

# Safety Data Sheet

acc. GHS

Printing date 11/08/2017

Reviewed on 11/08/2017

## \* 1 Identification

- . **Product identifier**
- . **Trade name** POLYESTER-EPOXY FAST CURE
- . **Article number:** 530
- . **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**



GHS07

Skin Sens. 1            H317 May cause an allergic skin reaction.

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**



GHS07

- . **Signal word** Warning

- . **Hazard-determining components of labeling:**

Phenol, polymer with formaldehyde, glycidyl ether

- . **Hazard statements**

May cause an allergic skin reaction.

May form combustible dust concentrations in air.

- . **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

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Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves.

If on skin: Wash with plenty of water.

Specific treatment (see on this label).

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Health = 2

Fire = 1

Reactivity = 1

. **HMIS-RATINGS (SCALE 0 - 4)**

Health = 2

Fire = 1

Reactivity = 1

. **Other hazards**. **Results of PBT and vPvB assessment**. **PBT:** Not applicable.. **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%
13463-67-7	titanium dioxide	2.5-10%
28064-14-4	Phenol, polymer with formaldehyde, glycidyl ether Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	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**. **After inhalation**

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

. **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 swallowing** In case of persistent 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**CO<sub>2</sub>, 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.

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- . **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.  
Inform respective authorities in case product reaches water or sewage system.
- . **Methods and material for containment and cleaning up:** Collect mechanically.
- . **Reference to other sections**  
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**

. <b>PAC-1:</b>		
25036-25-3	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	12 mg/m <sup>3</sup>
21645-51-2	aluminium hydroxide	8.7 mg/m <sup>3</sup>
13463-67-7	titanium dioxide	30 mg/m <sup>3</sup>
28064-14-4	Phenol, polymer with formaldehyde, glycidyl ether	30 mg/m <sup>3</sup>
9002-88-4	Ethene, homopolymer	16 mg/m <sup>3</sup>
7631-86-9	silicon dioxide, chemically prepared	18 mg/m <sup>3</sup>
1344-28-1	aluminium oxide	15 mg/m <sup>3</sup>
1314-23-4	zirconium dioxide	14 mg/m <sup>3</sup>
9002-84-0	Ethene, tetrafluoro-, homopolymer	12 mg/m <sup>3</sup>
14808-60-7	quartz (SiO <sub>2</sub> )	0.075 mg/m <sup>3</sup>
. <b>PAC-2:</b>		
25036-25-3	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	130 mg/m <sup>3</sup>
21645-51-2	aluminium hydroxide	73 mg/m <sup>3</sup>
13463-67-7	titanium dioxide	330 mg/m <sup>3</sup>
28064-14-4	Phenol, polymer with formaldehyde, glycidyl ether	330 mg/m <sup>3</sup>
9002-88-4	Ethene, homopolymer	170 mg/m <sup>3</sup>
7631-86-9	silicon dioxide, chemically prepared	740 mg/m <sup>3</sup>
1344-28-1	aluminium oxide	170 mg/m <sup>3</sup>
1314-23-4	zirconium dioxide	110 mg/m <sup>3</sup>
9002-84-0	Ethene, tetrafluoro-, homopolymer	130 mg/m <sup>3</sup>
14808-60-7	quartz (SiO <sub>2</sub> )	33 mg/m <sup>3</sup>
. <b>PAC-3:</b>		
25036-25-3	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	790 mg/m <sup>3</sup>
21645-51-2	aluminium hydroxide	440 mg/m <sup>3</sup>
13463-67-7	titanium dioxide	2,000 mg/m <sup>3</sup>
28064-14-4	Phenol, polymer with formaldehyde, glycidyl ether	2,000 mg/m <sup>3</sup>
9002-88-4	Ethene, homopolymer	1,000 mg/m <sup>3</sup>
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m <sup>3</sup>
1344-28-1	aluminium oxide	990 mg/m <sup>3</sup>
1314-23-4	zirconium dioxide	680 mg/m <sup>3</sup>
9002-84-0	Ethene, tetrafluoro-, homopolymer	790 mg/m <sup>3</sup>

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14808-60-7	quartz (SiO <sub>2</sub> )	200 mg/m <sup>3</sup>

## \* 7 Handling and storage

- . **Handling**
- . **Precautions for safe handling**  
No special measures required.  
Store in cool, dry place in tightly closed containers.  
Prevent formation of dust.
- . **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**
- . **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:**  
Store in cool, dry conditions in well sealed containers.
- . **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 at the workplace:**  
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
At this time, the remaining constituent has no known exposure limits.

<b>21645-51-2 aluminium hydroxide</b>	
REL (U.S.A)	Long-term value: 2 mg/m <sup>3</sup> as Al
TLV (U.S.A)	Long-term value: 1* mg/m <sup>3</sup> as Al;*as respirable fraction
EL (Canada)	Long-term value: 10 mg/m <sup>3</sup>
<b>13463-67-7 titanium dioxide</b>	
PEL (U.S.A)	Long-term value: 15* mg/m <sup>3</sup> *total dust
REL (U.S.A)	See Pocket Guide App. A
TLV (U.S.A)	Long-term value: 10 mg/m <sup>3</sup> withdrawn from NIC
EL (Canada)	Long-term value: 10* 3** mg/m <sup>3</sup> *total dust;**respirable fraction; IARC 2B
EV (Canada)	Long-term value: 10 mg/m <sup>3</sup> total dust
LMPE (Mexico)	Long-term value: 10 mg/m <sup>3</sup> A4

- . **Additional information:**  
The lists that were valid during the compilation were used as basis.
- . **Exposure controls** .

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- . **Personal protective equipment**
- . **General protective and hygienic measures**  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.
- . **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.

- . **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

- . **Smell:** Characteristic

- . **Odor threshold:** Not determined

- . **pH-value:** Not applicable

- . **Change in condition**

Melting point/Melting range: > 50 C / 120F  
Boiling point/Boiling range: > 260 °C (>500 °F)  
Not applicable

- . **Flash point:** Not applicable

- . **Inflammability (solid, gaseous)** Not determined

- . **Decomposition temperature:** Not determined

- . **Self-inflammability:** Product is not selfigniting.

- . **Danger of explosion:** Product is not explosive. However, formation of explosive air/dust mixtures is possible

- . **Critical values for explosion:**

Lower: Not determined.  
Upper: Not determined.

- . **Steam pressure:** Not applicable.

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- . **Density (Specific gravity) at 20 °C (68 °F)** 1.68 g/cm<sup>3</sup> (14.02 lbs/gal)
- . **Relative density** Not determined.
- . **Vapor density** Not applicable.
- . **Evaporation rate** Not applicable.
- . **Solubility in / Miscibility with Water:** Insoluble
- . **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.
- . **Incompatible materials:** No further relevant information available.
- . **Hazardous decomposition products:** In case of fire: CO, CO<sub>2</sub>, NO<sub>x</sub>

## \* 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:** Sensitization possible by skin contact.
- . **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:  
Irritant
- . **Carcinogenic categories**

. <b>IARC (International Agency for Research on Cancer)</b>		
13463-67-7	titanium dioxide	2B
9002-88-4	Ethene, homopolymer	3
7631-86-9	silicon dioxide, chemically prepared	3
9002-84-0	Ethene, tetrafluoro-, homopolymer	3
14808-60-7	quartz (SiO <sub>2</sub> )	1
. <b>NTP (National Toxicology Program)</b>		
14808-60-7	quartz (SiO <sub>2</sub> )	K
. <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>		
None of the ingredients is listed.		

## \* 12 Ecological information

- . **Toxicity**
- . **Aquatic toxicity:** No further relevant information available.
- . **Persistence and degradability** No further relevant information available.

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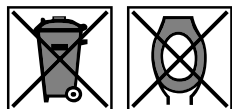
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- . **Behaviour in environmental systems:**
- . **Bioaccumulative potential** No further relevant information available.
- . **Mobility in soil** No further relevant information available.
- . **Ecotoxicological effects:**
- . **Remark:** Harmful to fish
- . **Additional ecological information:**
- . **General notes:**  
Generally not hazardous for water.  
Harmful to aquatic organisms
- . **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**



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- . **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
- . **Transport hazard class(es)**
- . **DOT, IMDG, IATA**
- . **Class** Not regulated.
- 
- . **ADR**
- . **Class** N/A
- . **Label** N/A
- . **Packing group**
- . **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):**

. <b>Section 355 (Extremely hazardous substances):</b>
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None of the ingredients is listed.
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. <b>Section 313 (Specific toxic chemical listings):</b>
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1344-28-1   aluminium oxide
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. <b>TSCA (Toxic Substances Control Act):</b>
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All ingredients are listed.
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. 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

. EPA (Environmental Protection Agency)

None of the ingredients is listed.

. TLV (Threshold Limit Value established by ACGIH)

13463-67-7 titanium dioxide

A4

1344-28-1 aluminium oxide

A4

1314-23-4 zirconium dioxide

A4

14808-60-7 quartz (SiO<sub>2</sub>)

A2

. NIOSH-Ca (National Institute for Occupational Safety and Health)

13463-67-7 titanium dioxide

14808-60-7 quartz (SiO<sub>2</sub>)

. GHS label elements

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

. Hazard pictograms



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. Signal word *Warning*

. Hazard-determining components of labeling:

*Phenol, polymer with formaldehyde, glycidyl ether*

. Hazard statements

*May cause an allergic skin reaction.**May form combustible dust concentrations in air.*

. Precautionary statements

*Avoid breathing dust/fume/gas/mist/vapors/spray**Contaminated work clothing must not be allowed out of the workplace.**Wear protective gloves.**If on skin: Wash with plenty of water.**Specific treatment (see on this label).**If skin irritation or rash occurs: Get medical advice/attention.**Wash contaminated clothing before reuse.**Dispose of contents/container in accordance with local/regional/national/international regulations.*. 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.

. Relevant phrases

*H315 Causes skin irritation.*

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H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

. **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

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Skin Sens. 1: Skin sensitisation - Category 1

. **\* Data compared to the previous version altered.**

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