Material Safety Data Sheet



Date of issue 8 February 2018

11.02

Version

1. Product and company identification

Product name	: LN-704 PROJECTS AHE70412WH0
Code	: 00407679
Manufacturer / Supplier	: PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272
<u>Emergency telephone</u> <u>number</u>	: (412) 434-4515 (U.S.) (514) 645-1320 (Canada) 01-800-00-21-400 or + 52 55 5559 1588 (Mexico)
Technical Phone Number	: 1-800-441-9695 (8:00 am to 5:00 pm EST)

2. Hazards identification

Emergency overview	: WARNING!
	MAY BE HARMFUL IF INHALED OR SWALLOWED. SANDING AND GRINDING DUSTS MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER.
	Avoid breathing vapor or mist. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Potential acute health effects	
Inhalation	: May be harmful if inhaled. Slightly irritating to the respiratory system.
Ingestion	: May be harmful if swallowed.
Skin	: No known significant effects or critical hazards.
Eyes	No known significant effects or critical hazards.

Over-exposure signs/symptoms

This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. For many PPG products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8).

Medical conditions aggravated by overexposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS). (1988 Version)

See toxicological information (Section 11)

Product name LN-704 PROJECTS AHE70412WH0

3. Composition/information on ingredients

Name	<u>CAS number</u>	% (w/w)
Limestone	1317-65-3	15 - 40
Kaolin	1332-58-7	10 - 30
ethanediol	107-21-1	0.1 - 1
titanium dioxide	13463-67-7	0.1 - 1
cristobalite (<10 microns)	14464-46-1	0.1 - 1
crystalline silica, respirable powder (<10 microns)	14808-60-7	0.1 - 1
crystalline silica, respirable powder (>10 microns)	14808-60-7	0.1 - 1

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.

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 Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

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.
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.
Inhalation	 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Ingestion	 If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product Extinguishing media	: In a fire or if heated, a pressure increase will occur and the container may burst.
Suitable	: Use an extinguishing agent suitable for the surrounding fire.
Not suitable Special exposure hazards	 None known. 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.
Hazardous combustion products	: Decomposition products may include the following materials: carbon oxides metal oxide/oxides
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.

6. Accidental release measures

Personal precautions	:	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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
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).

Product name LN-704 PROJECTS AHE70412WH0

6. Accidental release measures

Large spill	: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section
Small anill	1 for emergency contact information and Section 13 for waste disposal.
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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. If this material is part of a multiple component system, read the Material 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.

Storage

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. 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.

8. Exposure controls/personal protection

Name	Result	ACGIH	Ontario	Mexico	PPG
Limestone	TWA	Not established	Not established	Not established	Not established
Kaolin	TWA	2 mg/m ³ R	2 mg/m ³ R	2 mg/m ³ R	Not established
ethanediol	STEL	Not established	100 mg/m ³ C	100 mg/m ³ C	Not established
titanium dioxide	TWA	10 mg/m ³	10 mg/m ³ TD	10 mg/m ³	Not established
cristobalite (<10 microns)	TWA	0.025 mg/m ³ R	0.05 mg/m ³ R	0.025 mg/m ³ R	Not established
crystalline silica, respirable powder (<10 microns)	TWA	0.025 mg/m ³ R	0.1 mg/m ³ R	0.025 mg/m ³ R	Not established
crystalline silica, respirable powder (>10 microns)	TWA	0.025 mg/m ³ R	0.1 mg/m ³ R	0.025 mg/m ³ R	Not established

Key to abbreviations

A = Acceptable Maximum Peak CGIH = American Conference of Governmental Industrial Hygienists.

ACGIH = American Confere C = Ceiling Limit

C = Ceiling F = Fume

IPEL = Internal Permissible Exposure Limit

R = Respirable

S = Potential skin absorption

Respiratory sensitization

= Skin sensitization

SR

SS

TD

TLV

- STEL = Short term Exposure limit values
 - = Total dust
 - = Threshold Limit Value
- TWA = Time Weighted Average

Canada - Mexico

Page: 3/7

Product name LN-704 PROJECTS AHE70412WH0

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	: 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.
Engineering measures	: Use only with adequate ventilation. 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.
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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Personal protection	
Eyes	: Safety glasses with side shields.
Hands	: 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.
Respiratory	: 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. 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.
Skin	: 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.
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.

9. Physical and chemical properties

Physical state	:	Liquid.
Flash point	:	Closed cup: Not applicable. [Product does not sustain combustion.]
Color	:	Off-white.
Odor	:	Characteristic.
рН	:	8
Boiling/condensation point	:	100°C (212°F)
Melting/freezing point	:	Not available.
Specific gravity	:	1.46
Density(lbs / gal)	1	12.18
Vapor pressure	1	3.3 kPa (25 mm Hg) [room temperature]
Vapor density	:	Not available.
Volatility	:	57% (v/v), 39.138% (w/w)
Evaporation rate	1	0.05 (butyl acetate = 1)

Canada - Mexico

Page: 5/7

Product name LN-704 PROJECTS AHE70412WH0

9. Physical and chemical properties

Solubility	
Partition coefficient: n-	
octanol/water	
% Solid. (w/w)	

Partially soluble in the following materials: cold water.Not available.

: 60.862

10 . Stability and reactivity

Stability	: Stable under recommended storage and handling conditions (see Section 7).
Conditions to avoid	: No specific data.
Materials to avoid	: Reactive or incompatible with the following materials:,acids,oxidizing materials,strong alkalis
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Kaolin	LD50 Oral	Rat	>5000 mg/kg	-
ethanediol	LD50 Oral	Rat	4700 mg/kg	-
	LD50 Dermal	Rabbit	9.53 g/kg	-
titanium dioxide	LD50 Oral	Rat	>11 g/kg	-
Conclusion/Summary : Not avail	able.			
hronic toxicity				
Conclusion/Summary : Not avail	: Not available.			
arget organs : Contains	material which caus	ses damage to the	e following organs: ey	
			the following organs	
	ry tract, skin, stoma		generation of the second second	
arcinogenicity				
	material which can	cause cancer. R	isk of cancer depend	s on duration and
	exposure.			
Classification	1			
Classification				
	ACGIH	IARC	NT	D
Product/ingredient name		IARC	NTI -	þ
Product/ingredient name Kaolin	ACGIH A4 A4	IARC	NTI - -	þ
Product/ingredient name Kaolin ethanediol	A4	- - 2B	NTI - - -	2
Product/ingredient name Kaolin ethanediol titanium dioxide	A4 A4		-	D wn to be a human
Product/ingredient name Kaolin ethanediol titanium dioxide cristobalite (<10 microns)	A4 A4 A4 A2	- - 2B	- - - Kno carc	wn to be a human inogen.
Product/ingredient name Kaolin ethanediol titanium dioxide cristobalite (<10 microns) crystalline silica, respirable powder (<10	A4 A4 A4	- - 2B	- - - Kno carc Kno	wn to be a human inogen. wn to be a human
Product/ingredient name Kaolin ethanediol titanium dioxide cristobalite (<10 microns) crystalline silica, respirable powder (<10 microns)	A4 A4 A4 A2 A2	- - 2B 1	- - - Kno carc Kno carc	wn to be a human inogen. wn to be a human inogen.
Product/ingredient name Kaolin ethanediol titanium dioxide cristobalite (<10 microns) crystalline silica, respirable powder (<10 microns) crystalline silica, respirable powder (>10	A4 A4 A4 A2	- - 2B 1	- - - Kno carc Kno carc Kno carc Kno	wn to be a human inogen. wn to be a human inogen. wn to be a human
Product/ingredient name Kaolin ethanediol titanium dioxide cristobalite (<10 microns) crystalline silica, respirable powder (<10 microns)	A4 A4 A4 A2 A2	- - 2B 1	- - - Kno carc Kno carc Kno carc Kno	wn to be a human inogen. wn to be a human inogen.
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Product/ingredient name Kaolin ethanediol titanium dioxide cristobalite (<10 microns) crystalline silica, respirable powder (<10 microns) crystalline silica, respirable powder (>10 microns) Carcinogen Classification code: ACGIH: IARC: 1	A4 A4 A2 A2 A2 A2 A1, A2, A3, A4, A5 , 2A, 2B, 3, 4	- - 2B 1 1 1	- - - Kno carc Kno carc Kno carc	wn to be a human inogen. wn to be a human inogen. wn to be a human
Product/ingredient name Kaolin ethanediol titanium dioxide cristobalite (<10 microns) crystalline silica, respirable powder (<10 microns) crystalline silica, respirable powder (>10 microns) Carcinogen Classification code: ACGIH: IARC: 1 NTP: K	A4 A4 A2 A2 A2 A2 A1, A2, A3, A4, A5 , 2A, 2B, 3, 4 nown to be a human cal	- - 2B 1 1 1	- - - Kno carc Kno carc Kno carc	wn to be a human inogen. wn to be a human inogen. wn to be a human
Product/ingredient name Kaolin ethanediol titanium dioxide cristobalite (<10 microns) crystalline silica, respirable powder (<10 microns) crystalline silica, respirable powder (>10 microns) Carcinogen Classification code: ACGIH: IARC: 1 NTP: K a huma	A4 A4 A2 A2 A2 A2 A1, A2, A3, A4, A5 , 2A, 2B, 3, 4	- - 2B 1 1 1 1 rcinogen; Reasonabl	- - - Kno carc Kno carc Kno carc	wn to be a human inogen. wn to be a human inogen. wn to be a human
Product/ingredient name Kaolin ethanediol titanium dioxide cristobalite (<10 microns) crystalline silica, respirable powder (<10 microns) crystalline silica, respirable powder (>10 microns) Carcinogen Classification code: ACGIH: IARC: 1 NTP: K a humai Not liste	A4 A4 A4 A2 A2 A2 A2 A2 A2 A2 A2 A2 A2 A2 A2 A2	- - 2B 1 1 1 1 strongen; Reasonable cinogen: -	- - - Kno carc Kno carc Kno carc	wn to be a human inogen. wn to be a human inogen. wn to be a human inogen.

Product name LN-704 PROJECTS AHE70412WH0

12. Ecological information

Environmental effects

: No known significant effects or critical hazards.

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

13. Disposal considerations

Waste disposal : 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

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

Additional information

TDG	: None identified.
Mexico	: None identified.
IMDG	: 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.

Product name LN-704 PROJECTS AHE70412WH0

15. Regulatory information

Canada inventory (DSL)

: At least one component is not listed in DSL but all such components are listed in NDSL.

<u>Canada</u>

WHMIS (Canada)

: Class D-2A: Material causing other toxic effects (Very toxic).

<u>Mexico</u>

Classification

Flammability : 0 Health : 1 Reactivity : 0

16. Other information

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

Health : 1 * 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. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)Health : 1Flammability : 0Instability : 0Instability : 0Date of previous issue: 1/16/2018Organization that prepared: EHSthe MSDS

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.