

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**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.

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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**

. PAC-1:

25036-25-3	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	12 mg/m ³
21645-51-2	aluminium hydroxide	8.7 mg/m ³
13463-67-7	titanium dioxide	30 mg/m ³
28064-14-4	Phenol, polymer with formaldehyde, glycidyl ether	30 mg/m ³
9002-88-4	Ethene, homopolymer	16 mg/m ³
7631-86-9	silicon dioxide, chemically prepared	18 mg/m ³
1344-28-1	aluminium oxide	15 mg/m ³
1314-23-4	zirconium dioxide	14 mg/m ³
9002-84-0	Ethene, tetrafluoro-, homopolymer	12 mg/m ³
14808-60-7	quartz (SiO ₂)	0.075 mg/m ³

. PAC-2:

25036-25-3	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	130 mg/m ³
21645-51-2	aluminium hydroxide	73 mg/m ³
13463-67-7	titanium dioxide	330 mg/m ³
28064-14-4	Phenol, polymer with formaldehyde, glycidyl ether	330 mg/m ³
9002-88-4	Ethene, homopolymer	170 mg/m ³
7631-86-9	silicon dioxide, chemically prepared	740 mg/m ³
1344-28-1	aluminium oxide	170 mg/m ³
1314-23-4	zirconium dioxide	110 mg/m ³
9002-84-0	Ethene, tetrafluoro-, homopolymer	130 mg/m ³
14808-60-7	quartz (SiO ₂)	33 mg/m ³

. PAC-3:

25036-25-3	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	790 mg/m ³
21645-51-2	aluminium hydroxide	440 mg/m ³
13463-67-7	titanium dioxide	2,000 mg/m ³
28064-14-4	Phenol, polymer with formaldehyde, glycidyl ether	2,000 mg/m ³
9002-88-4	Ethene, homopolymer	1,000 mg/m ³
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m ³
1344-28-1	aluminium oxide	990 mg/m ³
1314-23-4	zirconium dioxide	680 mg/m ³
9002-84-0	Ethene, tetrafluoro-, homopolymer	790 mg/m ³

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14808-60-7 quartz (SiO ₂)		(Contd. of page 3) 200 mg/m ³
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* 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.

21645-51-2 aluminium hydroxide	
REL (U.S.A)	Long-term value: 2 mg/m ³ as Al
TLV (U.S.A)	Long-term value: 1* mg/m ³ as Al;*as respirable fraction
EL (Canada)	Long-term value: 10 mg/m ³
13463-67-7 titanium dioxide	
PEL (U.S.A)	Long-term value: 15* mg/m ³ *total dust
REL (U.S.A)	See Pocket Guide App. A
TLV (U.S.A)	Long-term value: 10 mg/m ³ withdrawn from NIC
EL (Canada)	Long-term value: 10* 3** mg/m ³ *total dust;**respirable fraction; IARC 2B
EV (Canada)	Long-term value: 10 mg/m ³ total dust
LMPE (Mexico)	Long-term value: 10 mg/m ³ 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/cm³ (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, CO₂, NO_x

* 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

. IARC (International Agency for Research on Cancer)		
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 ₂)	1
. NTP (National Toxicology Program)		
14808-60-7	quartz (SiO ₂)	K
. OSHA-Ca (Occupational Safety & Health Administration)		
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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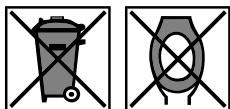
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- . **Behaviour in environmental systems:**
- . **Bioaccumulative potential** No further relevant information available.
- . **Mobility in soil** No further relevant information available.
- . **Ecotoxical effects:**
- . **Remark:** Harmful to fish
- . **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):**

. **Section 355 (Extremely hazardous substances):**

None of the ingredients is listed.

. **Section 313 (Specific toxic chemical listings):**

1344-28-1 aluminium oxide

. **TSCA (Toxic Substances Control Act):**

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.

. **Carcinogen 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 (SiO₂)

A2

. **NIOSH-Ca (National 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**

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

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.**

 -US-