

AMERON PROTECTIVE COATINGS -- BAR-RUST, MULTI-PURPOSE EPOXY NO.: DV235 BASE --
8010-01-359-7235

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Product Identification
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Product ID:BAR-RUST, MULTI-PURPOSE EPOXY NO.: DV235 BASE

MSDS Date:11/27/1996

FSC:8010

NIIN:01-359-7235

Status Code:A

MSDS Number: CKFKL

=== Responsible Party ===

Company Name:AMERON PROTECTIVE COATINGS

Address:201 NORTH BERRY STREET

Box:1020

City:BREA

State:CA

ZIP:

92622-1020

Country:US

Info Phone Num:714-529-1951

Emergency Phone Num:(800)424-9300

Chemtrec Ind/Phone:(800)424-9300

CAGE:0Y2E4

=== Contractor Identification ===

Company Name:AMERON PROTECTIVE COATINGS

Address:201 NORTH BERRY STREET

Box:1020

City:BREA

State:CA

ZIP:92622-1020

Country:US

Phone:714-529-1951

CAGE:0Y2E4

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Composition/Information on Ingredients
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Ingred Name:TITANIUM DIOXIDE

CAS:13463-67-7

RTECS #:XR2275000

< Wt:15.

OSHA PEL:5MG/M3

ACGIH TLV:5MG/M3

Ingr

ed Name:CARBON BLACK

CAS:1333-86-4

RTECS #:FF5800000

< Wt:5.

OSHA PEL:3.5 MG/M3

ACGIH TLV:3.5 MG/M3

Ingred Name:PTHALOCYANINE BLUE

CAS:147-14-8

RTECS #:GL8510000

< Wt:5.

OSHA PEL:0.1 MG/M3

ACGIH TLV:0.3 MG/M3

Ingred Name:CHROMIUM (III) OXIDE

CAS:1308-38-9

RTECS #:GB6475000

< Wt:10.

OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3

Ingred Name:SYNTHETIC IRON OXIDE (YELLOW)

CAS:51274-00-1

< Wt:10.

OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3

Ingred Name:MONOAZO YELLOW

CAS:7023-61-2

< Wt:5.

OSHA PEL:5MG

/M3

ACGIH TLV:5MG/M3

Ingred Name:RED YELLOW PIGMENT

CAS:6528-34-3

< Wt:5.

OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3

Ingred Name:ORANGE PIGMENT

CAS:3468-63-1

RTECS #:QL3854000

< Wt:5.

OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3

Ingred Name:IRON OXIDE (RED)

CAS:1332-37-2

RTECS #:NO7380000

< Wt:5.

OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3

Ingred Name:IRON OXIDE RED

CAS:1309-37-1

RTECS #:NO7400000

< Wt:15.

OSHA PEL:5 MG/M3

Wt:25.
OSHA PEL:0.1 MG/M3
ACGIH TLV:0.1 MG/M3

Ingred Name:MAGNESIUM SILICATE
CAS:14807-96-6
RTECS #:WW2710000
< Wt:35.
OSHA PEL:2 MG/M3
ACGIH TLV:2 MG/M3

Ingred Name:MICA
CAS:12001-26-2
RTECS #:VV8760000
< Wt:5.
OSHA PEL:3 MG/M3
ACGIH TLV:3 MG/M3

Ingred Name:ALUMINUM FLAKE
CAS:7429-90-5
RTECS #:BD0330000
< Wt:10.
OSHA PEL:5 MG/M3
ACGIH TLV:5 MG/M3

Ingred Name:VM & NAPHTHA VP= 5.2
CAS:64742-48-9
= Wt:2.7
OSHA PEL:300 PPM (1350 MG/M3)
ACGIH TLV:300 PPM (1370 MG/M3)

Ingred Name:XYLE
NE
CAS:1330-20-7
RTECS #:ZE2100000
= Wt:1.29
OSHA PEL:100 PPM (435MG/M3)
ACGIH TLV:100 PPM (435MG/M3)
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:BUTYL ALCOHOL
CAS:71-36-3
RTECS #:EO1400000
= Wt:7.7
OSHA PEL:50 PPM (150MG/M3)
ACGIH TLV:50 PPM (150MG/M3)
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:PROPYLENE GLYCOL METHYL ETHER ACETATE VP= 3.70
CAS:108-65-6
RTECS #:AI8925000
= Wt:1.57

Ingred Name:METHYL N-AMYL KETONE
CAS:110-43-0
RTECS #:MJ5075000
= Wt:2.23

(235MG/M3)
ACGIH TLV:50 PPM(235MG/M3)

Ingred Name:POLYSILOXANE COPOLYMER ADDITIVE
RTECS #:PO1001065
< Wt:5.
OSHA PEL:15 MG/M3
ACGIH TLV:6 MG/M3

Ingred Name:REACTIVE DILUENT VP= 0.60
CAS:68609-97-2
< Wt:5.

Ingred Name:POLYISOCYANITE RESIN VP= 0.036
RTECS #:PI1002499
< Wt:5.
OSHA PEL:.005PPM (.04MG/M3)
ACGIH TLV:.005PPM (.04MG/M3)

Ingred Name:EPOXY RESIN VP= 0.03 @ 170 'F
CAS:25068-38-6
RTECS #:CE6880000
< Wt:20.

Ingred Name:EPOXY RESIN VP= 4.0
CAS:25036-25-3
< Wt:25.

Ingr
ed Name:HYDROCARBON RESIN
RTECS #:HR1001150
< Wt:15.
OSHA PEL:5 MG/M3
ACGIH TLV:5 MG/M3

Ingred Name:1,2,4-TRIMETHYLBENZENE
CAS:95-63-6
RTECS #:DC3325000
= Wt:4.33
OSHA PEL:25 PPM (125MG/M3)
ACGIH TLV:25 PPM (125MG/M3)

Ingred Name:LIGHT AROMATIC SOLVENT NAPHTHA (PETROLEUM)
CAS:64742-95-6
RTECS #:WF3400000
= Wt:5.84
OSHA PEL:100 PPM

===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Health Hazards Acute and Chronic:S

KIN: SEVERE IRRITANT. SENSITIZATION

OR ALLERGIC REACTION, SUCH AS RASH OR HIVES. CAN BE ABSORBED THROUGH THE SKIN. CAN CAUSE DEFATTING AND DRYING OF SKIN.

INHALATION: IRRITANT. DELAYED LUNG INJURY. RESPIRATORY SENSITIZATION AND ALLERGIC REACTION SUCH AS ASTHMA. CENTRAL NERVOUS SYSTEM DAMAGE. DO NOT USE IF YOU HAVE CHRONIC LUNG OR BREATHING PROBLEMS, OR IF YOU HAVE EVER HAD A REACTION TO ISOCYANATES. WELDING FUMES CAN CAUSE METAL FUME FEVER. *

Effects of Over

exposure: VAPOR OR SPRAY MIST OR SPATTERED MATERIAL CAN BE HARMFUL. IRRITATING TO EYES, SKIN, AND IF INHALED TO NOSE AND THROAT. EXCESSIVE OR PROLONGED INHALATION CAN CAUSE HEADACHE, NAUSEA OR DIZZINESS. REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS IS ASSOCIATED WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL ABUSE, MISUSE OR OTHER MASSIVE EXPOSURE TO SOLVENTS MAY CAUSE MULTIPLE ORGAN DAMAGE AND/OR DEATH.

Medical Condition Aggravated by Exposure:

KIDNEYS, LIVER, SKIN, EYES, RESPIRATORY, ALLERGIES LUNGS.

===== First Aid Measures =====

First Aid: INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. TREAT SYMPTOMATICALLY. SEE PHYSICIAN. SKIN: WASH THOROUGHLY WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. CONSULT PHYSICIAN IF IRRITATION PERSISTS. EYES: FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION. INGESTION: DRINK 1 OR 2 GL

ASSES OF WATER TO DILUTE. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. DO NOT INDUCE VOMITING. CONTACT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. TREAT SYMPTOMATICALLY.

===== Fire Fighting Measures =====

Flash Point Method: SCC

Flash Point: =37.8C, 100.F
100F

Lower Limits: 0.90

Upper Limits: 13.10

Extinguishing Media: CO2, FOAM, DRY CHEMICAL.

Fire Fighting Procedures: WEAR FULL PROTECTIVE EQUIPMENT, SELF-CONTAINED BREATHING APPARATUS

US. WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT.

Unusual Fire/Explosion Hazard:CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT AND PRESSURE BUILD UP. ISOLATE FROM ELECTRICAL EQUIPMENT, SPARKS, HEAT AND OPEN FLAME. VAPORS MAY SPREAD LONG DISTANCES, CAUSE FLASH FIRE OR IGNITE EXPLOSIVELY. WATER OR FOAM MAY CAUSE FROTHING DUE TO GENERATION OF CARBON DIOXIDE.

===== Accident
al Release Measures =====

Spill Release Procedures:REMOVE IGNITION SOURCES.AVOID BREATHING VAPORS.VENTILATE AREA.USE ABSORBENT,INERT MATERIALS.(NOT SAWDUST.)REMOVE ABSORBENT W/NONSPARKING TOOLS.PLACE IN SEPARATE CONTAINER.DON'T PLACE UNREACTED,MIXED MATERIAL CONTAINING ALUMINUM/ZINC IN SEALED SCRAP RECEPTACLE CONTAINING WATER/OTHER MIXED MATERIAL;GASSING MAY CAUSE CONTAINER TO BURST.KEEP OUT OF SEWERS&WATERWAYS.IF ENTRY IS THREATENED/OCCURS,NOTIFY LOCAL AUTHORITIES.

===== Handling and Storage =====

Handling and Storage Precautions:KEEP CONTAINER CLOSED, UPRIGHT WHEN NOT IN USE. STORE IN COOL, DRY, WELL-VENTILATED AREA. AVOID PROLONGED STORAGE TEMPERATURES ABOVE 100' F. DO NOT RESEAL IF WATER-CONTAMINATED.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:WEAR NIOSH/MSHA CERTIFIED RESPIRATOR DESIGNED TO REMOVE A COMBINATION OF PARTICULATES (DUST OR SPRAY MIST) AND VA

POR. WHEN BRUSHING, ROLLING OR SPREADING SELECT THE APPROPRIATE RESPIRATORY PROTECTION FOR THE CONDITIONS. FOR SPECIFIC CONDITIONS, REFER TO CURRENT "NIOSH POCKET GUIDE TO CHEMICAL HAZARDS".**

Ventilation:SUFFICIENT VENTILATION, IN VOLUME AND PATTERN, SHOULD BE PROVIDED TO KEEP AIR CONTAMINANT CONCENTRATIONS BELOW TLV LIMITS.****

Eye Protection:SOLVENT RESISTANT GLASSES WITH SPLASH GUARDS OR FACE SHIELD

Other Protective Equipment:DEPENDENT UPON APPLICATION METHOD WEAR

RESISTANT COVERALLS, GLOVES AND SHOE COVERINGS TO PREVENT SKIN CONTACT. CONSULT 29CFR 1910.132, 133, 136, 138; ANSI Z87.1. USE EXPLOSION & SPARK PROOF EQUIPMENT.

Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING, SMOKING OR USING TOILET. LAUNDRY CONTAMINATED CLOTHING BEFORE USE.

Supplemental Safety and Health

** CONFINED/RESTRICTED VENTILATION AREAS USE AIRLINE RESPIRATORS/HOODS. REFER-29CFR, OSHA PARTS 1910 & 1915 FOR COATING OPERATIONS. PART 1910.146 CONFINED SP

ACES: ANSI Z88.2, PRACTICES FOR RESPIRATORY PROTECTION. POSITIVE PRESSURE, AIR SUPPLIED RESP. (NIOSH TC 19C) RECOMMENDED. ***

===== Physical/Chemical Properties =====

Boiling Pt: >117.8C, 244.F
B.P. Text: 244-336F
Vapor Density: >AIR
Spec Gravity: 11.3 LBS/GAL.
VOC Pounds/Gallon: 288
Evaporation Rate & Reference: LOW = 0.10; HIGH = 1.00
Appearance and Odor: LIQUID/ SOLVENT ODOR
Percent Volatiles by Volume: 35.8

===== Stability and Reactivity Data =====

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Stability Indicator/Materials to Avoid: YES
STRONG OXIDIZERS, ACIDS, ALKALIES, WATER.
Stability Condition to Avoid: HEAT, OPEN FLAME, ARC OR SPARKS. WATER OR MOISTURE. AMINES UNDER UNCONTROLLED CONDITIONS.
Hazardous Decomposition Products: CO, CO2. NOX, HYDROGEN CHLORIDE FUMES. IRON OXIDE FUMES. CHLORINE. ALDEHYDES. ALUMINUM OXIDE FUMES. ISOCYANATES. PHENOLS. SO_x, TOXIC GASES OR FUMES.

===== Toxicological Information =====

Toxicologica

I Information: HIGH FLASH NAPHTHA: LD50 3.1 G/KG; LC50 3870 PPM METHYL N-AMYL KETONE: LD50 12 G/KG; LC50 4000 PPM TITANIUM DIOXIDE: LD50 10G/KG (DERMAL RABBIT), LC50 6820PPM (INHALE, RAT) XYLENE: LD50 3.9G /KG (DERMAL, RABBIT) LC50 6700PPM (INHALE, RAT) VM & P NAPHTHA: LC50 3400 PPM (INHALE RAT) PROPYLENE GLYCOL: LD50 12G/KG (DERMAL RAB.) LC50 3000 PPM (INHALE. RAT) BUTYL ALCOHOL: LD50 4.2G/KG; LC50 8000 PPM

===== Ecological Informati

on =====

Ecological:EPA WAST NO.: D001 VAPOR/PARTICULATE RESP.(NIOSH?MSHA TC23C)MAY BE APPROPRIATE WHERE AIRBORNE MONITORING SHOWS VAPOR LEVELS BELOW TEN TIMES APPLICABLE EXPOSURE LIMITS.****REMOVE WELDING OR FLAME CUTTING DECOMPOSITION PRODUCTS. REFER TO 29 CFR, OSHA PARTS 1910 AND 1915 FOR COATING OPERATIONS, PART 1910.146, CONFINED SPACES.

===== Disposal Considerations =====

Waste Disposal Methods:PLACE IN SEPARATE, APPROPRIATE, CLOSED CONTAINER IN ACCORDANCE WITH ALL APPLICABLE LOCAL, DSTATE, AND FEDERAL REGULATIONS. THIS MATERIAL HAS NOT BEEN TESTED BY TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP).

===== MSDS Transport Information =====

Transport Information:DOT: PAINT UN# 1263

===== Regulatory Information =====

SARA Title III Information:ALL INGREDIENTS ARE ON TSCA INVENTORY OR ARE EXEMPT. (SARA, CERCLA, HAPS) TOXIC CHEMICAL SUBJECT TO REPORTING

REQUIREMENTS OF SARA AND CERCLA (40 CFR 302, 355, 372) OR HAPS (40 CFR 63) 1) BUTYL ALCOHOL 2) CHROMIUM (III) OXIDE 3) ALUMINUM FLAKE 4) XYLENE

State Regulatory Information:CALIFORNIA PROPOSITION 65: WARNING! THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. WARNING! THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. 1) HIGH FLASH POINT

2) CRYSTALLINE SILICA 3) EPOXY RESIN 4) POLYISOCYANATE RESIN 5) XYLENE 6) MAGNESIUM SILICATE 7) SILICA

===== Other Information =====

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