Safety Data Sheet
acc. GHS

Printing date 11/09/2017 Reviewed on 11/09/2017

1 Identification

. **Product identifier**

. **Trade name POLYESTER/TGIC**

. **Article number:** (4)18,38,39,49

. **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**

GHS08 Health hazard

Muta. 1B	H340	May cause genetic defects.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.

GHS05 Corrosion

Eye Dam. 1	H318	Causes serious eye damage.

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).

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. **Hazard pictograms**

GHS05 GHS07 GHS08

. **Signal word** Danger

. **Hazard-determining components of labeling:**
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione

. **Hazard statements**
Causes serious eye damage.
May cause an allergic skin reaction.
May cause genetic defects.
May cause damage to organs through prolonged or repeated exposure.
May form combustible dust concentrations in air.

. **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
If exposed or concerned: Get medical advice/attention.
Immediately call a poison center/doctor.
If skin irritation or rash occurs: Get medical advice/attention.
Store in a dry place. Store in a closed container.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

. **Classification system**

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

Health = 3
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	10-25%
7727-43-7	barium sulphate, natural	10-25%
2451-62-9	1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione Acute Tox. 3, H301; Acute Tox. 3, H331; Muta. 1B, H340; STOT RE 2, H373; Eye Dam. 1, H318; Skin Sens. 1, H317	2.5-10%

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. **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**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
. **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** Instantly call for 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:** Put on breathing apparatus.

* 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.
Ensure adequate ventilation.
. **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:**		
21645-51-2	aluminium hydroxide	8.7 mg/m³
13463-67-7	titanium dioxide	30 mg/m³
7727-43-7	barium sulphate, natural	15 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
1314-23-4	zirconium dioxide	14 mg/m³
471-34-1	calcium carbonate	45 mg/m³
14808-60-7	quartz (SiO2)	0.075 mg/m³

. **PAC-2:**		
21645-51-2	aluminium hydroxide	73 mg/m³

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13463-67-7	titanium dioxide	330 mg/m³
7727-43-7	barium sulphate, natural	170 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 mg/m³
13463-67-7	titanium dioxide	2,000 mg/m³
7727-43-7	barium sulphate, natural	990 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.
Thorough dedusting.
Keep containers tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Open and handle container with care.
. **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Keep breathing equipment ready.
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:** Keep container tightly sealed.
. **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:**	
21645-51-2 aluminium hydroxide	
REL (U.S.A)	Long-term value: 2 mg/m³ as Al
TLV (U.S.A)	Long-term value: 1* mg/m³ as Al;*as respirable fraction

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EL (Canada)	Long-term value: 10 mg/m³
13463-67-7 titanium 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
7727-43-7 barium 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
2451-62-9 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	
TLV (U.S.A)	Long-term value: 0.05 mg/m³
EL (Canada)	Long-term value: 0.05 mg/m³ R; S
EV (Canada)	Long-term value: 0.05 mg/m³
LMPE (Mexico)	Long-term value: 0.05 mg/m³

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

. **Exposure controls .**
. **Personal protective equipment**
. **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Store protective clothing separately.
. **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.

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. **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:	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.
. **Density (Specific gravity) at 20 °C (68 °F)**	1.53 g/cm³ (12.77 lbs/gal)
. **Relative density**	Not determined.
. **Vapor density**	Not applicable.
. **Evaporation rate**	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.

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. **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, NOx

* 11 Toxicological Information

. **Information on toxicological effects**
. **Acute toxicity:**

. LD/LC50 values that are relevant for classification:		
2451-62-9 1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione		
Oral	LD50	188-1,450 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	0.309-650 mg/l (rat)

. **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
Harmful
The product can cause inheritable damage.

. **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	quartz (SiO2)	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.
. **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 danger class 3 (Self-assessment): extremely hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into soil.
. **Results of PBT and vPvB assessment**
. **PBT:** Not applicable.
. **vPvB:** Not applicable.
. **Other adverse effects** No further relevant information available.

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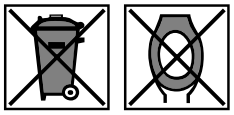
13 Disposal considerations

. **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**	N/A
. **UN proper shipping name**	N/A
. **Transport hazard class(es)**	
. **DOT, IMDG, IATA**	
. **Class**	Not regulated.
. **Packing group**	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 (Extremly hazardous substances):**
None of the ingredients is listed.

. **Section 313 (Specific toxic chemical listings):**	
7727-43-7	barium sulphate, natural
1344-28-1	aluminium oxide

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

. **EPA (Environmental Protection Agency)**		
7727-43-7	barium sulphate, natural	D, CBD(inh), NL(oral)

. **TLV (Threshold Limit Value established by ACGIH)**		
13463-67-7	titanium dioxide	A4

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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 (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**

GHS05 GHS07 GHS08

. **Signal word** Danger
. **Hazard-determining components of labeling:**
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione
. **Hazard statements**
Causes serious eye damage.
May cause an allergic skin reaction.
May cause genetic defects.
May cause damage to organs through prolonged or repeated exposure.
May form combustible dust concentrations in air.
. **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin: Wash with plenty of water.
If exposed or concerned: Get medical advice/attention.
Immediately call a poison center/doctor.
If skin irritation or rash occurs: Get medical advice/attention.
Store in a dry place. Store in a closed container.
Store locked up.
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**
H301 Toxic if swallowed.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H340 May cause genetic defects.
H373 May cause damage to organs through prolonged or repeated exposure.
. **Date of preparation / last revision** 11/09/2017 / -
. **Abbreviations and acronyms:**
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)

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NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
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
Acute Tox. 3: Acute toxicity - Category 3
Eye Dam. 1: Serious eye damage/eye irritation - Category 1
Skin Sens. 1: Skin sensitisation - Category 1
Muta. 1B: Germ cell mutagenicity - Category 1B
STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

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