

SDS prepared by Steve Davis of Aardvark Clay & Supplies

GHS - United States

## Section 1: Product and Company Identification

**Product Names:** Bee-Mix, Bee Mix+Sand, Big Porcelain, Coleman Porcelain, Coronado White, Hopkins White, Hopkins White 60, Kenji Porcelain, KGBS, LBM, Nara Porcelain, Navajo White, Porcelain, Rod's Bod, Soldate 30, Soldate 60, Sonora White, Sonora White Sculpture, Tuff Buff, Vegas Buff, Vegas Buff Smooth, White #27

**Synonym** Pottery Clays – Water Based, Moist, Cone 10 Light Clays

**Supplier/Manufacturer** Aardvark Clay & Supplies

1400 East Pomona St.
Santa Ana, Ca. 92705 USA
714-541-4157 phone
714-541-2021 fax
contact@aardvarkclay.com

**Emergency Phone Number** 911

**Product Use** Pottery Manufacturing

**Restrictions on Use** Not applicable

## Section 2: Hazards Identification

GHS/Hazcom 2012 Labels	GHS/Hazcom 20	12 Classifications:			
	Health:				
	CARCINOGENICITY (	nhalation) - Category 1A (quartz) (See Section 11 for carcinogen listings)			
	CARCINOGENICITY (Inhalation) - Category 2B (titanium dioxide)				
	SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure) (respiratory tract) (inhalation) - Category 1 (quartz)				
	SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure) (respiratory tract) (inhalation) - Category 2 (iron oxide)				
_	SPECIFIC TARGET OR	GAN TOXICITY (Single Exposure) (respiratory tract) (inhalation) - Category 3 (quartz)			
	EYE IRRITANT - Category 2A (quartz)				
\•/	SKIN IRRITANT - C	SKIN IRRITANT - Category 2 (quartz)			
	SKIN SENSITIZER - Category 1 (quartz)				
Signal Word:	Environmental: Not Hazardous				
Danger	Physical:	Not Hazardous			

Hazard :	Hazard Statements:				
Health:	Health:				
H320	Causes eye irritation H316 Causes mild skin irritation.				
H372	Causes damage to organs (lungs) through prolonged or		H335	May cause respiratory irritation	
	repeated exposure (inhalation).			May cause cancer.	
Environ	mental:	Not hazardous	Physical:	Not hazardous	

Precaut	Precaution Statements:				
Prevent	ion				
P261	Avoid breathing dust/spray.	P270	Do not eat, drink, or smoke when using this product.		
P262	Do not get into eyes, on skin, or on clothing.	P273	Avoid release to the environment.		
P264	Wash hands thoroughly after handling.	P284	[In case of inadequate ventilation] wear respiratory protection.		
Respons	se				
P314	Get medical advice/attention if you feel unwell.	P391	Collect Spillage.		
P302+	IF ON SKIN: Wash with plenty of soap and water.	P304+	IF INHALED: Remove person to fresh air and keep comfortable for		
P352		P340	breathing.		
P305+	IF IN EYES: Rinse cautiously with water for several	P301+	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.		
P351+	minutes. Remove contact lenses if present and easy to	P330+			
P338	do – continue rinsing.	P331			
P333+	If skin or eye irritation persists get medical				
P337+	advice/attention.				
P313					
Storage		Disposa			
P402	Store in a dry place.		Dispose of contents/container in accordance with		
			local/regional/national/international regulations.		
Hazards	not otherwise classified: Slippery when wet.	% of ing	redients with unknown acute toxicity: None known.		



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# Section 3: Composition / Information on Ingredients

**Substances/Mixtures** Mixture - A trade secret claim is made for this group of substantially similar mixtures.

Chemical	CAS Numbers	Ingredient % of Product Mixto	ure (Clay)	Chemical % of Ingredient	
Quartz, SiO2	CAS # 14808-60-7	Kaolin Clays	0 – 42	Kaolin Clays	.1 - 4
(Crystalline Silica)		Ball Clays	0 - 55	Ball Clays	5 - 30
		Fire Clays	0 - 61	Fire Clays	0 - 25
		Silica	0 – 27	Silica	99.9
		Sands	0 – 24	Sands	13 - 24
		Feldspars	0 – 30	Feldspars	3 – 10
		Bentonites	0 – 4	Bentonites	<1 - 2
Amorphous Silica SiO2	CAS # 7631-86-9	Calcined Grogs	0 – 15	Calcined Grogs	10-20
(Glass & Diatomaceous Earth)		Fireclays	0 - 61	Fireclays	20-30
		Sands	0 - 24	Sands	76-87
Crystobalite SiO2	CAS # 14464-46-1	Calcined Grogs	0 – 15	Calcined Grogs	15-25
		Fireclays	0 - 61	Fireclays	0-25
Kaolinite Al2O3.2SiO2.2H2O	CAS # 1332-58-7	Kaolin Clays	0 – 42	Kaolin Clays	95 - 98
		Ball Clays	0 - 55	Ball Clays	65 - 95
		Fireclays	0 - 61	Fireclays	60 - 100
Alpha – Alumina Al2O3	CAS # 1344-28-1	Silica	0 – 27	Silica	<1
(Alumina Oxide)		Fireclays	0 - 61	Fireclays	0-70
Mica (Na,K)2O.2Al2O3.6SiO2.2H2O	CAS # 12001-26-2	Kaolin Clays	0 - 42	Kaolin Clays	1-3
Mullite Al2O3.2SiO2	CAS # 1302-93-8	Calcined Grogs	0 - 15	Calcined Grogs	65
Iron Oxide Dust and Fume (as Fe)	CAS # 1309-37-1	Kaolins	0 - 42	Kaolins	.36
		Ball Clays	0 - 55	Ball Clays	.8 – 1.5
		Fireclays	0 - 61	Fireclays	1.4 - 2.4
		Silica	0 – 27	Silica	<0.1
Titanium Dioxide TiO2	CAS # 13463-67-7	Silica	0 – 27	Silica	<0.1
		Fireclays	0 - 61	Fireclays	0-3.5
		Ball Clays	0 - 55	Ball Clays	<2.6

## Section 4: First-Aid Measures

Description of first-aid Measures:				
First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical attention.			
First-aid measures after inhalation	Move victim to well ventilated area. If mechanical discomfort persists, seek medical attention.			
First-aid measures after skin contact	Remove contaminated clothing. Wash affected area with soap and warm water.			
	Obtain medical attention if irritation persists.			
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.			
	Continue rinsing. Obtain medical attention if pain, blinking, or redness persists.			
First-aid measures after ingestion	Rinse mouth. Do NOT induce vomiting. Unlikely to be toxic by ingestion.			
	If discomfort persists, seek medical attention.			
Most Important Symptoms and Effects, Both	Acute and Delayed:			
Symptoms/injuries	Causes damage to organs through prolonged or repeated exposure (inhalation).			
Symptoms/injuries after inhalation	May cause cancer by inhalation. Dust from this product may cause irritation to the respiratory tract.			
Symptoms/injuries after skin contact	Prolonged contact with large amounts of dust may cause mechanical irritation.			
Symptoms/injuries after eye contact	Prolonged contact with large amounts of dust may cause mechanical irritation.			
Symptoms/injuries after ingestion	If a large quantity has been ingested: intestinal blockage. Gastrointestinal irritation.			
Chronic symptoms	Repeated or prolonged exposure to respirable crystalline silica dust may cause lung damage in the form			
	of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.			
	Acute silicosis can be fatal.			

If exposed or concerned, get medical advice and attention.

## Section 5: Fire-Fighting Measures



#### National Fire Protection Association (U.S.A.)

Suitable extinguishing media	This product is not combustible. Use extinguishing media appropriate for surrounding fire.		
Unsuitable extinguishing media	No restrictions on extinguishing media for this mixture.		
Special hazards arising from the substance or mixture	This mixture is not flammable and does not support fire. The plastic bags and cardboard		
	boxes containing the mixture are flammable.		
Hazardous thermal decomposition products	This mixture does not contain hazardous decomposition products.		
Special protective actions	Product can become slippery when wet.		
for fire-fighters			
Special protective equipment	Fire-fighters should wear appropriate protective equipment.		
for fire-fighters			



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# Section 6: Accidental Release Measures

Use of personal precautions Avoid inhalation of dry clay dust. Wear a N-95 face mask when cleaning up dry clay dust.

**Emergency procedures**There are no emergency procedures required for this mixture.

Methods and MaterialsProduct comes in plastic bags and weigh 25 lbs.for containmentThere are no spill measures that apply for moist clay.Clean up proceduresFor dry dusts, use a vacuum to clean up spillage.

If appropriate, use gentle water spray to wet down and minimize dust generation. Place dry

clay dust in a sealed container.

#### Section 7: Handling & Storage

**Precautions for safe handling**Keep out of direct sunlight. Do not expose to freezing.

Boxes of moist clay weigh 52 lbs. Use proper lifting techniques to avoid physical injury.

Recommendations on the conditions for safe storage

No special storage considerations, but keep in a dry, cool location.

Section 8: Exposure Controls / Personal Protection				
Chemical Name	CAS Numbers	Occupational Exposure Limits		
Quartz, (Crystalline Silica) SiO2	CAS#14808-60-7	ACGIH TLV: TWA 0.025 mg/ m³ (respirable)  OSHA PEL: TWA 10 mg/m³/ divided by the value "%SiO2" + 2 (respirable)  OSHA PEL: TWA 30 mg/m³/ divided by the value "%SiO2" + 2 (total dust)  CAL OSHA PEL: TWA .1 mg/ m³ (respirable)  CAL OSHA PEL: TWA .3 mg/ m³ (total)		
Amorphous Silica SiO2 (Glass & Diatomaceous Earth)	CAS#7631-86-9	ACGIH TLV: TWA 10 mg/ m³ (respirable)  OSHA PEL: TWA for amorphous silica (diatomaceous earth) is either 80 mg/m³ divided by the value "%SiO <sub>2</sub> ," or 20 mppcf.  CAL OSHA PEL: TWA 3 mg/ m³ (respirable)  CAL OSHA PEL: TWA 6 mg/ m³ (total)		
Crystobalite SiO2	CAS#14464-46-1	ACGIH TLV: TWA .05 mg/m³ (respirable)  OSHA PEL: TWA 5 mg/m³/ divided by the value "%SiO2" + 2 (respirable)  OSHA PEL: TWA 15 mg/m³/ divided by the value "%SiO2" + 2 (total dust)  CAL OSHA PEL: TWA .05 mg/ m³ (respirable)		
Kaolinite Al2O3.2SiO2.2H2O	CAS#1332-58-7	ACGIH TLV: TWA 2 mg/ m³ (respirable) / particulate matter containing no asbestos and <1% crystalline silica (respirable) OSHA PEL: TWA 5 mg/m³ (respirable) OSHA PEL: TWA 15 mg/m³ (total) CAL OSHA PEL: TWA 2 mg/ m³ (respirable)		
Alpha – Alumina Al2O3 (Alumina Oxide)	CAS#1344-28-1	ACGIH TLV: TWA 10 mg/m³ for particulate matter containing no asbestos and < 1% crystalline silica OSHA PEL: TWA 5 mg/m³ (respirable) OSHA PEL: TWA 15 mg/m³ (total dust) CAL OSHA PEL: TWA 5 mg/ m³ (respirable) CAL OSHA PEL: TWA 10 mg/ m³ (total)		
Mica (Na,K)2O.2Al2O3.6SiO2.2H2O	CAS#12001-26-2	ACGIH TLV: TWA 3 mg/m³ (respirable) OSHA PEL: TWA 3 mg/m³ (respirable) OSHA PEL: TWA 20 mppcf See Appendix C (Mineral Dusts) See Section 16) CAL OSHA PEL: TWA 3 mg/m³ (respirable)		
Mullite Al2O3.2SiO2	CAS#1302-93-8	ACGIH TLV: TWA 2.0 mg/ m³ (respirable)  OSHA PEL: TWA 5 mg/ m³ (respirable) as kaolin  OSHA PEL: TWA 15 mg/m³ (total) as kaolin		
Iron Oxide Dust and Fume (as Fe)	CAS#1309-37-1	ACGIH TLV: TWA 5 mg/m³ (fume & dust) OSHA PEL: TWA 5 mg/m³ (respirable) OSHA PEL: TWA 15 mg/m³ (total dust) CAL OSHA PEL: TWA 5 mg/m³		
Titanium Dioxide TiO2	CAS#13463-67-7	ACGIH TLV: TWA 10 mg/m³ (respirable) OSHA PEL: TWA 15 mg/m³ CAL OSHA PEL: TWA 5 mg/m³ (respirable) CAL OSHA PEL: TWA 10 mg/m³ (total)		

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#### Section 8: Exposure Controls / Personal Protection

Appropriate engineering controls

Clay in moist form poses no health risk and no inhalation risk.

Once clay has dried, there may be dust generated by cleaning and working processes.

In the event that dust is generated, use local exhaust ventilation or other engineering controls as required

to maintain exposures below applicable occupational exposure limits (TLV).

#### Recommendations for personal protective measures

**Local Exhaust:** When dry sanding or grinding clay products, use sufficient local exhaust to reduce the level of respirable dust to the applicable standards set forth in Section III. See ACGIH "Industrial Ventilation, A Manual of Recommended Practice," latest edition.

Respiratory Protection: Dust is generated when working with dry clay. To minimize exposure to dust and/or crystalline silica, cutting or sanding dry clay products should be conducted with sufficient ventilation. Respirable dust and quartz levels should be monitored regularly. Dust and quartz levels in excess of appropriate exposure limits should be reduced by feasible engineering controls, including (but not limited to) wet sanding, wet suppression, ventilation, and process enclosure. When such controls are not feasible, NIOSH/MSHA approved respirators must be worn in accordance with a respiratory protection program which meets OSHA requirements as set forth at 29 CFR1910.134 and ANSI Z88.2-1080

**Eye Protection:** Use NIOSH/OSHA approved safety glasses with side shields. Face shields should also be used when dry sawing clay products. Wear tight fitting dust goggles when excessively (visible) dusty conditions are present or are anticipated. NIOSH recommends that contact lenses not be worn when working with crystalline silica dust.

Skin Protection: Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.

"Practices for Respiratory Protection". In most cases, a disposable N-95 Particulate Respirator is sufficient.

Work/Hygienic Practices: Avoid creating and breathing dust. Wear NIOSH/MSHA approved dust mask when working in dust conditions. (N-95) Food, beverages, and smoking materials should NOT be in the work area.

Persons using ceramic materials should wash thoroughly before eating, drinking, smoking, or applying cosmetics.





Protective Clothing Pictograms

N-95 face mask

# Section 9: Physical & Chemical Properties

Physical State	Moist Plastic Clay	
Appearance	Mud Brick	
Odor	Earthy.	
Odor Threshold	Not Applicable	
pH	6-8	
Solubility in Water	None	
Melting Point	> 1365 °C (>2500°F)	
Freezing Point	< 0 °C (<32°F)	
Specific Gravity / Relative Density	2.35 g/cc	
Evaporation Rate	No data available	
Boiling Point	Not Applicable	
Flash Point	Not Applicable	
Auto-Ignition Temperature	Not Applicable	
Decomposition Temperature	Not Applicable	
Flammability	Not Applicable	
Vapor Pressure	Not Applicable	
Vapor Density	Not Applicable	
Explosive Limits	Not Applicable	
Viscosity	Not Applicable	
Partition Coefficient: n-octanol/water	Not Applicable	
Initial Boiling Point & Boiling Range	Not Applicable	

#### Section 10: Stability & Reactivity

**Reactivity** Hazardous reactions will not occur under normal conditions.

**Chemical stability** Stable at standard temperature and pressure.

No stabilizers required to maintain chemical stability.

Safety issues – Mold may form in bag after several months of shelf life.

Possibility of hazardous reactions Hazardous polymerization will not occur.

Conditions to avoid None known

Incompatible materials None known

Hazardous decomposition products

None known

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## Section 11: Toxicological Information

Routes of Exposure	Inhalation of dry clay dust (Aspiration), Ingestion
Descriptions of the delayed, immediate, or chronic effects	from short- and long-term exposure
Inhalation	Inhalation of high concentrations of dry clay dust may cause mechanical irritation and
	discomfort. Repeated exposure may cause chronic effects.
Eye Contact	Not a primary eye irritant. May cause mechanical irritation.
Skin Contact/Irritation	Not a skin irritant. Not absorbed through skin.
Sensitization	Not a sensitizer
Ingestion	Not an ingestion hazard.
Chronic Effects	
OSHA Carcinogen	Lung cancer – Crystalline silica has been classified by OSHA as a human lung carcinogen.
Mutagenic Effects	None Known
Teratogenic Effects	None Known
Developmental Toxicity	None Known
Effects of Silicosis	Symptoms of Silicosis
Bronchitis/Chronic Obstructive Pulmonary Disorder.	Shortness of breath; possible fever.
Tuberculosis – Silicosis makes an individual more	Fatigue; loss of appetite.
susceptible to TB.	Chest pain; dry, nonproductive cough.
Scleroderma – a disease affecting skin, blood vessels, joints	Respiratory failure, which may eventually lead to death.
and skeletal muscles.	
Possible renal disease.	
Remarks	
Carcinogenicity	Repeated or prolonged exposure to respirable crystalline silica dust may cause lung
	damage in the form of silicosis. Symptoms will include progressively more difficult
	breathing, cough, fever, and weight loss. Acute silicosis can be fatal.
	Short term exposure is of little concern.
Numerical Measures of toxicity	None Known

OSHA, IARC, and NTP Carcinogen Classifications							
Chemicals with Carcinogen Potential	CAS#	OSHA	IARC	NTP			
Quartz, (Crystalline Silica)	SiO2	CAS # 14808-60-7	Yes	Yes - Group 1	Yes		
Amorphous Silica (Glass & Diatomaceous Earth)	SiO2	CAS # 7631-86-9	No	No - Group 3	No		
Crystobalite	SiO2	CAS # 14464-46-1	No	Yes - Group 1	No		
Iron Oxide Dust and Fume	(as Fe)	CAS # 1309-37-1	No	No - Group 3	No		
Titanium Dioxide	TiO2	CAS # 13463-67-7	No	Yes - Group 2b	No		

Substances, mixtures and exposure circumstances in this list have been classified by the <u>IARC</u> as **Group 1**: The agent (mixture) is <u>carcinogenic</u> to humans. The exposure circumstance entails exposures that are carcinogenic to humans. This category is used when there is sufficient evidence of carcinogenicity in humans. Exceptionally, an agent (mixture) may be placed in this category when evidence of carcinogenicity in humans is less than sufficient but there is sufficient evidence of carcinogenicity in experimental animals and strong evidence in exposed humans that the agent (mixture) acts through a relevant mechanism of carcinogenicity.

#### **OSHA, IARC, and NTP Carcinogen Classifications**

The agents in this list have been classified in **Group 2A** (**probable** <u>carcinogens</u>)<sup>[1]</sup> by the **IARC** (<u>International Agency for Research on Cancer</u>). The term "agent" encompasses both substances and exposure circumstances that pose a risk. This designation is applied when there is *limited evidence* of <u>carcinogenicity</u> in humans as well as *sufficient evidence* of carcinogenicity in <u>experimental animals</u>. In some cases, an agent may be classified in this group when there is *inadequate evidence* of carcinogenicity in humans along with *sufficient evidence* of carcinogenicity in experimental animals and *strong evidence* that the carcinogenesis is mediated by a mechanism that also operates in humans. Exceptionally, an agent may be classified in this group solely on the basis of *limited evidence* of carcinogenicity in humans.

Substances, mixtures and exposure circumstances in this list have been classified by the International Agency for Research on Cancer (IARC) as *Group 2B: The agent (mixture) is possibly carcinogenic to humans.* The exposure circumstance entails exposures that are possibly carcinogenic to humans. This category is used for agents, mixtures and exposure circumstances for which there is limited evidence of carcinogenicity in humans and less than sufficient evidence of carcinogenicity in experimental animals. It may also be used when there is inadequate evidence of carcinogenicity in humans but there is sufficient evidence of carcinogenicity in experimental animals. In some instances, an agent, mixture or exposure circumstance for which there is inadequate evidence of carcinogenicity in humans but limited evidence of carcinogenicity in experimental animals together with supporting evidence from other relevant data may be placed in this group. Further details can be found in the preamble to the IARC Monograph.

Substances, mixtures and exposure circumstances in this list have been classified by the <u>IARC</u> as **Group 3**: The agent (mixture or exposure circumstance) is not classifiable as to its carcinogenicity to humans. This category is used most commonly for agents, mixtures and exposure circumstances for which the evidence of carcinogenicity is inadequate in humans and inadequate or limited in experimental animals. Exceptionally, agents (mixtures) for which the evidence of carcinogenicity is inadequate in humans but sufficient in experimental animals may be placed in this category when there is strong evidence that the mechanism of carcinogenicity in experimental animals does not operate in humans. Agents, mixtures and exposure circumstances that do not fall into any other group are also placed in this category.

Further details can be found in the <u>IARC Monographs</u>.



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### Section 12: Ecological Information (non-mandatory)

**Ecotoxicity** None Known Biochemical oxygen demand (BOD5) None Known Chemical oxygen demand(COD) None Known **Products of Biodegradation** None Known Toxicity of the products of Biodegradation None Known **Bioaccumulation Potential** None Known Potential to move from soil to groundwater None Known Other adverse effects None Known

#### Section 13: Disposal Considerations

Personal Protection Refer to Section 8: "Recommendations for Personal Protective Measures" when disposing of ceramic waste.

**Appropriate disposal containers** Standard waste disposal containers – no specials requirements.

**Appropriate disposal methods**Disposal of this product should comply with the requirements of environmental protection and waste

disposal legislation and any regional local authority requirements. In most cases, this is normal waste disposal. The generation of waste should be avoided or minimized. Dispose of non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Avoid dispersal of spilled

material and runoff and contact with soil, waterways, drains, and sewers.

Physical and chemical properties

that may affect disposal

Sewage disposal
Special precautions for landfills

or incineration activities

Dry clay dust should be placed in a sealed container or in a manner that reduces or eliminates the release of the product. Moist clay has no special requirements. Packaging should be recycled before disposal.

Do not dispose of into sinks or toilets. They will clog. Never dispose of this product into a sewer system.

There are no special precautions for disposal in a landfill. This product is non-combustibleand is not

suitable for incineration.

#### Section 14: Transportation Information

Regulatory Information	UN Number	UN Proper Shipping Name	Transport Hazard Class	Packing Group Number	Bulk Transport Guidance	Special Precautions
DOT Classification	Not regulated	-	-	-	-	-
TDG Classification	Not regulated	-	-	-	-	-
ADR/RID Class	Not regulated	-	-	=	-	-
IMDG Class	Not regulated	-	-	-	-	-
IATA-DGR Class	Not regulated	-	-	=	-	-

## Section 15: Regulatory Information

TSCA – Toxic Substances Control Act - EPA	Quartz and other chemicals are listed in the TSCA Chemical Substance Inventory
CONFORMS WITH ASTM D4236	Certified Non-Toxic in moist form. ASTM - American Society for Testing and Materials
California Prop. 65 WARNING: This product contains a chemical known to the State of California to	
	cancer. (Prop. 65 - Calif. Health & Safety Code Section 2549 Et Seq.)
SARA/Title III	This mixture contains no substances at or above the reporting threshold under
(Emergency Planning & Community Right-to-Know Act)	Section 313, based on available data.

#### Section 16. Other Information

#### **Definitions**

**ASTM** means American System of Testing and Materials

**OSHA** means Occupational Safety & Health Administration

IARC means International Agency for Research on Cancer

NTP means National Toxicology Program

**HCS** means Hazardous Communication Standard

**CAS** means Chemical Abstract Service

**ACGIH** means American Conference of Governmental Industrial Hygienists

CAL-OSHA means California OSHA, most CAL-OSHA standards defer to the federal OSHA standards

OSHA means Occupational Safety & Health Administration

OSHA PEL means OSHA Permissible Exposure Limit

**OSHA STEL** means spot exposure for a duration of 15 minutes, that cannot be repeated more than 4 times per day, with at least 60 minutes between exposure periods

TWA means Time Weighted Average (average exposure on the basis of an 8h/day, 40h/week work schedule)

TLV means Threshold Limit Value - American Conference of Governmental Industrial Hygienists (ACGIH)

Three types of TLVs for chemical substances as defined by the ACGIH are:

- 1. **TLV-TWA** Time weighted average average exposure on the basis of an 8h/day, 40h/week work schedule.
- TLV-STEL Short-term exposure limit spot exposure for a duration of 15 minutes, that cannot be repeated more than 4 times per day, with at least 60 minutes between exposure periods.
- 3. TLV-C Ceiling limit absolute exposure limit that should not be exceeded at any time.



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This SDS is in compliance with The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) – prepared May 12, 2015. This data sheet is subject to change without notice.

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