

SAFETY DATA SHEET

Revision Date: 27-Jul-2018 Revision Number: 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name SATIN IMPERVO ALKYD LOW LUSTRE ENAMEL LINEN WHITE

Product Code Z23570
Alternate Product Code Z23570

Product Class SOLVENT THINNED PAINT

Color White Recommended use Paint

Restrictions on use No information available

Manufacturer Emergency Telephone

Benjamin Moore & Co. CHEMTREC (US): 800-424-9300 101 Paragon Drive CHEMTREC (outside US): (703)-527-3887

Montvale, NJ 07645 Phone: 1-866-708-9180 www.benjaminmoore.com

2. HAZARDS IDENTIFICATION

Classification

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

Carcinogenicity	Category 1A
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

May cause cancer May be fatal if swallowed and enters airways 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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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 or concerned: Get medical advice/attention

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower **Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

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)

Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded

Other information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Titanium dioxide	13463-67-7	25
Limestone	1317-65-3	25
Hydrotreated heavy naphtha, petroleum	64742-48-9	20
Odorless Mineral Spirits	64741-65-7	10
Kaolin	1332-58-7	5
Silica, amorphous	7631-86-9	5
Ethyl benzene	100-41-4	0.5
Silica, crystalline	14808-60-7	0.5
Cobalt bis(2-ethylhexanoate)	136-52-7	0.5

4. 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

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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-Aiders Use personal protective equipment.

Most Important Symptoms/Effects No information available.

Notes To Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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)

and full protective gear.

Specific Hazards Arising From The Chemical Combustible material. Closed containers may rupture if

exposed to fire or extreme heat. Keep product and empty container away from heat and sources of ignition. 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) 119.0
Flash Point (°C) 48.3
Method PMCC

Flammability Limits In Air

Lower flammability limit: Not available

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Upper flammability limit: Not available

NFPA Health: 1 Flammability: 2 Instability: 0 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 PrecautionsUse personal protective equipment. Remove all sources of ignition.

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

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advised if significant spillages cannot be contained.

Environmental precautions See Section 12 for additional Ecological Information.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly

labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

HandlingUse only in area provided with appropriate exhaust ventilation. Do not breathe

vapors or spray mist. Wear personal protective equipment. 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

open flames, hot surfaces and sources of ignition.

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.

DANGER - Rags, steel wool or waste soaked with this product may

spontaneously catch fire if improperly discarded. Immediately after use, place

rags, steel wool or waste in a sealed water-filled metal container.

Incompatible Materials Incompatible with strong acids and bases and strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL

Titanium dioxide	10 mg/m³ - TWA	15 mg/m³ - TWA
Limestone	N/E	15 mg/m³ - TWA 5 mg/m³ - TWA
Kaolin	2 mg/m³ - TWA	15 mg/m³ - TWA 5 mg/m³ - TWA
Silica, amorphous	N/E	20 mppcf - TWA
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 435 mg/m³ - TWA
Silica, crystalline	0.025 mg/m ³ - TWA	-

Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits

OSHA - Occupational Safety & Health Administration Exposure Limits

N/E - Not Established

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 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

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NIOSH approved respirator 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. When using do not eat,

drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid
Odor solvent

Odor Threshold No information available

 Density (lbs/gal)
 11.45 - 11.55

 Specific Gravity
 1.37 - 1.39

pHNo information availableViscosity (cps)No information availableSolubility(ies)No information availableWater solubilityNo information availableEvaporation RateNo information available

Vapor pressure @20 °C (kPa)

Vapor density

No information available
No information available

 Wt. % Solids
 70 - 80

 Vol. % Solids
 45 - 55

 Wt. % Volatiles
 20 - 30

 Vol. % Volatiles
 45 - 55

 VOC Regulatory Limit (g/L)
 < 400</td>

 Boiling Point (°F)
 279.0

 Boiling Point (°C)
 137.0

Freezing Point (°F) No information available

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Freezing Point (°C) No information available

Flash Point (°F) 119.0
Flash Point (°C) 48.3
Method PMCC

Flammability (solid, gas) Not applicable

Upper flammability limit:

Lower flammability limit:

Autoignition Temperature (°F)

Autoignition Temperature (°C)

Decomposition Temperature (°F)

No information available

10. STABILITY AND REACTIVITY

Reactivity Not Applicable

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.

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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.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

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

Eye contact Contact with eyes may cause irritation.

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

skin and produce dermatitis.

Ingestion Ingestion may cause irritation to mucous membranes. Small amounts of this

product aspirated into the respiratory system during ingestion or vomiting may

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cause mild to severe pulmonary injury, possibly progressing to death.

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.

SensitizationNo information available.Neurological EffectsNo information available.Mutagenic EffectsNo information available.Reproductive EffectsNo information available.Developmental EffectsNo information available.Target organ effectsNo information available.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure if inhaled. No information available.

STOT - single exposure No information available. 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

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) 14020 mg/kg ATEmix (dermal) 9817 mg/kg

Component Information

Acute Toxicity

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

Hydrotreated heavy naphtha, petroleum LD50 Oral: > 5,000 mg/kg (Rat) vendor data LD50 Dermal: > 3,160 mg/kg (Rabbit)

Kaolin

LD50 Oral: > 5000 mg/kg (Rat)

Silica, amorphous

LD50 Oral: > 5000 mg/kg (Rat) LD50 Dermal: 2,000 mg/kg (Rabbit) LC50 Inhalation (Dust): > 2 mg/L

Ethyl benzene

LD50 Oral: mg/kg (Rat)

LD50 Dermal: > mg/kg (Rabbit)

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

Silica, crystalline

LD50 Oral: 500 mg/kg (Rat)

Carcinogenicity

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

Chemical name	IARC	NTP	OSHA
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	2B - Possible Human		Listed
Titanium dioxide	Carcinogen		
	2B - Possible Human		Listed
Ethyl benzene	Carcinogen		
	1 - Human Carcinogen	Known Human	Listed
Silica, crystalline		Carcinogen	
	2B - Possible Human		Listed
Cobalt bis(2-ethylhexanoate)	Carcinogen		

- Crystalline Silica has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint.
- 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."
- Cobalt and cobalt compounds are listed as possible human carcinogens by IARC (2B). However, there is inadequate evidence of the carcinogenicity of cobalt and cobalt compounds in humans.

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

No information available.

Mobility in Environmental Media

No information available.

Ozone

No information available

Component Information

Acute Toxicity to Fish

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Titanium dioxide

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

Ethyl benzene

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

Acute Toxicity to Aquatic Invertebrates

Ethyl benzene

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

Acute Toxicity to Aquatic Plants

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, and local regulations. Local

requirements may vary, consult your sanitation department or state-designated

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environmental protection agency for more disposal options.

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

container is emptied. Residual vapors may explode on ignition.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name PAINT Hazard class UN-No. UN1263

Packing Group

UN1263, PAINT, 3, III, Marine Pollutant (Hydrotreated heavy naphtha, petroleum) Description

In the US this material may be reclassified as a Combustible Liquid and is not regulated in containers of less than 119 gallons (450 liters) via surface transportation (refer to 49CFR173.120(b)(2) for further information).

ICAO / IATA Contact the preparer for further information.

IMDG / IMO Contact the preparer for further information.

15. REGULATORY INFORMATION

International Inventories

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

Federal Regulations

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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-%	CERCLA/SARA 313
			(de minimis concentration)
Ethyl benzene	100-41-4	0.5	0.1

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

This product contains the following HAPs:

Chemical name	CAS No.	Weight-%	Hazardous Air Pollutant
			<u>(HAP)</u>
Ethyl benzene	100-41-4	0.5	Listed

US State Regulations

California Proposition 65

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WARNING: Cancer and Reproductive Harm- www.P65warnings.ca.gov

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania
Titanium dioxide	X	X	X
Limestone	X	X	X
Kaolin	X	X	X
Silica, amorphous	X	X	X
Silica, crystalline	X	X	Х

Legend

X - Listed

16. OTHER INFORMATION

HMIS - Health: 1* Flammability: 2 Reactivity: 0 PPE: -

HMIS Legend
0 - Minimal Hazard

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- 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

800-225-5554

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Disclaimer

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END OF SAFETY DATA SHEET