

SAFETY DATA SHEET

Revision Date: 12-Jul-2018

Revision Number: 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name

Product Code Alternate Product Code Product Class Color Recommended use Restrictions on use

Manufacturer

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

ARBORCOAT EXTERIOR OIL FINISH TRANSLUCENT SILVER GRAY C32670 ALKYD STAIN

Gray Stain No information available

Emergency Telephone

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 corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements

Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction May cause genetic defects Suspected of causing cancer May damage fertility or the unborn child May cause respiratory irritation Causes damage to organs through prolonged or repeated exposure May be fatal if swallowed and enters airways Flammable liquid and vapor



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

Wash face, hands and any exposed skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

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

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

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

Keep cool

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

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 advice/attention

Skin

If skin irritation or rash occurs: Get medical advice/attention

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

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

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 container tightly closed

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

1.2 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
4-Chlorobenzotrifluoride	98-56-6	25
Distillates, petroleum, hydrotreated light	64742-47-8	15
Silica, amorphous	7631-86-9	5
Stoddard solvent	8052-41-3	5
Zinc borate hydrate	138265-88-0	5
Titanium dioxide	13463-67-7	5
Carbamic acid, 1H-benzimidazol-2-yl-, methyl	10605-21-7	0.5
ester		
Ethyl benzene	100-41-4	0.5
Cobalt bis(2-ethylhexanoate)	136-52-7	0.5
Methyl ethyl ketoxime	96-29-7	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 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-FIGHT	ING MEASURES	
Suitable Extinguishing Media			water. Use extinguishing measures local circumstances and the ent.
Protective Equipment And Pred Firefighters	cautions For		elf-contained breathing apparatus SHA/NIOSH (approved or equivalent) ar.
Specific Hazards Arising From	The Chemical	exposed to fire or extr container away from h	Closed containers may rupture if reme heat. Keep product and empty neat and sources of ignition. Thermal ad to release of irritating gases and
Sensitivity To Mechanical Impa	ct	No	
Sensitivity To Static Discharge		Yes	
Flash Point Data Flash Point (°F) Flash Point (°C) Method		107 41.7 PMCC	
Flammability Limits In Air			
Lower flammability limit: Upper flammability limit:		Not available 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 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
4-Chlorobenzotrifluoride	2.5 mg/m ³ - TWA	2.5 mg/m ³ - TWA
Silica, amorphous	N/E 20 mppcf - TW.	
Stoddard solvent	100 ppm - TWA	500 ppm - TWA 2900 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

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 Odor **Odor Threshold** Density (lbs/gal) **Specific Gravity** pН Viscosity (cps) Solubility(ies) Water solubility **Evaporation Rate** Vapor pressure @20 °C (kPa) Vapor density Wt. % Solids Vol. % Solids Wt. % Volatiles Vol. % Volatiles VOC Regulatory Limit (g/L) **Boiling Point (°F) Boiling Point (°C)** Freezing Point (°F) Freezing Point (°C) Flash Point (°F) Flash Point (°C) Method Flammability (solid, gas) **Upper flammability limit:** Lower flammability limit: Autoignition Temperature (°F) Autoignition Temperature (°C) Decomposition Temperature (°F) Decomposition Temperature (°C) Partition coefficient

liquid solvent No information available 9.25 - 9.35 1.10 - 1.12 No information available 55 - 65 50 - 60 35 - 45 40 - 50 <250 279 137 No information available No information available 107 41.7 PMCC Not applicable No information available No information available

10. STABILITY AND REACTIVITY

ReactivityNot ApplicableChemical StabilityStable under normal conditions. Hazardous polymerisation
does not occur.Conditions to avoidKeep away from open flames, hot surfaces, static

electricity and sources of ignition.

Incompatible with strong acids and bases and strong oxidizing agents.

Thermal decomposition can lead to release of irritating gases and vapors.

Possibility of hazardous reactions

Hazardous Decomposition Products

None under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Product Information

Incompatible Materials

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 Skin contact	Contact with eyes may cause irritation. 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	No information available.
STOT - single exposure	No information available.
Other adverse effects Aspiration Hazard	No information available. 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

Unknown acute toxicity

1.2 % of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral)	20246 mg/kg
ATEmix (dermal)	5438 mg/kg

Component Information

Acute Toxicity

4-Chlorobenzotrifluoride LD50 Oral: (Rat) mg/kg LD50 Dermal: mg/kg (Rabbit) LC50 Inhalation (Vapor): mg/L (Rat, 4 hr.) Distillates, petroleum, hydrotreated light LD50 Oral: > 5,000 mg/kg (Rat) LD50 Dermal: > 3,000 mg/kg (Rabbit) Silica, amorphous LD50 Oral: > 5000 mg/kg (Rat) LD50 Dermal: 2,000 mg/kg (Rabbit) LC50 Inhalation (Dust): > 2 mg/L Stoddard solvent LD50 Oral: > 5,000 mg/kg (Rat) LD50 Dermal: > 3160 mg/kg (Rabbit) LC50 Inhalation (Vapor): > 6.1 mg/L (Rat) Zinc borate hydrate LD50 Oral: > 10000 mg/kg (Rat) vendor data LD50 Dermal: > 10000 mg/kg (Rabbit) LC50 Inhalation (Dust): > 5 mg/L (Rat, 4 hr.) Titanium dioxide LD50 Oral: > 10000 mg/kg (Rat) Carbamic acid, 1H-benzimidazol-2-yl-, methyl ester LD50 Oral: 6400 mg/kg (Rat) LD50 Dermal: 8500 mg/kg (Rabbit) Ethyl benzene LD50 Oral: mg/kg (Rat) LD50 Dermal: > mg/kg (Rabbit) LC50 Inhalation (Vapor): 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)

Carcinogenicity

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

Chemical name	IARC	NTP	OSHA
	2B - Possible Human		Listed
Titanium dioxide	Carcinogen		
	2B - Possible Human		Listed
Ethyl benzene	Carcinogen		
	2B - Possible Human		Listed
Cobalt bis(2-ethylhexanoate)	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."

• 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.

<u>Ozone</u>

No information available

Component Information

Acute Toxicity to Fish

<u>Titanium dioxide</u> LC50: > 1000 mg/L (Fathead Minnow - 96 hr.) <u>Carbamic acid, 1H-benzimidazol-2-yl-, methyl ester</u> LC50: 1.5 mg/L (Rainbow Trout - 96 hr.) <u>Ethyl benzene</u> LC50: 12.1 mg/L (Fathead Minnow - 96 hr.) <u>Methyl ethyl ketoxime</u> LC50: 48 mg/L (Bluegill sunfish - 96 hr.)

Acute Toxicity to Aquatic Invertebrates

Carbamic acid, 1H-benzimidazol-2-yl-, methyl ester LC50: 0.22 mg/L (water flea - 48 hr.) <u>Ethyl benzene</u> EC50: 1.8 mg/L (Daphnia magna - 48 hr.) <u>Methyl ethyl ketoxime</u> 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, 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	111
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 Chronic Health Hazard Fire hazard Sudden release of pressure hazard	Yes Yes Yes No
Reactive Hazard	NO NO

<u>SARA 313</u>

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)
Zinc borate hydrate	138265-88-0	5	1.0
Ethyl benzene	100-41-4	0.5	0.1

<u>Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)</u> This product contains the following HAPs:

Chemical name	CAS No.	Weight-%	Hazardous Air Pollutant
Ethyl benzene	100-41-4	0.5	<u>(HAP)</u> 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
4-Chlorobenzotrifluoride		X	
Linseed oil			X
Silica, amorphous	Х	X	Х
Stoddard solvent	Х	X	X
Zinc borate hydrate		X	Х
Titanium dioxide	Х	X	Х
Carbamic acid, 1H-benzimidazol-2-yl-,		X	
methyl ester			

Legend

X - Listed

16. OTHER INFORMATION

HMIS -	Health: 1*	Flammability: 2	Reactivity: 0	PPE: -	
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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 800-225-5554	
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Revision Summary	Not available	

Disclaimer

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END OF SAFETY DATA SHEET