

Revision Date: 04-Aug-2015 Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name WHITE VINYL MODIFIED UNDERCOATER

Product Code 1C-349
Alternate Product Code TE1205
Product Class LACQUER
Color White

Recommended use Surface coating

Restrictions on useNo information available

ManufacturerEmergency Telephone Number(s)Benjamin Moore & Co.CHEMTREC (US): 800-424-9300

101 Paragon Drive Montvale, NJ 07645 Phone: 800-225-5554 lenmar-coatings.com

2. HAZARDS IDENTIFICATION

CHEMTREC (outside US): (703)-527-3887

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 1
Flammable liquids	Category 2

Label elements

Danger

Hazard statements

Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
Suspected of causing cancer
May damage fertility or the unborn child
Causes damage to organs
Highly flammable liquid and vapor

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Appearance liquid Odor solvent

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling

Wear eye/face protection

Do not breathe dust/fume/mist/vapors/spray

Do not eat, drink or smoke when using this product

Keep away from heat/sparks/open flames/hot surfaces, no smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Precautionary Statements - Response

If exposed call a POISON CENTER or physician

Eyes

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

Skin

If skin irritation occurs get medical attention

If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water

Wash contaminated clothing before reuse

Inhalation

If inhaled remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or physician if you feel unwell

Fire

In case of fire use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not Applicable

Other information

No information available

3. COMPOSITION INFORMATION ON COMPONENTS

Chemical Name	CAS-No	Weight % (max)
Xylene	1330-20-7	20
Limestone	1317-65-3	20
Talc	14807-96-6	10
n-Butyl acetate	123-86-4	10
Titanium dioxide	13463-67-7	10
Ethyl acetate	141-78-6	10
Isobutyl acetate	110-19-0	10
Ethyl benzene	100-41-4	5
Isopropyl alcohol	67-63-0	5
Butyl benzyl phthalate	85-68-7	5
Acetone	67-64-1	5
Methyl alcohol	67-56-1	5

4. FIRST AID MEASURES

First aid measures

General Advice If symptoms persist, call a physician. Show this safety data sheet to the doctor in

attendance.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact

lenses and continue flushing for at least 15 minutes. Keep eye wide open while

rinsing. If symptoms persist, call a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated

clothes and shoes. If skin irritation persists, call a physician.

Inhalation Move to fresh air. If symptoms persist, call a physician.

If not breathing, give artificial respiration. Call a physician immediately.

Ingestion Clean mouth with water and afterwards drink plenty of water. Do not induce

vomiting without medical advice. Never give anything by mouth to an unconscious

person. Consult a physician.

Protection Of First-AidersUse personal protective equipment.

Most Important Symptoms/Effects No information available.

Notes To Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties

Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause flash fire.

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Suitable Extinguishing Media Foam, dry powder or water. Use extinguishing measures

that are appropriate to local circumstances and the

surrounding environment.

Protective Equipment And Precautions For

Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent)

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and full protective gear.

Specific Hazards Arising From The Chemical Flammable. Flash back possible over considerable

distance. Keep product and empty container away from heat and sources of ignition. Closed containers may rupture if exposed to fire or extreme heat. Thermal decomposition can lead to release of irritating gases and

vapors.

Sensitivity To Mechanical Impact No

Sensitivity To Static Discharge Yes

Flash Point Data

Flash Point (°F) 40
Flash Point (°C) 4
Flash Point Method PMCC

Flammability Limits In Air

Lower Explosion LimitNot availableUpper Explosion LimitNot available

NFPA Health: 2 Flammability: 3 Instability: 1 Special: Not Applicable

NFPA Legend

- 0 Not Hazardous
- 1 Slightly
- 2 Moderate
- 3 High
- 4 Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Remove all sources of ignition. Take precautions to prevent flashback. Ground

and bond all containers and handling equipment. Take precautionary measures against static discharges. Ensure adequate ventilation. Avoid contact with skin,

eyes and clothing. Use personal protective equipment.

Other Information Prevent further leakage or spillage if safe to do so. Do not allow material to

contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be

advised if significant spillages cannot be contained.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods For Clean-Up

Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

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7. HANDLING AND STORAGE

Handling

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not breathe vapors or spray mist. Use only in ventilated areas. Prevent vapor build-up by providing adequate ventilation during and after use.

Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and flame. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Ignition and/or flash back may occur.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children.

Incompatible Materials

No information available

Technical measures/Precautions Ensure adequate ventilation. Use only where airflow will keep vapors from building up in or near the work area in adjoining rooms. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing and disposal of flammable liquids.

> Dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. All equipment should be non-sparking and explosion proof. Use explosion proof electrical equipment for ventilation, lighting and material handling.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Chemical Name	ACGIH	OSHA
Xylene	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 435 mg/m³ - TWA
Limestone	N/E	15 mg/m³ - TWA total 5 mg/m³ - TWA
Talc	2 mg/m³ - TWA	20 mppcf - TWA
n-Butyl acetate	150 ppm - TWA 200 ppm - STEL	150 ppm - TWA 710 mg/m³ - TWA
Titanium dioxide	10 mg/m³ - TWA	15 mg/m³ - TWA
Ethyl acetate	400 ppm - TWA	1400 mg/m ³ - TWA 400 ppm - TWA
Isobutyl acetate	150 ppm - TWA	150 ppm - TWA 700 mg/m³ - TWA
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 435 mg/m³ - TWA
Isopropyl alcohol	200 ppm - TWA 400 ppm - STEL	400 ppm - TWA 980 mg/m³ - TWA
Acetone	500 ppm - TWA 750 ppm - STEL	1000 ppm - TWA 2400 mg/m ³ - TWA

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Methyl alcohol	200 ppm - TWA 250 ppm - STEL	200 ppm - TWA 260 mg/m ³ - TWA
	Skin	3

Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits

OSHA - Occupational Safety & Health Administration Exposure Limits

N/E - Not Established

Appropriate engineering

controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields

Skin Protection Long sleeved clothing. Protective gloves.

Respiratory Protection Use only with adequate ventilation. In operations where exposure limits are

exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator

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specified for paint spray or organic vapors.

Hygiene Measures Avoid contact with skin, eyes and clothing. Remove and wash contaminated

clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid
Odor solvent

Odor Threshold No information available

 Density (lbs/gal)
 10.15 - 10.25

 Specific Gravity
 1.21 - 1.23

pH No information available

Viscosity (cps)No information availableSolubilityNo information availableWater SolubilityNo information availableEvaporation RateNo information availableVapor PressureNo information availableVapor DensityNo information available

 Wt. % Solids
 45 - 55

 Vol. % Solids
 25 - 35

 Wt. % Volatiles
 45 - 55

 Vol. % Volatiles
 65 - 75

 VOC Regulatory Limit (g/L)
 < 680</td>

 Boiling Point (°F)
 132

 Boiling Point (°C)
 56

Freezing Point (°F)

No information available
Freezing Point (°C)

No information available

Flash Point (°F) 40
Flash Point (°C) 4
Flash Point Method PMCC
Flammability (solid, gas) Not applicable

Upper Explosion LimitNo information availableLower Explosion LimitNo information available

Autoignition Temperature (°F)No information availableAutoignition Temperature (°C)No information availableDecomposition Temperature (°F)No information availableDecomposition Temperature (°C)No information availablePartition Coefficient (n-octanol/water)No information available

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical Stability Stable under normal conditions. Hazardous polymerisation

does not occur.

Conditions To Avoid Keep away from open flames, hot surfaces, static

electricity and sources of ignition. Sparks. Elevated

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temperature.

Incompatible Materials Incompatible with strong acids and bases and strong

oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating

gases and vapors.

Possibility Of Hazardous Reactions None under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Principal Routes of Exposure Eye contact, skin contact and inhalation.

Acute Toxicity

Product Information Repeated or prolonged exposure to organic solvents may lead to permanent brain

and nervous system damage. Intentional misuse by deliberately concentrating and

inhaling vapors may be harmful or fatal.

Information on toxicological effects

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Eve contact Contact with eyes may cause irritation.

Skin contact May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the

skin and produce dermatitis.

Ingestion Harmful if swallowed. Ingestion may cause irritation to mucous membranes. Small

amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to

death.

Inhalation Harmful by inhalation. High vapor / aerosol concentrations are irritating to the

eyes, nose, throat and lungs and may cause headaches, dizziness, drowsiness,

unconsciousness, and other central nervous system effects.

Sensitization: No information available **Neurological Effects** No information available. **Mutagenic Effects** No information available. Reproductive Effects No information available. No information available. **Developmental Effects** No information available. **Target Organ Effects** No information available. STOT - repeated exposure No information available. STOT - single exposure Other adverse effects No information available.

Aspiration Hazard May be harmful if swallowed and enters airways. Small amounts of this product

aspirated into the respiratory system during ingestion or vomiting may cause mild

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to severe pulmonary injury, possibly progressing to death.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 4138 mg/kg ATEmix (dermal) 4997 mg/kg ATEmix (inhalation-dust/mist) 4.6 mg/L ATEmix (inhalation-vapor) 4559 mg/L

Acute Toxicity Component

Xylene

LD50 Oral: 4300 mg/kg (Rat)

LD50 Dermal: > 1700 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 5000 ppm (Rat, 4 hr.)

Limestone

LD50 Oral: 6,450 mg/kg (Rat) vendor data

n-Butyl acetate

LD50 Oral: 10768 mg/kg (Rat)

LD50 Dermal: > 17600 mg/kg (Rabbit) LC50 Inhalation (Vapor): 390 ppm (Rat, 4 hr.)

Sensitization: non-sensitizing (guinea pig)

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat) LD50 Dermal: > 10000 mg/m³ (Rabbit)

LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

Ethyl acetate

LD50 Oral: 5620 mg/kg (Rat) LD50 Dermal: > 20 mL/kg (Rabbit)

LC50 Inhalation (Vapor): 200000 mg/m³ (Rat)

Ethyl benzene

LD50 Oral: 3500 mg/kg (Rat)

LD50 Dermal: > 5000 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 55000 mg/m³ (Rat, 2 hr.)

Isopropyl alcohol

LD50 Oral: 5,000-5,045 mg/kg (Rat) LD50 Dermal: 12,800 mg/kg (Rabbit) LC50 Inhalation (Vapor): 16,000 ppm (Rat)

Acetone

LD50 Oral: 5800 mg/kg (Rat)

Methyl alcohol

LD50 Oral: 5600 mg/kg (Rat) LD50 Dermal: 15800 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 64000 ppm (Rat, 4 hr.)

Carcinogenicity

The information below indicates whether each agency has listed any ingredient as a carcinogen:.

Chemical Name	IARC	NTP	OSHA Carcinogen
	2B - Possible Human		Listed
Titanium dioxide	Carcinogen		
	2B - Possible Human		Listed
Ethyl benzene	Carcinogen		

[•] Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint."

Legend

IARC - International Agency for Research on Cancer

NTP - National Toxicity Program

OSHA - Occupational Safety & Health Administration

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

The environmental impact of this product has not been fully investigated.

Product Information

Acute Toxicity to Fish

No information available

Acute Toxicity to Aquatic Invertebrates

No information available

Acute Toxicity to Aquatic Plants

No information available

Persistence / Degradability

No information available.

Bioaccumulation / Accumulation

No information available.

Mobility in Environmental Media

No information available.

Ozone

Not Applicable

Component

Acute Toxicity to Fish

Xylene

LC50: 13.5 mg/L (Rainbow Trout - 96 hr.)

n-Butyl acetate

LC50: 18 mg/L (Fathead Minnow - 96 hr.)

Titanium dioxide

LC50: > 1000 mg/L (Fathead Minnow - 96 hr.)

Ethyl benzene

LC50: 12.1 mg/L (Fathead Minnow - 96 hr.)

Acetone

LC50: 8300 (Bluegill - 96 hr.) mg/L

Acute Toxicity to Aquatic Invertebrates

n-Butyl acetate

EC50: 72.8 mg/L (Daphnia magna - 48 hr.)

Ethyl benzene

EC50: 1.8 mg/L (Daphnia magna - 48 hr.)

Acetone

EC50: 12600 mg/L (Daphnia magna - 48 hr.)

Acute Toxicity to Aquatic Plants

n-Butyl acetate

EC50: 674.7 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

Ethyl benzene

EC50: 4.6 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with federal, state, provincial, and local regulations.

Local requirements may vary, consult your sanitation department or

state-designated environmental protection agency for more disposal options.

Empty Container Warning Emptied containers may retain product residue. Follow label warnings even after

container is emptied. Residual vapors may explode on ignition.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Paint
Hazard Class 3
UN-No UN1263
Packing Group II

Description UN1263, Paint, 3, II,

ICAO / IATA Contact the preparer for further information.

IMDG / IMOContact the preparer for further information.

15. REGULATORY INFORMATION

International Inventories

DSL: CanadaYes - All components are listed or exempt. **TSCA: United States**Yes - All components are listed or exempt.

Federal Regulations

SARA 311/312 hazardous categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight % (max)	CERCLA/SARA 313
			(de minimis concentration)
Xylene	1330-20-7	20	1.0
Ethyl benzene	100-41-4	5	0.1
Isopropyl alcohol	67-63-0	5	1.0
Methyl alcohol	67-56-1	5	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical Name	CAS-No	Weight % (max)	Hazardous Air Pollutant
			<u>(HAP)</u>
Xylene	1330-20-7	20	Listed
Ethyl benzene	100-41-4	5	Listed
Methyl alcohol	67-56-1	5	Listed

State Regulations

California Proposition 65

This product may contain small amounts of materials known to the state of California to cause cancer or reproductive harm.

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania
Xylene	X	X	X
Limestone	X	Χ	X
Talc	X	Χ	X
n-Butyl acetate	X	Χ	X
Titanium dioxide	X	X	X
Ethyl acetate	X	X	X
Isobutyl acetate	X	Χ	X
Ethyl benzene	X	Χ	X
Isopropyl alcohol	X	Χ	X
Butyl benzyl phthalate	X	X	X
Acetone	X	Χ	X
Methyl alcohol	X	Χ	X

Legend

X - Listed

16. OTHER INFORMATION

HMIS Health: 2* Flammability: 3 Reactivity: 1 PPE: -

HMIS Legend

- 0 Minimal Hazard
- 1 Slight Hazard
- 2 Moderate Hazard
- 3 Serious Hazard
- 4 Severe Hazard
- * Chronic Hazard
- X Consult your supervisor or S.O.P. for "Special" handling instructions.

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

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, has chosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Prepared By Product Stewardship Department

> Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 855-724-6802

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Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

END OF SAFETY DATA SHEET