Printing date 11/08/2017

Reviewed on 11/08/2017

## 1 Identification

- . Product identifier
- . Trade name POLYESTER-ACRYLIC HYBRID
- . Article number: 2/3/4/5/8 (16)
- . Application of the substance / the mixture Powder coating material
- . Manufacturer/Supplier:

USA:

TIGER Drylac U.S.A., Inc. 3945 Swenson Ave St. Charles, IL 60174 Phone: +1-630-587-2918 Fax: +1-630-587-2923

#### Canada:

TIGER Drylac Canada Inc. 110 Southgate Drive Guelph, Ontario, N1G 4P5 Phone: +1-519-766-4781 Fax: +1-519-766-4787

#### Mexico

TIGER Drylac Mexico S.A. de C.V. Circuito Exportación 212, Parque Industrial Tres Naciones San Luis Potosí, SLP, C.P. 78395 Phone +52-444-799-7243 Fax +52-444-799-7244

- . Informing department: Product Safety Department
- . Emergency telephone number: 24/7:1-800-255-3924; International:+01 or +001-813-248-0585

## 2 Hazard(s) identification

. Classification of the substance or mixture

Combustible Dust May form combustible dust concentrations in air.

- . Label elements
- . GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- . Hazard pictograms Void
- . Signal word Warning
- . Hazard statements

May form combustible dust concentrations in air.

- . Classification system
- . NFPA ratings (scale 0-4)



Health = 1
Fire = 1
Reactivity = 1

HMIS-RATINGS (SCALE 0 - 4)



Health = 1
Fire = 1
Reactivity = 1

- . Other hazards
- . Results of PBT and vPvB assessment
- . PBT: Not applicable.

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. vPvB: Not applicable.

## 3 Composition/information on ingredients

- . Chemical characterization: Mixtures
- . Description: Mixture consisting of the following components with harmless additives.

. Hazardous ingredients:		
21645-51-2	aluminium hydroxide	10-25%
7727-43-7	barium sulphate, natural	10-25%
13463-67-7	titanium dioxide	2.5-10%

. Additional information For the wording of the listed hazard phrases refer to section 16.

## 4 First-aid measures

- . Description of first aid measures
- . General information No special measures required.
- . After inhalation Supply fresh air; consult doctor in case of symptoms.
- . After skin contact Instantly wash with water and soap and rinse thoroughly.
- . After eye contact Rinse opened eye for several minutes under running water.
- . After  $\mathit{swallowing}$  In case of persistent  $\mathit{symptoms}$  consult doctor.
- . Information for doctor
- . Most important symptoms and effects, both acute and delayed

No further relevant information available.

. Indication of any immediate medical attention and special treatment needed No further relevant information available.

## 5 Fire Fighting Measures

- . Extinguishing media
- . Suitable extinguishing agents

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

. Special hazards arising from the substance or mixture

No further relevant information available.

- . Advice for firefighters
- . Protective equipment: No special measures required.

## 6 Accidental release measures

- . Personal precautions, protective equipment and emergency procedures
  - Wear protective equipment. Keep unprotected persons away. Avoid causing dust.
- . Environmental precautions: Do not allow product to reach sewage system or water bodies.
- . Methods and material for containment and cleaning up: Collect mechanically.
- . Reference to other sections

No dangerous materials are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

. Protective Action Criteria for Chemicals

. PAC-1:		
21645-51-2	aluminium hydroxide	8.7 mg/m³
7727-43-7	barium sulphate, natural	15 mg/m³
13463-67-7	titanium dioxide	30 mg/m³
7631-86-9	silicon dioxide, chemically prepared	18 mg/m³
1344-28-1	aluminium oxide	15 mg/m³
112926-00-8	Silicon dioxide	18 mg/m³

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1314-23-4		$14 \text{ mg/m}^3$
471-34-1	calcium carbonate	45 mg/m³
14808-60-7	quartz (SiO2)	$0.075 \text{ mg/m}^3$
. PAC-2:		
21645-51-2	aluminium hydroxide	73 mg/m³
7727-43-7	barium sulphate, natural	170 mg/m³
13463-67-7	titanium dioxide	330 mg/m³
7631-86-9	silicon dioxide, chemically prepared	740 mg/m³
1344-28-1	aluminium oxide	170 mg/m³
112926-00-8	Silicon dioxide	200 mg/m³
1314-23-4	zirconium dioxide	110 mg/m³
471-34-1	calcium carbonate	210 mg/m³
14808-60-7	quartz (SiO2)	33 mg/m³
. PAC-3:		
21645-51-2	aluminium hydroxide	$440 \text{ mg/m}^3$
7727-43-7	barium sulphate, natural	990 mg/m³
13463-67-7	titanium dioxide	2,000 mg/m³
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m³
1344-28-1	aluminium oxide	990 mg/m³
112926-00-8	Silicon dioxide	1,200 mg/m³
1314-23-4	zirconium dioxide	680 mg/m³
471-34-1	calcium carbonate	1,300 mg/m³
14808-60-7	quartz (SiO2)	200 mg/m³

## 7 Handling and storage

- . Handling
- . Precautions for safe handling No special measures required.
- . Information about protection against explosions and fires:





Keep ignition sources away - Do not smoke.

Dust can combine with air to form an explosive mixture.

- . Conditions for safe storage, including any incompatibilities  $% \left( 1\right) =\left( 1\right) \left( 1$
- . Storage
- . Requirements to be met by storerooms and containers:

Store only in the original container. Static charges may build up in the powder

- . Information about storage in one common storage facility: Not required.
- . Further information about storage conditions: None.
- . Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

- . Additional information about design of technical systems: No further data; see item 7.
- . Control parameters

. Components with critical values that require monitoring as	the workplace:
21645-51-2 aluminium hydroxide	
REL (U.S.A) Long-term value: 2 mg/m³ as Al	

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TLV (U.S.A)	Long-term value: 1* mg/m³	
	as Al; *as respirable fraction	
EL (Canada)	Long-term value: 10 mg/m³	
7727-43-7 bari	um sulphate, natural	
PEL (U.S.A)	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction	
REL (U.S.A)	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction	
TLV (U.S.A)	Long-term value: 5* mg/m³ *inhalable fraction; E	
EL (Canada)	Long-term value: 10* 3** mg/m³ *total dust, **respirable fraction	
EV (Canada)	Long-term value: 10 mg/m³ total dust	
LMPE (Mexico)	Long-term value: 10 mg/m³	
13463-67-7 tit	anium dioxide	
PEL (U.S.A)	Long-term value: 15* mg/m³ *total dust	
REL (U.S.A)	See Pocket Guide App. A	
TLV (U.S.A)	Long-term value: 10 mg/m³ withdrawn from NIC	
EL (Canada)	Long-term value: 10* 3** mg/m³ *total dust;**respirable fraction; IARC 2B	
EV (Canada)	Long-term value: 10 mg/m³ total dust	
LMPE (Mexico)	Long-term value: 10 mg/m³ A4	

## . Additional information:

The lists that were valid during the compilation were used as basis.

- . Exposure controls .
- . Personal protective equipment
- . General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.

. Breathing equipment:



In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

#### . Protection of hands:



Protective gloves.

### . Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

## . Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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. Eye protection:



Safety Glasses

. Body protection: Protective work clothing.

## 9 Physical and Chemical Properties

- . Information on basic physical and chemical properties
- . General Information
- . Appearance:

Form: Solid

Colour: According to Trade Name

. Change in condition

. Self-inflammability: Product is not selfigniting.

. Danger of explosion: Product is not explosive. However,

formation of explosive  $\operatorname{air}/\operatorname{dust}$  mixtures is

possible

. Critical values for explosion:

Lower: Not determined.
Upper: Not determined.

Steam pressure: Not applicable.

. Density (Specific gravity) at 20 °C (68 °F) 1.63 g/cm³ (13.6 lbs/gal)

Relative density
Vapor density
Evaporation rate
Not determined.
Not applicable.
Not applicable.

. Solubility in / Miscibility with

Water: Unsoluble

. Partition coefficient (n-octanol/water): Not determined.

. Viscosity:

dynamic: Not applicable.
kinematic: Not applicable.

. Solvent content:

Organic solvents: 0,0 %
Solids content: 100,0 %

. Other information No further relevant information available.

## 10 Stability and Reactivity

- . Reactivity No further relevant information available.
- . Chemical stability
- . Conditions to be avoided: No decomposition if used according to specifications.
- . Possibility of hazardous reactions No dangerous reactions known
- . Conditions to avoid No further relevant information available.

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- . Incompatible materials: No further relevant information available.
- . Hazardous decomposition products: In case of fire: CO, CO2, NOx

# 11 Toxicological Information

- . Information on toxicological effects
- . Acute toxicity:
- . Primary irritant effect:
- . on the skin: No irritant effect.
- . on the eye: No irritant effect.
- . Sensitization: No sensitizing effect known.
- . Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

### . Carcinogenic categories

. IARC (International Agency for Research on Cancer)			
•	· · · · · · · · · · · · · · · · · · ·		
13463-67-7	titanium dioxide	2B	
7631-86-9	silicon dioxide, chemically prepared	3	
112926-00-8	Silicon dioxide	3	
14808-60-7	quartz (SiO2)	1	
. NTP (National Toxicology Program)			
14808-60-7	14808-60-7 quartz (SiO2) K		
. OSHA-Ca (Occupational Safety & Health Administration)			
None of the ingredients is listed.			

# 

- . Toxicity
- . Aquatic toxicity: No further relevant information available.
- . Persistence and degradability No further relevant information available.
- . Behaviour in environmental systems:
- . Bioaccumulative potential No further relevant information available.
- . Mobility in soil No further relevant information available.
- . Additional ecological information:
- . General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

- . Results of PBT and vPvB assessment
- . PBT: Not applicable.
- . vPvB: Not applicable.
- . Other adverse effects No further relevant information available.

## 13 Disposal considerations

- . Waste treatment methods
- . Recommendation Smaller quantities can be disposed with household garbage.
- . Uncleaned packagings:
- . Recommendation: Disposal must be made according to official regulations.

### 14 Transport information

- . UN-Number
- . ADR, IMDG, IATA

N/A

. UN proper shipping name

N/A

acc.

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. DOT, IMDG, IATA N/A

. ADR Not applicable

. Transport hazard class(es)

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. Class Not regulated.

. Packing group

. DOT, IMDG, IATA

. ADR, IMDG, IATA N/A

. Environmental hazards:

. Marine pollutant: No

. Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

# 15 Regulatory information

- . Safety, health and environmental regulations/legislation specific for the substance or mixture
- . SARA (Superfund Amendments and Reauthorization Act):

· (			
. Section 3	55 (Extremly hazardous substances):		
None of the	ne ingredients is listed.		
. Section 3	13 (Specific toxic chemical listings):		
7727-43-7	barium sulphate, natural		
1344-28-1	aluminium oxide		
. TSCA (Tox:	. TSCA (Toxic Substances Control Act):		
All ingre	All ingredients are listed.		

- . TSCA new (21st Century Act) (Substances not listed)
- . Proposition 65:

 -
Chemicals known to cause cancer:
13463-67-7 titanium dioxide
Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.
Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

. Cancerogenity categories

7727 12 7		D CDD (inh)	77 (a.a. 7.)
//2/-43-/	barium sulphate, natural	D, CBD(inh), 1	≀L(oral)
. TLV (Thresh	old Limit Value established by ACGIH)		
13463-67-7	titanium dioxide		A4
1332-58-7	kaolin		A4
1344-28-1	aluminium oxide		A4
1314-23-4	zirconium dioxide		A4
14808-60-7	quartz (SiO2)		A2
. NIOSH-Ca (N	ational Institute for Occupational Safety and Health)		
13463-67-7	titanium dioxide		
14808-60-7	quartz (SiO2)		

. GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- . Hazard pictograms Void
- . Signal word Warning
- . Hazard statements

May form combustible dust concentrations in air.

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. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- . Date of preparation / last revision 11/08/2017 / -
- . Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
PBT: Persistent, Bioaccumulative and Toxic
VPVB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health

OSHA: Occupational Safety & Hea TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

. \* Data compared to the previous version altered.

- US -