

# Material Safety Data Sheet

acc. to ISO 11014

Printing date 06/02/2011

Reviewed on 07/13/2010

## 1 Identification of substance

. **Product details**

. **Trade name** RAL 1013 SM GL

. **Article number:** 49/11280

. **Manufacturer/Supplier:**

USA:

TIGER Drylac U.S.A., Inc.

1090 Commons Blvd.

Reading, PA 19605

Phone: +1 / 610 / 926 8148

Fax: +1 / 610 / 926 8149

Canada:

TIGER Drylac Canada Inc.

110 Southgate Drive

Guelph, Ontario, N1G 4P5

Phone: +1 / 519 / 766 4781

Fax: +1 / 519 / 766 4787

. **Informing department:** Product Safety Department

. **Emergency information:** 24/7:1-800-255-3924; International:+01 or +001-813-248-0585

## \* 2 Composition/Data on components:

. **Chemical characterization**

. **Description:** Mixture consisting of the following components with harmless additives.

. **Dangerous components:**

13463-67-7	titanium dioxide		10-25%
7727-43-7	barium sulphate, natural		10-25%
	TGIC	T, Xi; R 46-23/25-41-43-48/22-52/53	2.5-10%

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

## \* 3 Hazards identification

. **Hazard designation:**

Toxic

. **Information pertaining to health and environmental hazards**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

May cause heritable genetic damage.

Also harmful by inhalation and if swallowed.

May cause sensitization by skin contact.

. **Classification system**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

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



Health = 2

Fire = 1

Reactivity = 1

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



Health = \*2

Fire = 1

Reactivity = 1

(Contd. on page 2)

USA

# Material Safety Data Sheet

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Printing date 06/02/2011

Reviewed on 07/13/2010

Trade name RAL 1013 SM GL

(Contd. of page 1)

## 4 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.

## \* 5 Fire fighting measures

- . **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- . **Protective equipment:** No special measures required.

## \* 6 Accidental release measures

- . **Person-related safety precautions:**  
Wear protective equipment. Keep unprotected persons away.  
Avoid causing dust.
- . **Measures for environmental protection:**  
Do not allow product to reach sewage system or water bodies.
- . **Measures for cleaning/collecting:**  
Collect mechanically.  
Ensure adequate ventilation.

## \* 7 Handling and storage

- . **Handling**
- . **Information 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.
- . **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.

## \* 8 Exposure controls and personal protection

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

(Contd. on page 3)

USA

# Material Safety Data Sheet

acc. to ISO 11014

Printing date 06/02/2011

Reviewed on 07/13/2010

Trade name RAL 1013 SM GL

(Contd. of page 2)

. Components with critical values that require monitoring at the workplace:	
<b>13463-67-7 titanium dioxide</b>	
PEL (U.S.A)	15* mg/m <sup>3</sup> *total dust
REL (U.S.A)	LFC (LOQ 0.2 mg/m <sup>3</sup> )
TLV (U.S.A)	10 mg/m <sup>3</sup>
EL (Canada)	10 mg/m <sup>3</sup> IARC 2B
EV (Canada)	10 mg/m <sup>3</sup> total dust
LMPE (Mexico)	Short-term value: 20 mg/m <sup>3</sup> Long-term value: 10 mg/m <sup>3</sup> A4
<b>7727-43-7 barium sulphate, natural</b>	
PEL (U.S.A)	15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
REL (U.S.A)	10* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV (U.S.A)	10 mg/m <sup>3</sup> E
EL (Canada)	10 mg/m <sup>3</sup>
EV (Canada)	10 mg/m <sup>3</sup> total dust
<b>TGIC</b>	
TLV (U.S.A)	0.05 mg/m <sup>3</sup>
EL (Canada)	0.05 mg/m <sup>3</sup> R; S
EV (Canada)	0.05 mg/m <sup>3</sup>

**. Additional information:**

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

**. 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.

**. 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.

(Contd. on page 4)

USA

# Material Safety Data Sheet

acc. to ISO 11014

Printing date 06/02/2011

Reviewed on 07/13/2010

Trade name RAL 1013 SM GL

(Contd. of page 3)

## . Eye protection:



Safety Glasses

## . Body protection: Protective work clothing.

\* **9 Physical and chemical properties:**

## . General Information

Form: Solid  
 Colour: According to Trade Name  
 Smell: Characteristic

## . Change in condition

Melting point/Melting range: > 50 C / 120F  
 Boiling point/Boiling range: Not determined

. Flash point: Not applicable

. Self-inflammability: Product is not selfigniting.

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

. Density at 20°C (68°F) 1.64 g/cm<sup>3</sup>

## . Solubility in / Miscibility with

Water: Unsoluble

## . Solvent content:

Organic solvents: 0.0 %

Solids content: 100.0 %

\* **10 Stability and reactivity**

. Conditions to be avoided: No decomposition if used according to specifications.

. Materials to be avoided:

. Dangerous reactions No dangerous reactions known

. Dangerous products of decomposition: In case of fire: CO, CO<sub>2</sub>, NO<sub>x</sub>\* **11 Toxicological information**

## . Acute toxicity:

## . LD/LC50 values that are relevant for classification:

## TGIC

Oral	LD50	188-1450 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4 h	0.309-0.650 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

(Contd. on page 5)

# Material Safety Data Sheet

acc. to ISO 11014

Printing date 06/02/2011

Reviewed on 07/13/2010

Trade name RAL 1013 SM GL

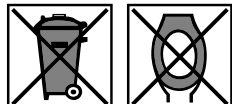
(Contd. of page 4)

\* **12 Ecological information:**

- . **Ecotoxicological effects:**
- . **Remark:** Harmful to fish

**13 Disposal considerations**

- . **Product:**
- . **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**

- . **DOT regulations:**
- . **Hazard class:** Not regulated.
- . **Maritime transport IMDG/GGVSea:**
- . **IMDG/GGVSea Class:** Not regulated.
- . **Marine pollutant:** No
- . **Air transport ICAO-TI and IATA-DGR:**
- . **ICAO/IATA Class:** Not regulated.

\* **15 Regulations**

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

All ingredients are listed.

- . **Proposition 65:**

- . **Chemicals known to cause cancer:**

None of the ingredients is listed.

- . **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- . **Chemicals known to cause reproductive toxicity for males:**

TGIC

- . **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- . **Carcinogenicity categories**

- . **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- . **IARC (International Agency for Research on Cancer)**

13463-67-7	titanium dioxide	2B
7631-86-9	silicon dioxide, chemically prepared	3

(Contd. on page 6)

# Material Safety Data Sheet

acc. to ISO 11014

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Reviewed on 07/13/2010

Trade name **RAL 1013 SM GL**

(Contd. of page 5)

112926-00-8	Silicon dioxide	3
9002-88-4	Ethene, 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>. TLV (Threshold Limit Value established by ACGIH)</b>		
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 (SiO <sub>2</sub> )	A2
<b>. NIOSH-Ca (National Institute for Occupational Safety and Health)</b>		
13463-67-7	titanium dioxide	
14808-60-7	quartz (SiO <sub>2</sub> )	
<b>. OSHA-Ca (Occupational Safety &amp; Health Administration)</b>		
None of the ingredients is listed.		

**. Designation according to EC guidelines:**

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

**. Code letter and hazard designation of product:**

Toxic

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

TGIC

**. Risk phrases:**

May cause heritable genetic damage.  
Also harmful by inhalation and if swallowed.  
May cause sensitization by skin contact.

**. Safety phrases:**

Avoid exposure - obtain special instructions before use.  
Keep container in a well-ventilated place.  
Avoid contact with skin.  
Wear suitable gloves.  
This material and its container must be disposed of as hazardous waste.

**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.

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