# SAFETY DATA SHEET



Date of issue/Date of revision 1 May 2016

**Version 3** 

## **Section 1. Identification**

Product name : LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

Product code : 00370933

Other means of : Not available.

identification

Product type : Solid.

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

Product use : Industrial applications.

Use of the substance/

mixture

: Adhesive.

Uses advised against : Not applicable.

**Manufacturer**: PPG Industries, Inc.

One PPG Place

Pittsburgh, PA 15272

**Emergency telephone** 

number

: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico)

**Technical Phone Number** : 1-800-441-9695 (8:00 am to 5:00 pm EST)

## Section 2. Hazards identification

**OSHA/HCS status** 

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2

TOXIC TO REPRODUCTION (Fertility) - Category 1B TOXIC TO REPRODUCTION (Unborn child) - Category 1B

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 50.3%

**GHS label elements** 

Hazard pictograms





Signal word : Danger

United States Page: 1/13

### Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

## Section 2. Hazards identification

**Hazard statements** 

Causes serious eye irritation.
 May cause an allergic skin reaction.
 May damage fertility or the unborn child.
 Suspected of causing cancer.

#### **Precautionary statements**

**Prevention** 

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid breathing dust. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

: IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage Disposal : Store locked up.

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

: Trimethoxysilanes are capable of forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. 1-component mixtures: formaldehyde is released during curing. Formaldehyde may cause irreversible effects, is irritating to the mucous membranes and may cause skin sensitization. Emits toxic fumes when heated.

Hazards not otherwise classified

: None known.

# Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Product name

: LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

Ingredient name	%	CAS number
proprietary sax 350 silyl terminated polyether	≥20 - ≤50	Not available.
1,2-Cyclohexanedicarboxylic acid, 1,2-dinonyl ester, branched and linear	≥10 - ≤20	474919-59-0
titanium dioxide	≥1.0 - ≤5.0	13463-67-7
N-(3-(trimethoxysilyl)propyl)ethylenediamine	≥1.0 - <3.0	1760-24-3
trimethoxyvinylsilane	≥1.0 - ≤4.2	2768-02-7
dibutylbis(pentane-2,4-dionato-O,O')tin	<1.0	22673-19-4

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

United States Page: 2/13

### Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

## Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

### **Description of necessary first aid measures**

**Eye contact**: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids

apart for at least 10 minutes and seek immediate medical advice.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained

personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water

or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep

person warm and at rest. Do NOT induce vomiting.

### Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact**: May cause an allergic skin reaction.

**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:

pain or irritation

watering redness

**Inhalation** : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

**Ingestion** : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

#### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments**: No specific treatment.

United States Page: 3/13

Product code 00370933

Date of issue 1 May 2016

Version 3

#### Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

## Section 4. First aid measures

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

metal oxide/oxides

Specific hazards arising from the chemical

: This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### Methods and materials for containment and cleaning up

United States Page: 4/13

Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

## Section 6. Accidental release measures

Small spill

: Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

#### **Precautions for safe handling**

**Protective measures** 

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Special precautions** 

: If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, : including any incompatibilities

Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

**Control parameters** 

Occupational exposure limits

United States Page: 5/13

## **Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE**

## Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
proprietary sax 350 silyl terminated polyether	None.
1,2-Cyclohexanedicarboxylic acid, 1,2-dinonyl ester, branched and linear	None.
titanium dioxide	OSHA PEL (United States, 2/2013).
	TWA: 15 mg/m³ 8 hours. Form: Total dust
	ACGIH TLV (United States, 3/2015).
	TWA: 10 mg/m³ 8 hours.
N-(3-(trimethoxysilyl)propyl)ethylenediamine	None.
trimethoxyvinylsilane	None.
dibutylbis(pentane-2,4-dionato-O,O')tin	ACGIH TLV (United States). Absorbed
	through skin.
	STEL: 0.2 mg/m³
	OSHA PEL (United States).
	TWA: 0.1 mg/m³, (as Sn)
	TWA: 0.1 mg/m³, (as Sn) Form: Total dust
	ACGIH TLV (United States, 3/2015).
	TWA: 2 mg/m³, (as Sn) 8 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 2 mg/m³, (as Sn) 8 hours.

#### Key to abbreviations

= Acceptable Maximum Peak S = Potential skin absorption ACGIH = American Conference of Governmental Industrial Hygienists. SR = Respiratory sensitization = Ceilina Limit SS = Skin sensitization С F STEL = Short term Exposure limit values **IPEL** = Internal Permissible Exposure Limit TD = Total dust **OSHA** = Occupational Safety and Health Administration. = Threshold Limit Value TLV R = Respirable TWA = Time Weighted Average = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

### Consult local authorities for acceptable exposure limits.

# procedures

**Recommended monitoring**: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

## Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

## **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### **Individual protection measures**

**United States** Page: 6/13

## Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

## Section 8. Exposure controls/personal protection

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before

eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety

showers are close to the workstation location.

Eye/face protection **Skin protection** 

: Chemical splash goggles.

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be

worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the

protection time of the gloves cannot be accurately estimated.

Gloves : butyl rubber

**Body protection**: Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before

handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the

hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying

with an approved standard if a risk assessment indicates this is necessary.

## Section 9. Physical and chemical properties

: Not available.

**Appearance** 

**Boiling point** 

Physical state : Solid.

Color : Not available.

Odor : Characteristic.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Flash point : Closed cup: Not applicable. [Product does not sustain combustion.]

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Lower: 1.04% Upper: 1% : Not available.

Evaporation rate : Not available.

Vapor pressure : Not available.

Vapor pressure : Not available.
Vapor density : Not available.

Relative density : 1.39

United States Page: 7/13

### Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

## Section 9. Physical and chemical properties

Density (lbs/gal) : 11.6

**Solubility** Insoluble in the following materials: cold water.

Partition coefficient: n-

octanol/water

**Viscosity** 

: Not available.

: Kinematic (40°C (104°F)): Not applicable.

Volatility : 100% (v/v), 100% (w/w)

% Solid. (w/w)

## Section 10. Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. Reactivity

**Chemical stability** : The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.

Refer to protective measures listed in sections 7 and 8.

: Keep away from the following materials to prevent strong exothermic reactions: **Incompatible materials** 

oxidizing agents, strong alkalis, strong acids.

**Hazardous decomposition** 

products

: Decomposition products may include the following materials: carbon monoxide, carbon

dioxide, smoke, oxides of nitrogen.

# **Section 11. Toxicological information**

#### Information on toxicological effects

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
titanium dioxide	LD50 Oral	Rat	>11 g/kg	-
N-(3-(trimethoxysilyl)propyl) ethylenediamine	LD50 Oral	Rat	2413 mg/kg	-
trimethoxyvinylsilane	LC50 Inhalation Vapor	Rat	>16790 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	>3.4 g/kg	-
	LD50 Oral	Rat	>7.3 g/kg	-
dibutylbis(pentane-2, 4-dionato-O,O')tin	LD50 Oral	Rat	>2 g/kg	-

**Conclusion/Summary** 

: There are no data available on the mixture itself.

**Irritation/Corrosion** 

Conclusion/Summary

Skin There are no data available on the mixture itself. There are no data available on the mixture itself. **Eyes** : There are no data available on the mixture itself. Respiratory

**United States** Page: 8/13

## Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

## Section 11. Toxicological information

### **Sensitization**

**Conclusion/Summary** 

Skin : There are no data available on the mixture itself.Respiratory : There are no data available on the mixture itself.

**Mutagenicity** 

Conclusion/Summary : There are no data available on the mixture itself.

**Carcinogenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself.

Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-

#### Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA:

Not listed/not regulated: -

### Reproductive toxicity

**Conclusion/Summary**: There are no data available on the mixture itself.

**Teratogenicity** 

**Conclusion/Summary**: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Name	Category	
dibutylbis(pentane-2,4-dionato-O,O')tin	Category 1	

## Specific target organ toxicity (repeated exposure)

Name	Category
dibutylbis(pentane-2,4-dionato-O,O')tin	Category 1

<u>Target organs</u>: Contains material which causes damage to the following organs: eyes.

Contains material which may cause damage to the following organs: lungs, bladder,

upper respiratory tract, skin, central nervous system (CNS), stomach.

#### **Aspiration hazard**

Not available.

### Information on the likely routes of exposure

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact**: May cause an allergic skin reaction.

**Ingestion**: No known significant effects or critical hazards.

Over-exposure signs/symptoms

United States Page: 9/13

## **Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE**

## **Section 11. Toxicological information**

**Eye contact** : Adverse symptoms may include the following:

> pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

> reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact : Adverse symptoms may include the following:

> irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

: Adverse symptoms may include the following: Ingestion

> reduced fetal weight increase in fetal deaths skeletal malformations

## Delayed and immediate effects and also chronic effects from short and long term exposure

**Conclusion/Summary** : There are no data available on the mixture itself. Trimethoxysilanes are capable of

> forming methanol if hydrolyzed or ingested. If swallowed, methanol may be harmful or fatal or cause blindness. 1-component mixtures: formaldehyde is released during curing. Formaldehyde may cause irreversible effects, is irritating to the mucous membranes and may cause skin sensitization. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral,

inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate : There are no data available on the mixture itself.

: There are no data available on the mixture itself. Potential delayed effects

Long term exposure

Potential immediate : There are no data available on the mixture itself.

effects

effects

: There are no data available on the mixture itself. Potential delayed effects

Potential chronic health effects

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

Carcinogenicity Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

Mutagenicity : No known significant effects or critical hazards.

**Teratogenicity** May damage the unborn child.

: No known significant effects or critical hazards. **Developmental effects** 

**Fertility effects** : May damage fertility.

**Numerical measures of toxicity** 

Acute toxicity estimates

**United States** Page: 10/13

### Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

## **Section 11. Toxicological information**

Route	ATE value
Oral	52141.8 mg/kg
Inhalation (gases)	60445.9 ppm
Inhalation (vapors)	147.8 mg/l
Inhalation (dusts and mists)	20.15 mg/l

## Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

#### Persistence and degradability

Not available.

#### **Bioaccumulative potential**

Not available.

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

## Section 13. Disposal considerations

#### **Disposal methods**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

United States Page: 11/13

### Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

## 14. Transport information

	DOT	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class (es)	-	-	-
Packing group	-	-	-
Environmental hazards Marine pollutant substances	No. Not applicable.	No. Not applicable.	No. Not applicable.

#### **Additional information**

DOT : None identified. **IMDG** : None identified. IATA : None identified.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

# Section 15. Regulatory information

### **United States**

United States inventory (TSCA 8b) : All components are listed or exempted.

**SARA 302/304** 

**SARA 304 RQ** : Not applicable. **Composition/information on ingredients** 

No products were found.

**SARA 311/312** 

Classification : Immediate (acute) health hazard

Delayed (chronic) health hazard

### Composition/information on ingredients

Name	hazard	Sudden release of pressure	Immediate (acute) health hazard	Delayed (chronic) health hazard

**United States** Page: 12/13

### Product name LN-501 LIQUID NAILS MOISTURE CURING CONSTRUCTION ADHESIVE

## **Section 15. Regulatory information**

proprietary sax 350 silyl terminated	Yes.	No.	No.	Yes.	No.	ł
polyether					ļ	
1,2-Cyclohexanedicarboxylic acid, 1,	Yes.	No.	No.	Yes.	No.	ł
2-dinonyl ester, branched and linear					ļ	
titanium dioxide	No.	No.	No.	No.	Yes.	ł
N-(3-(trimethoxysilyl)propyl)	No.	No.	No.	Yes.	No.	ļ
ethylenediamine					ļ	
trimethoxyvinylsilane	Yes.	No.	No.	Yes.	No.	ł
dibutylbis(pentane-2,4-dionato-O,O')tin	No.	No.	No.	Yes.	Yes.	ł
	1				1	1

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

## Section 16. Other information

**Hazardous Material Information System (U.S.A.)** 

Health: 3 \* Flammability: 0 Physical hazards: 0

(\*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

**National Fire Protection Association (U.S.A.)** 

Health: 3 Flammability: 0 Instability: 0

Date of previous issue : 8/17/2015

Organization that prepared : EHS

the MSDS

**Key to abbreviations** : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

### Indicates information that has changed from previously issued version.

#### **Disclaimer**

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

United States Page: 13/13