



SAFETY DATA SHEET

Revision Date: 18-May-2021

Revision Number: 3

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

Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 1-866-708-9180
www.benjaminmoore.com

Emergency Telephone

CHEMTREC: +1 703-741-5970 / 1-800-424-9300
+1 703-527-3887 (outside US & Canada)

2. HAZARDS IDENTIFICATION

Classification

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

Skin sensitization	Category 1A
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1B
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

May cause an allergic skin reaction
May cause cancer
May damage fertility or the unborn child
May be fatal if swallowed and enters airways
Flammable liquid and vapor



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

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

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 skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

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	20 - 25
Limestone	1317-65-3	20 - 25
Hydrotreated heavy naphtha, petroleum	64742-48-9	15 - 20
Odorless Mineral Spirits	64741-65-7	5 - 10
Kaolin	1332-58-7	1 - 5
Silica amorphous	7631-86-9	1 - 5
Ethyl benzene	100-41-4	0.1 - 0.5
Silica, crystalline	14808-60-7	0.1 - 0.5
Trimethylolpropane	77-99-6	0.1 - 0.5
Cobalt bis(2-ethylhexanoate)	136-52-7	0.1 - 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 rinsing. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Wash clothing before reuse. Destroy contaminated articles such as shoes.
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	May cause allergic skin reaction.
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
Flash Point (°C)	48
Method	PMCC

Flammability Limits In Air

Lower flammability limit:	Not available
Upper flammability limit:	Not available

NFPA **Health:** 2

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 Precautions

Use 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 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

Handling

Use 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	TWA: 10 mg/m ³	15 mg/m ³ - TWA
Limestone	N/E	15 mg/m ³ - TWA 5 mg/m ³ - TWA
Kaolin	TWA: 2 mg/m ³ particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter	15 mg/m ³ - TWA 5 mg/m ³ - TWA
Silica amorphous	N/E	20 mppcf - TWA
Ethyl benzene	TWA: 20 ppm	100 ppm - TWA 435 mg/m ³ - TWA
Silica, crystalline	TWA: 0.025 mg/m ³ respirable particulate matter	50 µg/m ³ - TWA Respirable crystalline silica 50 µg/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. If splashes are likely to occur, wear: Tightly fitting safety goggles

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 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)	11.3 - 11.7
Specific Gravity	1.35 - 1.40
pH	No information available
Viscosity (cps)	No information available
Solubility(ies)	No information available
Water solubility	No information available
Evaporation Rate	No information available
Vapor pressure	No information available
Vapor density	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
Boiling Point (°F)	279
Boiling Point (°C)	137
Freezing point (°F)	No information available
Freezing Point (°C)	No information available
Flash point (°F)	119
Flash Point (°C)	48
Method	PMCC
Flammability (solid, gas)	Not applicable
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Autoignition Temperature (°F)	No information available
Autoignition Temperature (°C)	No information available
Decomposition Temperature (°F)	No information available
Decomposition Temperature (°C)	No information available
Partition coefficient	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.
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.
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 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.
Sensitization	May cause an allergic skin reaction.
Neurological Effects	No information available.
Mutagenic Effects	No information available.
Reproductive Effects	May damage fertility or the unborn child.
Developmental Effects	No information available.
Target organ effects	No information available.
STOT - repeated exposure	Causes damage to organs through prolonged or repeated exposure if inhaled.
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) 15564 mg/kg
ATEmix (dermal) 9817 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide	> 10000 mg/kg (Rat)	-	-

13463-67-7			
Hydrotreated heavy naphtha, petroleum 64742-48-9	> 6000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	> 8500 mg/m ³ (Rat) 4 h
Odorless Mineral Spirits 64741-65-7	> 7000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.04 mg/L (Rat) 4 h
Kaolin 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Silica amorphous 7631-86-9	= 7900 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat) 1 h
Ethyl benzene 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
Trimethylolpropane 77-99-6	= 14100 mg/kg (Rat) = 14000 mg/kg (Rat)	-	> 0.29 mg/L (Rat) 4 h
Cobalt bis(2-ethylhexanoate) 136-52-7	-	> 5000 mg/kg (Rabbit)	> 10 mg/L (Rat) 1 h

Chronic Toxicity**Carcinogenicity**

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

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

- 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

There is no data for this product.

Mobility in Environmental Media

No information available.

Ozone

No information available

Component Information

Acute Toxicity to Fish

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 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	III
Description	UN1263, PAINT, 3, III

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

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:

<u>Chemical name</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>CERCLA/SARA 313 (de minimis concentration)</u>
Ethyl benzene	100-41-4	0.1 - 0.5	0.1

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

This product contains the following HAPs:

<u>Chemical name</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>Hazardous Air Pollutant (HAP)</u>
Ethyl benzene	100-41-4	0.1 - 0.5	Listed
Cobalt bis(2-ethylhexanoate)	136-52-7	0.1 - 0.5	Listed

US State Regulations

California Proposition 65

 **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
Silica, crystalline	X	X	X
Cobalt bis(2-ethylhexanoate)		X	X

Legend

X - Listed

16. OTHER INFORMATION

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

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Disclaimer

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End of Safety Data Sheet