

Date of issue: Revision date: 2024-08-01 Supersedes: V2.2 Version: 3.0a

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

Polymer Group Ltd
62 Stonedon Drive, East Tamaki Manukau City, New Zealand
Ph: 0800 999 001 Mon-Friday 8.00 am – 5.30 pm / Ph: 09 916 3026 24 hrs

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency Number
United States	Neptune Coatings Emergency number (English Speaking)	Las Vegas NV	Call CHEMTREC: Toll Free: 1-800-424-9300/ +1 703-527-3887
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
New Zealand	Polymer Group Ltd	62 Stonedon Drive, East Tamaki Manukau City, New Zealand	Ph: 0800 999 001 Mon-Friday 8.00 am – 5.30 pm Ph: 09 916 3026 24 hrs
Netherland	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	0.1 - 1%	Acute toxicity Category 4 Oral Carcinogenicity Category 1A Specific target organ toxicity - repeated exposure Category 1 Lung
Acrylic Resin	(CAS No) 9003-01-4	60 - 99%	Not hazardous substance - Exempted of registration
Total		100%	

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	<p>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.</p> <p>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.</p> <p>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.</p>
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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, suchr 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)

Acute oral toxicity LD50: > 5000 mg/kg (rat, female) (OECD Test Guideline 425)

Acute inhalation toxicity LC50: > 6.82 mg/l, 4 h (rat, male)

Acute dermal toxicity LD50: > 10000 mg/kg (rabbit)

Neptune Coatings Corporation.

4260 Wagon Trail Avenue ■ Las Vegas ■ NV 89118 ■ USA

Skin irritation Rabbit, OECD Test Guideline 404, Exposure Time: 24 h, Non-irritating
Eye irritation Rabbit, OECD Test Guideline 405, Non-irritating
Sensitization Dermal: non-sensitizer (Guinea pig, Maximization Test)
Dermal: non-sensitizer (Human, Patch Test)
Skin sensitization (local lymph node assay (LLNA)): Negative (mouse, OECD Test Guideline 429)
Repeated dose toxicity 28 Days, inhalation: NOAEL: 35 mg/m³, (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)

Mutagenicity
Genetic toxicity in vitro: 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)

Genetic toxicity in vivo: Drosophila SLRL test: negative (Drosophila melanogaster) negative

Cytogenetic assay: Negative (mouse, male, intraperitoneal) 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."

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)

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 / ADNR / IMDG / 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

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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

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

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

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

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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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