN EXPOSED TO INCREASING HEAT. IN CASE OF FIRE, COOL NEARBY CONTAINERS WITH WATER FOG. FORMATION OF POISONOUS GASES DURING HEATING OR IN FIRES.**

Section V - Reactivity Data

Stability: Unstable: Stable: **X** Conditions to Avoid: **HEAT, SPARKS, OPEN FLAME**
Incompatibility (*Materials to Avoid*): **STRONG OXIDIZING AGENTS**
Hazardous Decomposition or Byproducts: **NO DECOMPOSITION IF USED ACCORDING TO SPECIFICATIONS**
Hazardous Polymerization: May Occur: Will Not Occur: **X** Conditions to Avoid:

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation?: **X** Skin?: **X** Ingestion?: **X**

Health Hazards (*Acute and Chronic*): **CORROSIVE. CAN BE CORROSIVE TO SKIN. CAN CAUSE RESPIRATORY TRACT IRRITATION, EYE DAMAGE, GASTROINTESTINAL TRACT DAMAGE. CAN CAUSE NERVOUS SYSTEM EFFECTS AND SKIN SENSITIZATION.**

Carcinogenicity: **N/A** NTP?: **-NO** IARC Monographs?: **-NO** OSHA Regulated?: **-NO**

Signs and Symptoms of Exposure: **IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.**

"B-COMPONENT" (HARDENER) - CORROSIVE

Medical Conditions - Generally Aggravated by Exposure: **CAUSES BURNS, MAY CAUSE SENSITIZATION BY SKIN CONTACT.**

Emergency and First Aid Procedures:

SKIN: **AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH SOAP & PLENTY OF WATER. DO NOT USE THINNER OR SOLVENTS FOR REMOVAL. REMOVE SOILED CLOTHING.**

EYES: **IN CASE OF CONTACT WITH THE EYES, RINSE EYES THROUGH OPEN EYE LIDS IMMEDIATELY WITH PLENTY OF WATER (MINIMUM 15 MIN.) AND CONSULT A PHYSICIAN.**

INGESTION: **RINSE MOUTH AND DRINK PLENTY OF WATER IN SMALL SIPS. DO NOT INDUCE VOMITING. DO NOT DRINK MILK, ALCOHOL, OIL, ETC. CONSULT IMMEDIATELY A PHYSICIAN.**

INHALATION: **MOVE TO FRESH AIR IF FEELING ILL OR EXPERIENCING TROUBLE WITH BREATHING. CONSULT PHYSICIAN IF PROBLEMS PERSIST. IN CASE OF UNCONSCIOUSNESS BRING PATIENT INTO STABLE SIDE POSITION FOR TRANSPORT.**

NOTE: **ADVERSE REACTIONS MAY TAKE SEVERAL HOURS TO APPEAR. MEDICAL OBSERVATION SHOULD LAST AT LEAST 48 HRS AFTER ANY OF THE ABOVE INCIDENTS.**

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled:

REMOVE ALL SOURCES OF IGNITION. CONTAIN AND COLLECT SPILLAGE WITH NON-COMBUSTIBLE, ABSORBENT MATERIALS, I.E. SAND, EARTH, VERMICULITE, DIATOMACEOUS EARTH, UNIVERSAL BINDERS, SAWDUST, AND PLACE IN CONTAINER FOR DISPOSAL. EMERGENCY PROCEDURES ARE NOT REQUIRED.

Waste Disposal Method: **DISPOSE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.**

Ecological Information: **DO NOT ALLOW PRODUCT TO REACH GROUND WATER, BODIES OF WATER, OR SEWAGE SYSTEMS.**

Precautions to Be Taken in Handling and Storing:

AVOID CONTACT WITH SKIN AND EYES. OBSERVE NORMAL PRECAUTIONS WHEN HANDLING WITH CHEMICALS. DO NOT SMOKE.

Other Precautions: **STORE CONTAINERS TIGHTLY CLOSED IN A COOL (FROST FREE), WELL VENTILATED PLACE. KEEP OUT OF REACH OF CHILDREN.**

Section VIII - Control Measures

Respiratory Protection (*Specify Type*): **NONE, BUT AVOID BREATHING VAPORS IF POSSIBLE.**

Ventilation: Local Exhaust: **PROVIDE GOOD VENTILATION.** Special: **NONE**
Mechanical (*General*): **RECOMMENDED** Other: **NONE**

Protective Gloves: **NITRIL-RUBBER-LATEX** Eye Protection: **TIGHTLY SEALED SAFETY GOGGLES
EYE WASH BOTTLE MUST BE AVAILABLE**

Other Protective Clothing or Equipment: **ACID AND ALCALINE RESISTANT PROTECTIVE CLOTHING**

Work/Hygienic Practices: **WASH HANDS BEFORE BREAKS AND AFTER WORK, AND BEFORE EATING, DRINKING OR SMOKING.**

Section IX - Shipping Information

DOT (Surface & Air): **Amines, liquid, corrosive, NOS, 8, UN 2735, PG III**

IMO (Ocean): **Amines, liquid, corrosive, NOS, 8, UN 2735, PG III**

IATA (Air): **Amines, liquid, corrosive, NOS, 8, UN 2735, PG III**

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any loss, damage, expense, direct or consequential, arising from their use.