# SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER PRODUCT INFORMATION www.designengineering.com 50208 INFORMATION (440) 930-7940

**PRODUCT NAME** 

ATAC - Advanced Thermal Acoustic Coating

**MANUFACTURER'S NAME** Design Engineering, Inc. 604 Moore Road Avon Lake, Ohio 44012

EMERGENCY CONTACT VELOCITYEHS

(800)255-3924 (NORTH AMERICA) +1 (813)248-0585 (INTERNATIONAL)

**HMIS Codes** 

### SECTION 2 — HAZARDS IDENTIFICATION

**ROUTES OF EXPOSURE** 

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

EFFE/6TISyOWarightXPOSCAS Number Ingredient Cristobalite 0.14464-46-1

Units

Flammability 0 Vapor Pressure Reactivity

Health

SKIN: Prolonged or repeated exposure Haylaves Hitation.

0.025 mg/m3 as Resp. Dust 0.05 mg/m3 as Resp. Dust

INHALATION: Irritation of the upper respiratory system

13 463-67-7 Titanium Dioxide

ACGIH TLV OSHA

10 mg/m3 as Dust 10 mg/m3 Total Dust 5 mg/m3 Respirable

In a confined area vapors in high compentoscipa may cause headache, nausea or dizziness. Fraction

SIGNS AND SYMPTOMS CIBO VIETES 420 SURE **Zinc Oxide** 

> Redness and itching or burning sensationally That cate eye or excessive skin exposure. Not Available Not Available

MEDICAL CONDITIONS AGGRAVATED BY EXPOSUREHA PEL None generally recognized.

**CANCER INFORMATION** 

For complete discussion of toxicology data refer to Section 11.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS						
% by Weight	CAS Number	Ingredient	Units	Vapor Pressure		
1.0	107-21-1	Ethylene Glycol				
		ACGIH C	100 mg/m <sup>3</sup>			
% by Weight	CAS Number Ingredient 14464-46-1 Cristobalite	OSHA TLV-C <b>Units</b> Titanium Dioxide	50 ppm Vapor Pressure			
0.1	14464-46-1 Cristobalite  ACGIH TLV OSHA PEL	SHA ACGIHTLV 0.025 mg/m3 as Res OSHA PEL	ACGILLTLV OSDA PEL OSDA PEL			
12		OSHA PEL	5 mg/m³ Respirable Fraction			
1.1	13463-67-7 Titanium Dio 1314-13 ACGIH TLV OS PEL OSHA PEL	Zinc Oxide HA 10 mg/m3 as Dust 1 ACGIH LLY-LWA (8 HR)	0 mg/m3 Total Dust 5 mg/m3 Respirable 10 mg/m³ Total Dust 5 mg/m³ Respirable Fraction			
2	1314-13-2 Zinc Oxide	OSHA PEL (8 HR)	5 mg/m³ Respirable Fraction			
ACGIH TLV SECTION HOLAVPIRST AID MEASURES						

OSHA PEL

Not Available 

% by Weight IN:

0.1

CAS Number affected in a representation of the state of t

INHALATION:

13463-87 upt indurremiting Districted ical attention immediately.

# SECTION 5 — FIRE FIGHTING MEASURES

2 FLASH 13-2 % by Weight Applicable 14464-46-1 S Number

13

EYES:

Zinc Oxide LEL Ingradia Mapplicable Costobatite

Not Applicable

FLAMMABILITY CLASSIFICATION
Not Available Pressure Applicable

Page **1** of **3** 

Not Available

ACGIH TLV OSHA 0.025 mg/m3 as Resp. Dust 0.05 mg/m3 as Resp. Dust **EXTINGUISHING MEDIA** 

13463-67-7 Titanium Dioxide UNUSUAL FIRE AND EXPLOSION HAZARDS

ACGIH TLV OSHA 10 mg/m3 as Dust 10 mg/m3 Total Dust 5 mg/m3 Respirable

Closed containers may explode (due pethoshi)dpm of pressure) when exposed to extremeraetion

2During emerg 4314 4043 ti2ns overexpZince 0xide omposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain

ACGIH TLV Not Available medical attention. OSHA PEL Not Available **SPECIAL FIRE FIGHTING PROCEDURES** 

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

# SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

% by Weight all scass Numbers. Ventilate are dies. Remove with inert also its ent. Keep in suitable cloyare harres use disposal. Prevent further leakage or o 14464-461.
spillage. Prevent product from entering and livers or lakes. See Section 13 for disposal.
ACGIH TLV OSHA 0.025 mg/m3 as Resp. Dust 0.05 mg/m3 as Resp. Dust

13463-67-7 **Titanium Dioxide** 

ACGIH TLV OSHA 10 mg/m3 as Dust 10 mg/m3 Total Dust 5 mg/m3 Respirable



# SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

% by Weightlicab GAS Number Units **Vapor Pressure** Ingredient

PRECAUTIONS TO BE TAKEN IN HANDLING AND STICKAGE LITE

ACGIH TLY OSHA 0.025 mg/m3 as Resp. Dust 0.05 mg/m3 as Resp. Dust Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally.

1 Keep out of the reach of Children. Titanium Dioxide

# ACGIH TLV OSHA 10 mg/m3 as Dust 10 mg/m3 Total Dust 5 mg/m3 Respirable SECTION PROTECTION

PRECAUTIONS TO BE TAKERIA USE-2 **Zinc Oxide** 

Not Availablevapor Pressure % by Weight with CAS Numbertilation. Ingredient Units

Not Available O Avoid contact 1/14654 14661 eyes. Avoid is the lift of apor and spray mist.

ACGIH TLV OSHA 0.025 mg/m3 as Resp. Dust 0.05 mg/m3 as Resp. Dust Wash hands after using

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried filmc the tree files hasts are listen in hectign bushed in the tree files has been all the same from the files of the dried films for 

2kemoval of old 314-13-2 ding, scra Zino Oxide means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects Coste city in children or pregnant women. Con Noti Agailableure to lead or other hazardous substances requires the use of proper protective equipmen QSUA BE properly fitted respirator (NIOSH ap Note Mainth foper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

#### VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

#### RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

#### PROTECTIVE GLOVES

2

2

Wear gloves which are recommended by glove supplier for protection against materials in Section 2.

#### **EYE PROTECTION**

Wear safety spectacles with unperforated sideshields.

# **SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

PRODUCT WEIGHT 6.6 – 6
Weight CAS Number 6.6 - 6.9 lb/gal (790 - 826 g/l) VOLATILE % by Weight Ingredient Units **Vapor Pressure** VOLUME 0.1 SPECIFIC GRANGE 4-46-1 83 Cristobalite EVAPORATION Slower than Ether 0.025 mg/m3 as Resp. Dust ACGIH TLV OSHA >212° F (>1<u>00</u>° C) PEL **BOILING POINT** VAPOR DENSITY Heavier than Air

13 MELTING 13463-67 Availab tanium Dioxide

ăcgih tlv osha

SOLUBILITY IN Soluble 10 mg/m3 as Dust 10 mg/m3 Eptal Dust 5 mg/m3 Respirable PEL OSHA PEL Fraction 8.2 - 8.8

**Zinc Oxide** VOLATILE ORGANIC COMPOUNDS (VOC Theoretical As Packaged)

.178SHAREL Less Water and Federally Exempt Solvents 21.24 g/l

Not Available

0.13 lb/gal 16 g/l **Emitted VOC** 

**VOLATILE ORGANIC COMPOUNDS (VOC - As Applied)** 

1314-13-2

< 0.41 lb/gal < 50 g/lLess Water and Federally Exempt Solvents

### SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable HAZARDOUS DECOMPOSITION PRODUCTS

controller ight/OIDCAS Number Ingredient Unite By fire: CarbapatxRtessuten Monoxide

0.1one known.14464-46-1 Cristobalite HAZARDOUS POLYMERIZATION

ACGIH TLV OSHA 0.025 mg/m3 as Resp. Dust 0.05 mg/m3 as Resp. Dust INCOMPATIBILITY PFI

13 one known. 13463-67-7 **Titanium Dioxide** 

# SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC PEALTH HAZAR 13-14-13-2 Zinc Oxide

% by WRIGHTION GAS NUMBER ports the WORLD evidence of carcin Unitarity in expeNateAvailable Apole Profeshiom dioxide but inadequate evidence 14464-46-15 Cristopalite
Office of Cardinal addition, the LARC Submary Color of Cardinal addition, the LARC Submary Color of Cardinal addition, the LARC Submary Color of Cardinal Color of Card

13 13463-67-7 **Titanium Dioxide** ACGIH TLV OSHA 10 mg/m3 as Dust 10 mg/m3 Total Dust 5 mg/m3 Respirable PEL OSHA PEL Fraction

1314-13-2 **Zinc Oxide ACGIH TLV** Not Available OSHA PEL Not Available



**TOXICOLOGY DATA** 

CAS No.	Ingredient Name			
107-21-1	Ethylene Glycol			
		LC50 RAT Inhalation	6HR	2.5 mg/l
		LC50 RAT Oral		2,000 mg/kg
13463-67-7	Titanium Dioxide			
		LC50 RAT Oral		1,000 mg/kg
1314-13-2	Zinc Oxide			
		LC50 RAT Dust	4HR	> 5,700 mg/m <sup>3</sup>
		LC50 RAT Oral		15.000 mg/m <sup>3</sup>

# SECTION 12 — ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION** 

% by Weight availans Number Ingredient Units Vapor Pressure 14464-46-1 Cristobalite

ACG SECTION 13 — DISPOSAL CORSPORATO ON Sm3 as Resp. Dust

WASTE DISSOSAL METH 29463-67-7 **Titanium Dioxide** 

% by Weightom the Strike her of haz accompanding adament the Respondence of the responden

011 incinerate in approved 13cinty. Do notific software the sed container. Dispose of in accordance actioned are larger to the sed container of the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance actioned are larger to the sed container. Dispose of in accordance action action action action action.

ACCHIPLTI V Not Available

#### **SSEIGTEON 14** -TRANSPORT INFORMATION

Multi-modal shipping descriptions are through A Relinformational purposes and do not confidetion national shipping description for 2 particular mace of transport. All packaging must be reviewed for suitability prior to shipme ACCH Chipliance with the applicable regulation of the person offering the product for

Not Available Vapor Pressure % by Weightt. **CAS Number** 

14464-46-1 Cristobalite US Groun (4DOT) Not Regulated for Transportation. ACGIH TLV OSHA 0.025 mg/m3 as Resp. Dust 0.05 mg/m3 as Resp. Dust

PEL Canada (TDG) **Titanium Dioxide** 

**13463-67-7 Titanium Dioxide**Not Regulated for Transportation. ACGIH TLV OSHA 10 mg/m3 as Dust 10 mg/m3 Total Dust 5 mg/m3 Respirable

PEL OSHA PEL Fraction

2Not Regulated 1314a1302 tation. **Zinc Oxide** 

ACGIH TLV Not Available IMO

OSHA PEL Not Available Not Regulated for Transportation.

IATA/ICAO

IMO

Not Regulated for Transportation.

# SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION CAS No Weight CAS Number OMBOLIA ROLL CASI NHORE COMPOUND gredient Units **Vapor Pressure** % by WT Cristobalite

<sub>107-21-1</sub>**0.1** 14464-46 ilycol ACGIH TLV OSHA

0.025 mg/m3 as Resp. Dust 0.05 mg/m3 as Resp. Dust 1314-13-2 Zinc Compound

PEL CALIFORNIA PROPOSITION 65 13 13463-67-7 WARNING: This product contains of

itanium Dioxide Jenuals Knows 19 the State of California to cause cancer and birth defects or other reproductive harm. 4GJH TOO HE TO mg/m3 as Dust 10 mg/m3 Total Dust 5 mg/m3 Respirable

**TSCA CERTIFICATION** 

PEL OSHA PEL

All chemicals in நிற்றாருப்பு are listed and are presented and in the TSCA Inventory

# OSH SECTION 16 — OTHER INFORMATION

Notice:

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ACCURATE AT THE DATE OF PUBLICA Cristobalite
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ACGIN TUV OSHA
IN ALL CASES, IT IS THE RESPONSIBILITY OF THE REPUBLICATION AND RECOMMENDATIONS AND THE

13UITABILITY OF 3463PEGODYCT FOR HEANING DIBLIGUEAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDSJANDLSHOBHABE USEDOWNITHING&LIBIODUSWI-DLENGKRT3AITOHAZARDSS5ARTGD/BGSCRBESDINADTellS PUBLICATION, NO GUARANTEE IS MADE THAT THESE AREIT AS BALPETAZARDS THAT EXIST. Fraction

HAZARDS, TO 13-14-13-3-BEHAVIOR OF THE PROBUCTS MAY DIFFER WHEN USED WITH OTHER MATERIALS AND ARE DEPENDENT UPON THE MANUFACTURING CIRCUMSTANCES OF CHILD PROCESSES. SUCH HAZARDS, TOXICITY HAD AVAILABLE REPORTED BY THE USER AND MADE NOT AVAILABLE. KNOWN TO HANDLERS, PROCESSORS AND END USERS.

