Material Safety Data Sheet

24 Hour Assistance: 1-847-367-7700 Rust-Oleum Corp. www.rustoleum.com

Section 1 - Chemical Product / Company Information

SEM-EPOXY 1-GL 2PK PRO BASE

Product Name: DUNE TAN Revision Date: 05/06/2011

Identification

Number: 238549

Product Use/Class: Floor Coating/Epoxy
Supplier: Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Preparer: Regulatory Department

Manufacturer: Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Section 2 - Composition / Information On Ingredients

		Weight % Less				OSHA PEL
Chemical Name	CAS Number	<u>Than</u>	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	CEILING
Epoxy Resin	25085-99-8	40.0	N.E.	N.E.	N.E.	N.E.
Magnesium Silicate	14807-96-6	20.0	2 mg/m3	N.E.	0.1 mg/m3 (Respirable)	N.E.
Titanium Dioxide	13463-67-7	20.0	10 mg/m3	N.E.	15 mg/m3 (Total Dust)	N.E.
Xylene	1330-20-7	10.0	100 ppm	150 ppm	100 ppm	N.E.
Methyl Isobutyl Ketone	108-10-1	5.0	50 ppm	75 ppm	100 ppm	N.E.
Ethylbenzene	100-41-4	5.0	100 ppm	125 ppm	100 ppm	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: High vapor concentrations can irritate eyes, nose and respiratory passages. Causes nose and throat irritation. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Harmful if inhaled. Harmful if swallowed. Causes eye irritation. Causes skin irritation. Flammable liquid and vapor.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure to this material. Prolonged or repeated skin contact may cause irritation. Causes skin irritation. Allergic reactions are possible.

Effects Of Overexposure - Inhalation: Prolonged or excessive inhalation may cause respiratory tract irritation. High vapor concentrations are irritating to the eyes, nose, throat and lungs. May cause headaches and dizziness. Avoid breathing vapors or mists. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Harmful if inhaled.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed. Harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula.

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, do not induce vomiting. If victim is conscious and alert, give 2 to 4 cupfuls of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

Flash Point: 80 F (Setaflash)

Extinguishing Media: Film Forming Foam, Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire And Explosion Hazards: Isolate from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat due to buildup of steam. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Eliminate all ignition sources; use explosion-proof equipment. Place material in a container and dispose of according to local, provincial, state and federal regulations. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

Section 7 - Handling And Storage

Handling: Avoid prolonged or repeated contact with skin. Follow all MSDS/label precautions even after container

is emptied because it may retain product residues. Use with adequate ventilation. Use only in a well-ventilated area. Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Keep away from heat, sparks, flame and sources of ignition. Keep container closed when not in use.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use impervious gloves to prevent skin contact and absorption of this material through the skin.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further guidance on types of personal protective equipment and their applications. Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Remove contaminated clothing immediately and launder before reuse. Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Vapor Density:Heavier than AirOdor:Solvent LikeAppearance:LiquidEvaporation Rate:Slower than Ether

Solubility in H2O: Slight Freeze Point: N.D. Specific Gravity: 1,450 pH: N.D.

Physical State: Liquid

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid contact with strong acid and strong bases. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: By open flame, carbon monoxide and carbon dioxide. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde When heated to decomposition, it emits acrid smoke

and irritating fumes.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions. May form peroxides of unkown stability

Section 11 - Toxicological Information

Chemical Name	<u>LD50</u>		
Epoxy Resin	>5000 mg/kg (Rat)	N.E.	

Magnesium Silicate N.E. TCLo: 11 mg/m3 (Inhalation)

Titanium Dioxide >7500 mg/kg (Rat, Oral) N.E.

Xylene 4300 mg/kg (Rat, Oral) 5000 ppm (Rat, Inhalation, 4Hr)

Methyl Isobutyl Ketone N.E. N.E. Ethylbenzene 3500 mg/kg (Rat, Oral) N.E.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components. Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

	Domestic (USDOT)	International (IMDG)	Air (IATA)
Proper Shipping Name:	Consumer Commodity	Paint	Paint
Hazard Class:	ORM-D	3	3
UN Number:	N.A.	UN1263	UN1263
Packing Group:	N.A.	III	III
Limited Quantity:	No	IMDG 34-08, 3.4.7	Yes

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

 Chemical Name
 CAS Number

 Xylene
 1330-20-7

 Methyl Isobutyl Ketone
 108-10-1

 Ethylbenzene
 100-41-4

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Chemical NameCAS NumberC-9 Hydrocarbon Resin Unsaturated71302-83-5

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical NameCAS NumberC-9 Hydrocarbon Resin Unsaturated71302-83-5

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: B2 D2A D2B

Section 16 - Other Information

HMIS Ratings:

Health: 2* Flammability: 3 Reactivity: 0 Personal Protection: X

NFPA Ratings:

Health: 2 Flammability: 3 Instability: 0

VOLATILE ORGANIC COMPOUNDS, g/L: 235

REASON FOR REVISION: Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this material safety data sheet. However, because the

conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

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Material Safety Data Sheet

Vernon Hills, IL 60061

24 Hour Assistance: 1-847-367-7700

Rust-Oleum Corp. www.rustoleum.com

1. Identification

SEM-EPOXY 1-GL 2PK 9100 ACTVTR PART Revision Date: Product Name: 4/18/2012

Α

Identification Number: 214556

Product Use/Class: Floor Coating/Epoxy

Rust-Oleum Corporation **Rust-Oleum Corporation** Manufacturer:

> 11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Supplier: 11 Hawthorn Parkway

USA

Preparer: Regulatory Department

2. Hazard Identification

EMERGENCY OVERVIEW: Causes skin and eye burns. May cause allergic skin reaction. Flammable liquid and vapor. Vapors irritating to eyes and respiratory tract. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Extremely irritating to the eyes and may cause severe damage, including blindness.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Contact causes severe skin irritation and possible burns. May cause allergic skin reaction.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. May cause allergic respiratory reaction. High vapor concentrations are irritating to the eyes, nose, throat and lungs. May cause headaches and dizziness.

EFFECTS OF OVEREXPOSURE - INGESTION: Corrosive and may cause severe and permanent damage to mouth, throat and stomach.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

3. Composition/Information On Ingredients

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Limestone	1317-65-3	60.0	3 mg/m3 (Respirable)	N.E.	5 mg/m3 (Respirable)	N.E.
Polyamide Resin	68424-41-9	25.0	N.E.	N.E.	N.E.	N.E.
Xylene	1330-20-7	10.0	100 ppm	150 ppm	100 ppm	N.E.
n-Butanol	71-36-3	10.0	20 ppm	N.E.	100 ppm	N.E.
Para-Nonyl Phenol	84852-15-3	5.0	N.E.	N.E.	N.E.	N.E.
Ethylbenzene	100-41-4	5.0	100 ppm	125 ppm	100 ppm	N.E.

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4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

5. Fire-fighting Measures

Flash Point, °F 83 (Setaflash)

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors may form explosive mixtures with air. Isolate from heat, electrical equipment, sparks and open flame.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Evacuate area and fight fire from a safe distance.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Wash hands before eating.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking.

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9. Physical and Chemical Properties

Vapor Density **HEAVIER THAN AIR** Odor: Solvent Like Appearance: Liquid **Evaporation Rate:** Slower than Ether

Solubility in Water: Slight Freeze Point: N.D. Specific Gravity: 1.527 pH: N.D.

Physical State: Liquid

(See section 16 for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological Information

Chemical Name	<u>LD50</u>	<u>LC50</u>
Limestone	N.E.	N.E.
Polyamide Resin	2000 mg/kg	N.E.
Xylene	4300 mg/kg (Rat, Oral)	5000 ppm (Rat, Inhalation, 4Hr)
n-Butanol	2500 mg/kg (Rat)	>8000 ppm (Rat, Inhalation, 4Hr)
Para-Nonyl Phenol	1300 mg/kg (Rat, Oral)	N.E.
Ethylbenzene	3500 mg/kg (Rat, Oral)	N.E.

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

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13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

14. Transport Information

	Domestic (USDOT)	International (IMDG)	Air (IATA)
Proper Shipping Name:	Consumer Commodity	Paint	Paint
Hazard Class:	ORM-D	3	3
UN Number:	N.A.	UN1263	UN1263
Packing Group:	N.A.	III	III
Limited Quantity:	Yes	Yes	Yes

15. Regulatory Information

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U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b)components exist in this product.

International Regulations:

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: B2 D2A D2B

16. Other Information

HMIS Ratings:

Health: 3 Flammability: 3 Physical Hazard: 0 Personal Protection: X

NFPA Ratings:

Health: 3 Flammability: 3 Instability 0

VOLATILE ORGANIC COMPOUNDS, q/L: 264

REASON FOR REVISION: Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this material safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.