

Date of issue: Revision date: 05/9/2017 Supersedes: V1.0 Version: 2.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Liquid mixture / Water-based acrylic coating  
Product name. : Reflex HP Base Coat  
Product code : 17-RBC-5  
Type of product : Top coating

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category : Industrial use / Professional use  
Industrial/professional use spec : Wide dispersive use  
Use of the substance/mixture : Coating

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Neptune Coatings Inc  
4260 Wagon Trail Avenue  
Las Vegas, NV 89118 USA  
T +1 (702) 410 5500 - F +1 (702) 410 5889  
info@neptunecoatings.com

Informations : +1 702 751 0460 & Neptune Coatings working days +1 702 410 5500 9 AM to 5PM

### 1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency Number
United States	Neptune Coatings Emergency number ( English Speaking)	Las Vegas NV	+1 702 605 3881
United Kingdom	Neptune Coatings Emergency number ( English Speaking)	London	+44 203239 7225
United States	National Capital Poison Center		+ 1 800 222 1222
United Kingdom	NPIS Edinburgh (Scottish Poisons Information Bureau) Royal Infirmary of Edinburgh	51 Little France Crescent EH16 4SA Edinburgh	0844 892 0111
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241
Belgique	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid	Rue Bruyn 1 1120 Bruxelles/Brussel	+32 70 245 245
France	Centre Antipoison Hôpital Edouard Herriot	5 Place d'Arsonval F-69437 Lyon Cedex 03	+33 4 72 11 69 11
Nederland	Nationaal Vergiftigingen Informatie Centrum	Huispostnummer B.00.118 PO Box 85500 3508 GA Utrecht	+31 30 274 88 88

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture



Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixture/Substance: SDS EU 2015: According to Annex II of Regulation (EC) No. 453/2010 (REACH Annex II)

Carcinogenicity	Category 1A	H350
Specific target organ toxicity single exposure	Category 2	H371
Specific target organ toxicity repeated exposure	Category 1	H372
Acute toxicity oral	Category 4	H302

Full text of classification categories and H statement: see section 16

### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to display Extra classification(s) to display

Hazard pictograms (CLP)	:		
Signal word (CLP)	:	Danger	
Hazardous ingredients	:		
Hazard statements (CLP)	:	H350: May Cause Cancer H302: Harmful if swallowed H371: May cause damage to Respiratory track H372: Causes damages to Lungs Through Prolonged or Repeated Exposure	
Precautionary statements (CLP)	:	P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P261 - Avoid breathing dust/fume/gas/mist/vapor/spray P264 - Wash hands thoroughly after handling P271 - Use only Outdoors or in a well-ventilated area P281 - Use personal protective equipment as required P304+P340 - IF INHALED: Remove victim to fresh air and keep in rest in a comfortable position for breathing P403+P233 - Store in a well-ventilated place. Keep cool P308+P313 - IF exposed or concerned: get medical advice /attention P405 - Store locked up P501 - Dispose of content and container in accordance with existing federal, state and local environmental control laws	

### 2.3. Other hazards

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 24%

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP] & GHS
Titanium Dioxide (Rutile)	(CAS No) 13463-67-7	1-5%	Carcinogenicity category 2 inhalation Specific target organ toxicity - Single exposure category 3 respiratory system
Christalline Quartz Sillica	(CAS No) 14808-60-7	01. - 1%	Acute toxicity Category 4 Oral Carcinogenicity Category 1A Specific target organ toxicity - repeated exposure Category 1 Lung

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

#### 3.2. Mixture

No information available

Full text of H-phrases: see section 16

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove the victim into fresh air. Consult a doctor/medical service if you feel unwell.
- First-aid measures after skin contact : Wash immediately with lots of water. Wash with water and soap
- First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Keep eye wide open while rinsing. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth with water. Do not induce vomiting. Immediately consult a doctor/medical service.

##### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : No data available
- Symptoms/injuries after skin contact : May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash.
- Symptoms/injuries after eye contact : Causes serious eye irritation with symptoms of reddening, tearing, swelling, and burning
- Symptoms/injuries after ingestion : No data available

##### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : All extinguishing media are suitable  
 Unsuitable extinguishing media : No data available

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Material presenting a minor fire hazard.  
 Explosion hazard : Heat may cause pressure rise with explosion risk.  
 Hazardous decomposition products in case of fire : By Thermal Decomposition: carbon monoxide, carbon dioxide, Acrylic monomers, other potentially toxic fumes

### 5.3. Advice for firefighters

- Precautionary measures fire : Exposure to fire/heat: keep upwind.  
 Protection during firefighting : Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Ventilate enclosed areas. Ventilate closed spaces before entering.

#### 6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses. Wear appropriate personal protective equipment during cleanup.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Dam up the liquid spill. Do not touch or walk through spilled material.  
**Small Spills:** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.  
**Large Spills:** Dam ahead of liquid spill for later disposal. Prevent entry into waterways, sewers, basements or confined areas. Surfaces may become slippery after spillage.

Methods for cleaning up : Take up liquid spill into inert absorbent material. Scoop absorbed substance into closing containers.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : None under normal use.
- Precautions for safe handling : Avoid contact with skin, eye and clothing. As with all chemicals, good industrial hygiene practices should be followed when handling this material. No special measures necessary provided product is used correctly
- Hygiene measures : Do no eat, drink or smoke when using this product.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep in a ventilated place. Protect against frost. Keep the container tightly closed. Avoid excessive heat.
- Incompatible products : No information available
- Storage temperature : 1 - 49°C / 33.8 - 120.2°F
- Packaging materials : Stainless steel. Glass. Plastics.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

Personal protective equipment	: Gloves. Safety glasses.
Hand protection	: Gloves. NBR (Nitrile rubber).
Eye protection	: Safety glasses
Respiratory protection	: Under normal conditions, respirator is not normally required. If vapors are present or irritation is experienced, NIOSH approved respiratory protection for organic vapors should be worn. Provide for sufficient ventilation and suction at critical points. When spraying: Gas mask with filter type A



### 8.2. Exposure controls

Titanium dioxide (Rutile) (13463-67-7)	
ACGIH	Time Weighted Average (TWA): 10 mg/m3 Hazard Designation: Group A4 Not classifiable as a human carcinogen.
OSHA	Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit: 15 mg/m3 (Total dust.)
Crystalline Quartz Silica (14808-60-7)	
ACGIH	Time Weighted Average (TWA): 0.025 mg/m3 (Respirable fraction.) Hazard Designation: Group A2 Suspected human carcinogen.
OSHA	Table Z-3 (29 CFR 1910.1000) Time Weighted Average (TWA): 2.4 millions of particles per cubic foot of air (Respirable.)The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$ , using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits. Table Z-3 (29 CFR 1910.1000) Time Weighted Average (TWA): 0.1 mg/m3 (Respirable.)The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$ , using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits. Table Z-3 (29 CFR 1910.1000) Time Weighted Average (TWA): 0.3 mg/m3 (Total dust.)The exposure limit is calculated from the equation, $30/(\%SiO_2+2)$ , using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Slightly viscous mixture
Colour	: Various
Odour	: Mild, Amine
Odour threshold	: No data available
pH	: No data available
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: 0°C / 32°F similar to water
Boiling point	: 100°C / 212°F Similar to water
Flash point	: Not applicable
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 17 mmHg @ 20°C (68°F) similar to water
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.44
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosion limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Hazardous polymerization does not occur.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None under normal use.

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

By Thermal Decomposition: carbon monoxide, carbon dioxide, Acrylic monomers, other potentially toxic fumes

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

LD50 oral rat	:	> 5000 mg/kg (Rat)
LD50 inhalation toxicity	:	> 6.82 mg/l (Rat)
LD50 acute dermal toxicity	:	> 10000 mg/kg (Rabbit)
Skin irritation	:	Rabbit Exposure time 24 Hours, non-irritating
Eye irritation	:	Rabbit non-irritating
Skin sensitization	:	Guinea Pig non sensitizer Human non sensitizer Mouse Negative
Mammalian cell mutagenicity	:	Negative
Carcinogenicity	:	Rat, Male/Female, inhalation, According to IARC, several rat inhalation and intratracheal installation studies using titanium dioxide have shown increases in benign and malignant lung tumors. Reviewed human exposure data did not suggest an association between occupational exposure to titanium dioxide and risk for cancer. Additionally, the IARC working group determined that, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other material, such as in paints."
Reproductive toxicity	:	No data available
Specific target organ toxicity (single exposure)	:	No data available
Specific target organ toxicity (repeated exposure)	:	No data available
Aspiration hazard	:	Not classified

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

#### Toxicity Data for Titanium dioxide (Rutile)

<b>Acute oral toxicity</b>	LD50: > 5000 mg/kg (rat, female) (OECD Test Guideline 425)
<b>Acute inhalation toxicity</b>	LC50: > 6.82 mg/l, 4 h (rat, male)
<b>Acute dermal toxicity</b>	LD50: > 10000 mg/kg (rabbit)
<b>Skin irritation</b>	Rabbit, OECD Test Guideline 404, Exposure Time: 24 h, Non-irritating
<b>Eye irritation</b>	Rabbit, OECD Test Guideline 405, Non-irritating
<b>Sensitization</b>	Dermal: non-sensitizer (Guinea pig, Maximization Test) Dermal: non-sensitizer (Human, Patch Test)
<b>Skin sensitization</b>	(local lymph node assay (LLNA)): Negative (mouse, OECD Test Guideline 429)
<b>Repeated dose toxicity</b>	28 Days, inhalation: NOAEL: 35 mg/m <sup>3</sup> , (Rat) 29 days, Oral: NOAEL: 24,000 mg/kg, (rat, male, daily) Up to 2 years, inhalation: NOAEL: 0.01 mg/l, (Rat, male/female, 6 hrs/day 5 days/week)
<b>Mutagenicity</b>	
<b>Genetic toxicity in vitro:</b>	Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without) Mammalian cell - gene mutation assay: negative (Mouse lymphoma cells (L5178Y/TK), Metabolic Activation: with/without) Chromosome aberration test: negative (Chinese hamster ovary (CHO) cells, Metabolic Activation: with/without)
<b>Genetic toxicity in vivo:</b>	Drosophila SLRL test: negative (Drosophila melanogaster) negative
<b>Cytogenetic assay:</b>	Negative (mouse, male, intraperitoneal) negative
<b>Carcinogenicity</b>	Rat, Male/Female, inhalation

According to IARC, several rat inhalation and intratracheal installation studies using titanium dioxide have shown increases in benign and malignant lung tumors. Reviewed human exposure data did not suggest an association between occupational exposure

**Safety Data Sheet**  
**Reflex HP Base Coat**  
**17-RBC-5**

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Federal register / vol 77 n° 58 03/26/2012  
Rules & regulations

to titanium dioxide and risk for cancer. Additionally, the IARC working group determined that, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other material, such as in paints."

**Other Relevant Toxicity Information** May cause irritation of respiratory tract.

**Toxicity data for Crystalline Quartz Silica**

**Acute oral toxicity** LD50: 500 mg/kg (rat)

**Mutagenicity**

**Genetic toxicity in vitro:** Ames: Negative results were reported in various in vitro studies. (Salmonella typhimurium, Metabolic Activation: with/without)

**Genetic toxicity in vivo:** Sister Chromatid Exchange: ambiguous (hamster) ambiguous

**Carcinogenicity** Rat, Male/Female, inhalation, 2 years, 6 hrs/day 5 days/week, positive

**Carcinogenicity:**

**Titanium dioxide (Rutile)**

**IARC -** Overall evaluation: 2B Possibly carcinogenic to humans.

**SECTION 12: Ecological information**

**12.1. Toxicity**

LC50 fishes 1 : No data available
   
 LC50 other aquatic organisms 1 : No data available
   
 Threshold limit other aquatic organism 1 : No data available

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No additional information available

**12.5. Results of PBT and vPvB assessment**

No additional information available

**12.6. Other adverse effects**

No additional information available

**Ecological data for Titanium dioxide (Rutile)**

Acute and prolonged toxicity to fish	LC0: > 1,000 mg/l (Golden orfe (Leuciscus idus), 48 h)
Acute toxicity to aquatic invertebrates	EC0: > 3 mg/l (Water flea (Daphnia magna))
Toxicity to microorganisms	EC0: > 10,000 mg/l, (Pseudomonas fluorescens, 24 h)

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

- Regional legislation (Waste) : Disposal must be done according to official regulations.
- Sewage disposal recommendations : Avoid any discharge of the product into waste water. Do not discharge into drains, surface waters or ground waters. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator.

## SECTION 14: Transport information

In accordance with ADR / RID / ADN / IMDG / IATA / ICAO / IATA  
 DOT Proper Shipping Name This product is not regulated by DOT, IMO or IATA.

### 14.1. UN number

Not regulated for transport

UN-No. (ADR)	:	Not applicable
UN-No. (IMDG)	:	UN3082
UN-No.(IATA)	:	UN3082
UN-No.(ADN)	:	Not applicable
UN-No. (RID)	:	Not applicable
Proper shipping name (ADR)	:	Not applicable
Proper shipping name (IMDG)	:	Not applicable
Proper shipping name (IATA)	:	Not applicable
Proper shipping name (ADN)	:	Not applicable
Proper shipping name (RID)	:	Not applicable
Transport document description (ADR)	:	Not applicable

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	:	No information available
Danger labels (ADR)	:	No information available

#### IMDG

Transport hazard class(es) (IMDG)	:	Not applicable
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#### IATA

Transport hazard class(es) (IATA)	:	Not applicable
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#### ADN

Transport hazard class(es) (ADN)	:	Not applicable
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#### RID

Transport hazard class(es) (RID)	:	Not applicable
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### 14.4. Packing group

Packing group (ADR)	:	No information available
Packing group (IMDG)	:	III
Packing group (IATA)	:	III
Packing group (ADN)	:	Not applicable
Packing group (RID)	:	Not applicable

**Safety Data Sheet**
  
**Reflex HP Base Coat**
  
**17-RBC-5**

according to Regulation
   
 (EC) No. 1907/2006 (REACH)
   
 with its amendment Regulation (EC) No. 453/2010
   
 Federal register / vol 77 n° 58 03/26/2012
   
 Rules & regulations

**14.5. Environmental hazards**

Dangerous for the environment : No supplementary information available
   
 Marine pollutant : No supplementary information available
   
 Other information : No supplementary information available

**14.6. Special precautions for user**

**- Overland transport**

Classification code (ADR) : No information available
   
 Special provision (ADR) : No information available
   
 Limited quantities (ADR) : No information available
   
 Excepted quantities (ADR) : No information available
   
 Packing instructions (ADR) : No information available
   
 Special packing Provisions (ADR) : No information available
   
 Mixed packing Provisions (ADR) : No information available
   
 Portable tank and bulk container instructions (ADR) : No information available
   
 Portable tank and bulk container special provisions (ADR) : No information available
   
 Tank code (ADR) : No information available
   
 Vehicle for tank carriage : No information available
   
 Transport category (ADR) : No information available
   
 Special provisions for carriage - packages (ADR) : No information available
   
 Special provisions for carriage - loading and unloading (ADR) : No information available
   
 Hazard identification number (Kemler No.) : No information available
   
 Orange plates : No information available
   
 Tunnel restriction code (ADR) : No information available
   
 EAC code : No information available

**- Transport by sea**

MFAG-No : No information available

**- Air transport**

No data available

**- Inland waterway transport**

Carriage prohibited (ADN) : No information available
   
 Not subject to ADN : No

**- Rail transport**

Carriage prohibited (RID) : No

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable



## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No additional information available

#### 15.1.2. US Federal regulations

Registration status: TSCA, US released / listed  
OSHA hazard category: Not hazardous  
SARA hazard categories (EPCRA 311/312) : Acute Health Hazard Chronic Health Hazard

#### 15.1.4. Canada

No additional information available

#### 15.1.4. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

## SECTION 16: Other information

Indication of changes:

Classification according to Regulation (EC) No. 1272/2008 [CLP].

SDS (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*

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