

SAFETY DATA SHEET



SDS No.: AC2016.1
Date Created: May 10, 2016
Supersedes: previous issue

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Apoxie® Clay- (Parts A and B and combined A + B; native and white)
General Use: Sculpting
Product Description: Two part system. Part A contains base material, resin, and colorant (if any). Part B contains the base material and the catalyst. Part A and B are designed to be mixed together 50:50 by weight. Cured Apoxie® Clay is a hard & durable material designed to be permanent. Finished product will accept tooling and most paints and finishes.

MANUFACTURER
Aves Studio, LLC
PO Box 344, River Falls, WI 54022 U.S.A.
715-386-9097

EMERGENCY TELEPHONE NUMBER:
Rocky Mountain Poison and Drug Center
303-739-1110

2. HAZARD IDENTIFICATION

NOTE: This information is a composite of Parts A and B which are designed to be combined. Components having exposure limits established by recognized authorities

Component	EXPOSURE LIMITS 8 hrs TWA (ppm)				
	OSHA PEL	ACGIH TLV	Australian Std	NIOSH REL	AIHA WEEL
Talc	20 mppcf	2 mg/m ³ Respir.	2.5 mg/m ³	2 mg/m ³ Respir.	
Triethylenetetraamine	None Established	None Established	None Established	None Established	
Blend of Oils	None Established	5 mg/m ³	5 mg/m ³	None Established	
Perlite	15 mg/m ³ Total 5 mg/m ³ Respir.	Withdrawn	10 mg/m ³	10 mg/m ³ Total 5 mg/m ³ Respir.	
*Titanium Dioxide	15 mg/m ³ Total	1 mg/m ³	10 mg/m ³	None Established	
**Crystalline silica	0.1 mg/m ³	0.1 mg/m ³	0.1 mg/m ³	0.05 mg/m ³	

* This SDS covers available product colors. These are potential colorants/colorant additives that can be in the product depending on the color.

** Exists as an inconsequential trace element in some ingredients.

Talc, perlite, titanium dioxide, and crystalline silica exposure only occurs if the cured product is sanded in an aggressive manner so as to produce dust.

PRODUCT IN CURED FORM CONFORMS TO SAFETY STANDARD ASTM INTERNATIONAL D4236

The Apoxie® Clay two part system as designed in the quantities provided is safe for normal use by adults. Not intended for use by children.

EMERGENCY OVERVIEW

GHS CLASSIFICATION OF SUBSTANCE

Flammable Liquid	Not Applicable
Aspiration Toxicity	Not Applicable
Skin Irritation	Skin sensitizer - Category 1B
Eye Irritation	Category 2B
Carcinogenicity	No classification Under GHS
Specific Organ Toxicity Repeated Exposure	No classification Under GHS

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Specific Organ Toxicity Single Exposure	No Classification Under GHS
Reproductive Toxicity	No Classification Under GHS
Acute Toxicity	No Classification Under GHS
Germ Cell mutagenicity	No Classification Under GHS
Hazardous to the aquatic env.	No Classification Under GHS

GHS LABEL ELEMENTS



WARNING

May cause an allergic skin reaction and eye irritation.

Hazard Statements

H317 - May cause an allergic skin reaction.

H320 - Causes eye irritation.

Precautionary Statements

General:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Prevention:

P261 - Avoid breathing dust.

P280 - Wear protective gloves when combining parts A and B together.

Wear dust mask when sanding the cured product.

Response:

P302 + 352 - If on skin: wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice /attention.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

Storage/Disposal:

None Applicable

UN GHS

According to the Globally Harmonized Standard for Classification and Labeling (GHS), this product is considered hazardous based on the potential for skin and eye irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Applicable to parts A and B when combined into final product

<u>Component</u>	<u>wt%</u>	<u>CAS Registry #</u>
Talc	20 - 50	14807-96-6
Aluminum salts	3 - 10	Mixed
Magnesium salts	3 - 8	Mixed
Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers	15 - 20	025085-99-8
Chlorite Group Minerals	<1	1318-59-8
*Titanium Dioxide	1 - 8	13463-67-7
Blend of Oils	.5 - 5	Mixed
**Crystalline silica	0.5 - 4	14808-60-7
Triethylenetetraamine	<1	112-24-3
Diidomethyl-p-tolylsulfone	<0.05	020018-09-1
Expanded Perlite	.5 - 8	93763-70-3

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4. FIRST AID MEASURES

INHALATION:

Only a significant route of exposure when cured product is sanded. If the victim has difficulty breathing, move them to fresh air and keep at rest. If problem persists or worsens, seek medical attention.

EYE CONTACT:

Remove contact lens (if present). Rinse eyes immediately with plenty of clean water for at least 15 minutes. If necessary, gently hold the eyelid open during the flush. If eye irritation persists, seek medical attention.

SKIN CONTACT:

Uncured product components may cause skin irritation and sensitization especially in persons with pre-existing skin allergies. After handling, wash hands with soap and water. Remove and launder any contaminated clothing. If irritation persists or other symptoms occur, seek medical attention.

INGESTION:

Not a significant route of exposure. If ingested, do not induce vomiting. If discomfort or other symptoms persist, seek medical attention showing label and SDS.

5. FIRE FIGHTING MEASURES

Flashpoint and Method: Not Applicable

Flammable Limits: Not Applicable

Autoignition Temperature: Not Applicable

GENERAL HAZARD:

Unused uncured A+B are nonflammable and non-combustible under criteria provided in U.S. DOT 49 CFR173.124 & Appendix E. Packaging is combustible but is not a significant fire hazard.

FIRE FIGHTING INSTRUCTIONS:

Water fog or fine spray; dry chemical fire extinguishers; carbon dioxide fire extinguishers; foam; alcohol resistant foams (ATC type).

FIRE FIGHTING EQUIPMENT:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. For small outdoor fires, which may be easily extinguished with a portable fire extinguisher, use of protective equipment is generally unnecessary.

FURTHER INFORMATION:

During a fire, smoke may contain the original material in addition to combustion products which might be more irritating.

HAZARDOUS COMBUSTION PRODUCTS:

Carbon monoxide, carbon dioxide, oxides of nitrogen, and organics such as aldehydes and amines depending on the heat of the fire.

6. ACCIDENTAL RELEASE MEASURES

Applicable to Parts A or B or cured Apoxie® Clay.

LAND SPILL RESPONSE:

Material is a solid. Scrape, shovel, or otherwise gather up the material. Dispose as a solid waste. Waste is not hazardous unless mixed with hazardous material(s).

WATER SPILL:

Unreacted parts A and B have a putty-like consistency with limited water solubility. They have limited solubility in water. If unused product and or final material is spilled into a water body it is expected to sink to the bottom and appear as stone/rock in the water body. Accidental spill size is not expected to be a response concern.

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RECOMMENDED DISPOSAL:

Not a U.S. Environmental Protection Agency RCRA hazardous waste unless mixed with something that would render it hazardous.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE: Ambient

STORAGE PRESSURE: Atmospheric

GENERAL:

Store in original sealed package at ambient temperature (below 120 F/49 C) in a dry location. Keep containers sealed. Store out of direct sunlight, in a dry location. Protect package against physical damage. Product is freeze-thaw stable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

NOTE: This information is a composite of Parts A and B which are designed to be combined.

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

Component	EXPOSURE LIMITS 8 hrs TWA (ppm)				
	OSHA PEL	ACGIH TLV	Australian Std	NIOSH REL	AIHA WEEL
Talc	20 mppcf	2 mg/m ³ Respir.	2.5 mg/m ³	2 mg/m ³ Respir.	
Triethylene tetraamine	None Established	None Established	None Established	None Established	
Blend of Oils	None Established	5 mg/m ³	5 mg/m ³	None Established	
Perlite	15 mg/m ³ Total 5 mg/m ³ Respir.	Withdrawn	10 mg/m ³	10 mg/m ³ Total 5 mg/m ³ Respir.	5
*Titanium Dioxide	15 mg/m ³ Total	1 mg/m ³	10 mg/m ³	None Established	
*Aluminum	15 mg/m ³ Total	15 mg/m ³ Total	10 mg/m ³	None Established	
**Crystalline silica	0.1 mg/m ³	0.1 mg/m ³	0.1 mg/m ³	0.05 mg/m ³	

* This SDS covers available product colors. These are potential colorants/colorant additives that can be in the product depending on the color.

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Talc, perlite, titanium dioxide, and crystalline silica exposure only occurs if the cured product is sanded in an aggressive manner so as to produce dust.

ENGINEERING CONTROLS: None Needed

PERSONAL PROTECTION:

Wear protective gloves (nitrile or equivalent), when mixing parts A and B together.

Wear dust mask if sanding finished material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	Not Applicable	Vapor Density:	Not Applicable
Specific Gravity:	Cured: 1.7 [water=1]	Evaporation Rate:	Not Applicable
Solubility in Water:	Negligible for Parts A & B; Cured Apoxie® Clay is insoluble	Freezing Point:	Freeze/Thaw Stable
pH:	Cured A+B pH neutral	Odor:	Part A or B slight; cured no odor.
Boiling Point:	Not Applicable	Appearance:	Depends on the color selected
Viscosity:	Putty-like	Physical State:	Solid
Flash Point:	Not Applicable	Flammable Range:	Not Applicable

10. STABILITY AND REACTIVITY

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GENERAL:

Material is stable after parts A and B are combined.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Avoid combining parts A and B with any materials other than themselves according to manufacturer's instructions. Avoid contact with strong acids or bases and temperatures greater than 572 F/300 C.

HAZARDOUS DECOMPOSITION:

Carbon dioxide, carbon monoxide, oxides of nitrogen and organics depending on nature of decomposition.

11. TOXICOLOGICAL INFORMATION

TOXICITY TO ANIMALS:

<u>Component</u>	<u>Acute Test</u>	<u>Value</u>	<u>Species</u>
Epoxy resin	Oral LD50	>15,000 mg/kg	Rat
Epoxy resin	Dermal LD50	23,000 mg/kg	Rabbit
Talc	Oral LD50	>5000 mg/kg	Rat
Talc	Dermal	animals developed skin dryness	Rabbit
Triethylenetetraamine	Oral LD50	>5000 mg/kg	Rat
Triethylenetetraamine	Dermal LD50	>5000 mg/kg	Rabbit
Perlite	Oral LD50	>10 gm/kg	Rat
Perlite	Chronic Inhalation	226 mg/m ³ NOAEL	guinea pigs/rats

ROUTES OF ENTRY:

Skin contact and eye contact; respiratory contact as a dust; ingestion as a solid.

CHRONIC EFFECTS ON HUMANS:

Except for potential skin sensitization, repeated exposures to the uncured resins are not anticipated to cause any significant adverse effects. Wearing gloves while blending parts A & B will greatly reduce risk of sensitization.

Eyes:

Eye contact with the uncured components may cause irritation in susceptible individuals.

Skin:

Uncured component contact with the skin may cause allergic reaction in susceptible individuals. Contact with the skin may cause mild irritation, redness, and discomfort which is transient.

Ingestion:

Hazard presented by ingestion is expected to be physical blockage rather than gastrointestinal problems particularly in the case of the cured product.

Inhalation:

The two parts are physically solids and are not sufficiently volatile to produce a significant vapor inhalation hazard. Sanding the cured resin is expected to create some respirable dust. Wear a dust mask to control exposure if sanding.

12. ECOLOGICAL INFORMATION

No information available. Cured product is not soluble in water.

PRODUCTS OF BIODEGRADATION:

Cured product is stable and does not biodegrade in air or water.

13. DISPOSAL CONSIDERATIONS

Product is not a U.S. EPA RCRA hazardous waste based on components. Dispose of in accordance with local, state, federal regulations. Not a hazardous waste unless combined with hazardous materials.

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14. TRANSPORT INFORMATION

The following proper shipping name, hazard class and packing group are in accordance to transportation regulations.

Mode of Transportation	Domestic Surface (USDOT)	Domestic Air	International Air (IATA)
UN Number	Not Regulated	Not Regulated	Not Regulated
Proper Shipping Name			
Hazard Class			
Packing Group			
Hazard Label			
Handling Label(s)			
ERG#:			
Packaging Instructions:			

15. REGULATORY INFORMATION

Chemical Inventory Status

Ingredients listed on: TSCA, DSL, Japan, and EC inventories.

SARA Section 302 - Emergency Planning Notification - None

SARA Section 304 - Emergency Release Notification - None

SARA 311/312 - Hazard categories for SARA Section 311/312 Reporting - None

CERCLA - Hazardous Substance - None

RCRA Hazardous Waste Classification - None

California Proposition 65: Titanium Dioxide is listed as airborne, unbound particles of respirable size on the list. **This is not applicable to this product in either uncured or cured solid state.** Crystalline silica is listed, however, silica exposure has been demonstrated to be below detection limits for products with similar crystalline silica concentrations when sanded in a similar manner to the cured Apoxie® Clay. Otherwise no components are listed.

16. OTHER INFORMATION

UNITED STATES NATIONAL FIRE PROTECTION ASSOCIATION (U.S. NFPA)

NFPA Category	Apoxie® Clay
Health:	1
Fire:	0
Reactivity:	0

CREATION/REVISION SUMMARY:

Created on: 10-May-16

Cheryl Sykora, CIH, CSP, CHMM
Registered Specialist, SDS and Label Authoring #118534
LEGEND TECHNICAL SERVICES, INC.
88 Empire Drive, Saint Paul, Minnesota 55103
651-221-4085



THE INFORMATION RELATES TO THIS SPECIFIC PRODUCT. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY ONESELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE. ALL MATERIALS MAY PRESENT UNKNOWN HAZARDS AND SHOULD BE USED WITH CAUTION. ALTHOUGH CERTAIN HAZARDS ARE DESCRIBED HEREIN, WE CANNOT GUARANTEE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.