SAFETY DATA SHEET

Revision Date: *28-Jul-2015* **Revision Number:** *1*

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	**SATIN IMPERVO DEEP BASE**
Product Code	**C2353B**
Product Class	SOLVENT THINNED PAINT
Color	All
Recommended use	Paint
Restrictions on use	No information available

Manufacturer
Benjamin Moore & Co.
101 Paragon Drive
Montvale, NJ 07645
Phone: 855-724-6802
www.benjaminmoore.com

Emergency Telephone Number(s)
CHEMTREC (US): 800-424-9300
CHEMTREC (outside US): (703)-527-3887

2. HAZARDS IDENTIFICATION

Classification

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

Skin sensitization	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements
May cause an allergic skin reaction
May cause cancer
Causes damage to organs through prolonged or repeated exposure
May be fatal if swallowed and enters airways
Flammable liquid and vapor

Appearance liquid **Odor** little or no odor

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
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Do not breathe dust/fume/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
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 or concerned get medical attention
Skin
If skin irritation or rash occurs get medical attention
Wash contaminated clothing before reuse
If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water
Ingestion
If swallowed immediately call a POISON CENTER or 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)
Not Applicable

Other information
No information available

Other Hazards

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight % (max)
Limestone	1317-65-3	35
Hydrotreated heavy naphtha, petroleum	64742-48-9	25
Solvent naphtha, petroleum, medium aliphatic	64742-88-7	10
Titanium dioxide	13463-67-7	10
Ethyl benzene	100-41-4	0.5
Cobalt bis(2-ethylhexanoate)	136-52-7	0.5
Methyl ethyl ketoxime	96-29-7	0.5
Silica, crystalline	14808-60-7	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 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. 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)	119.0
Flash Point (°C)	48.3
Flash Point Method	PMCC
Flammability Limits In Air	
Lower Explosion Limit	Not available
Upper Explosion 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 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 Clean-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

No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Chemical Name	ACGIH	OSHA
Limestone	N/E	15 mg/m³ - TWA total 5 mg/m³ - TWA
Titanium dioxide	10 mg/m³ - TWA	15 mg/m³ - TWA
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 435 mg/m³ - TWA
Silica, crystalline	0.025 mg/m³ - TWA	respirable - (10)/(%SiO2 + 2) mg/m³ TWA respirable - (250)/(%SiO2 + 5) mppcf TWA total dust - (30)/(%SiO2 + 2) mg/m³ 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 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	little or no odor
Odor Threshold	No information available
Density (lbs/gal)	9.7 - 10.0
Specific Gravity	1.16 - 1.20

pH	No information available
Viscosity (cps)	No information available
Solubility	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	65 - 75
Vol. % Solids	45 - 55
Wt. % Volatiles	25 - 35
Vol. % Volatiles	45 - 55
VOC Regulatory Limit (g/L)	< 380
Boiling Point (°F)	279.0
Boiling Point (°C)	137.0
Freezing Point (°F)	No information available
Freezing Point (°C)	No information available
Flash Point (°F)	119.0
Flash Point (°C)	48.3
Flash Point Method	PMCC
Flammability (solid, gas)	Not applicable
Upper Explosion Limit	No information available
Lower Explosion 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 (n-octanol/water)	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.

Information on toxicological effects

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 No information available.
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. Contains: Crystalline Silica which 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.
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) 15432 mg/kg
ATEmix (dermal) 10422 mg/kg

Component

Acute Toxicity

Limestone
LD50 Oral: 6,450 mg/kg (Rat) vendor data
Hydrotreated heavy naphtha, petroleum
LD50 Oral: > 5,000 mg/kg (Rat) vendor data
LD50 Dermal: > 3,160 mg/kg (Rabbit)
Solvent naphtha, petroleum, medium aliphatic
LD50 Oral: > 6240 mg/kg (Rat)

LD50 Dermal: > 3120 mg/kg (Rabbit)
LC50 Inhalation (Vapor): 1400 ppm (Rat, 4 hr.)
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 benzene
LD50 Oral: 3500 mg/kg (Rat)
LD50 Dermal: > 5000 mg/kg (Rabbit)
LC50 Inhalation (Vapor): 55000 mg/m³ (Rat, 2 hr.)
Methyl ethyl ketoxime
LD50 Oral: 930 mg/kg (Rat)
LD50 Dermal: 200 µL/kg (Rabbit)
LC50 Inhalation (Vapor): > 4.8 mg/L (Rat)
Silica, crystalline
LD50 Oral: 500 mg/kg (Rat) vendor data

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

Chemical Name	IARC	NTP	OSHA Carcinogen
Titanium dioxide	2B - Possible Human Carcinogen		Listed
Ethyl benzene	2B - Possible Human Carcinogen		Listed
Cobalt bis(2-ethylhexanoate)	2B - Possible Human Carcinogen		
Silica, crystalline	1 - Human Carcinogen	Known 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 / Accumulation
No information available.

Mobility in Environmental Media
No information available.

Ozone
No information available

Component

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.)
Methyl ethyl ketoxime
LC50: 48 mg/L (Bluegill sunfish - 96 hr.)

Acute Toxicity to Aquatic Invertebrates

Ethyl benzene
EC50: 1.8 mg/L (Daphnia magna - 48 hr.)
Methyl ethyl ketoxime
EC50: 750 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, 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	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:

Chemical Name	CAS-No	Weight % (max)	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 % (max)	Hazardous Air Pollutant (HAP)
Ethyl benzene	100-41-4	0.5	Listed
Cobalt bis(2-ethylhexanoate)	136-52-7	0.5	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
Limestone	X	X	X
Solvent naphtha, petroleum, medium aliphatic		X	
Titanium dioxide	X	X	X
Ethyl benzene	X	X	X
Cobalt bis(2-ethylhexanoate)		X	X
Silica, crystalline	X	X	X

Legend
X - Listed

16. OTHER INFORMATION

HMIS **Health:** 1* **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.

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Disclaimer

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END OF SAFETY DATA SHEET