



Revision Date: 20-Jul-2018 Revision Number: 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name HIGH SOLIDS RAPID DRY ENAMEL TINTABLE WHITE

Product Code V225-86
Alternate Product Code V22586

Product Class SOLVENT THINNED PAINT

Color

Recommended use Industrial 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

ΑII

101 Paragon Drive Montvale, NJ 07645 Phone: 1-866-708-9180 corotechcoatings.com

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
Flammable liquids	Category 2

Label elements

Danger

Hazard statements

May cause an allergic skin reaction

May cause cancer

Causes damage to organs through prolonged or repeated exposure

Highly flammable liquid and vapor

Revision Date: 20-Jul-2018



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

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Do not breathe dust/fume/gas/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, 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

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 COMPONENTS

Chemical name	CAS No.	Weight-%
---------------	---------	----------

Titanium dioxide	13463-67-7	25
t-Butyl acetate	540-88-5	10
2-Pentanone	107-87-9	10
Silica, crystalline	14808-60-7	10
Solvent naphtha, petroleum, light aromatic	64742-95-6	10
Kaolin	1332-58-7	5
1,2,4-Trimethylbenzene	95-63-6	5
Xylene	1330-20-7	5
Silica, amorphous	7631-86-9	5
Ethyl benzene	100-41-4	0.5
Methyl ethyl ketoxime	96-29-7	0.5
Cumene	98-82-8	0.5

4. FIRST AID MEASURES

Description of 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

Revision Date: 20-Jul-2018

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-AidersUse personal protective equipment.

Most Important Symptoms/Effects May cause allergic skin reaction.

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.

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 ForAs in any fire, wear self-contained breathing apparatus

······

Firefighters pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear.

Hazardous combustion products

Burning may result in carbon dioxide, carbon monoxide

and other combustion products of varying composition

Revision Date: 20-Jul-2018

which may be toxic and/or irritating.

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) 55
Flash Point (°C) 13
Method PMCC

Flammability Limits In Air

Lower flammability limit:

Upper flammability limit:

Not available
Not available

NFPA Health: 2 Flammability: 3 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 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 Cleaning Up

Dam up. Soak up with inert absorbent material. Use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. Clean contaminated surface thoroughly.

Revision Date: 20-Jul-2018

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.

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.

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 TLV	OSHA PEL
Titanium dioxide	10 mg/m³ - TWA	15 mg/m³ - TWA
t-Butyl acetate	200 ppm - TWA	200 ppm - TWA 950 mg/m³ - TWA
2-Pentanone	150 ppm - STEL	200 ppm - TWA 700 mg/m³ - TWA
Silica, crystalline	0.025 mg/m ³ - TWA	-
Kaolin	2 mg/m³ - TWA	15 mg/m³ - TWA 5 mg/m³ - TWA
Xylene	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 435 mg/m³ - TWA

Silica, amorphous	N/E	20 mppcf - TWA
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 435 mg/m³ - TWA
Cumene	50 ppm - TWA	50 ppm - TWA 245 mg/m³ - TWA prevent or reduce skin absorption

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

Revision Date: 20-Jul-2018

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)
 10.85 - 10.95

 Specific Gravity
 1.30 - 1.32

pH No information available
Viscosity (cps) No information available
Solubility(ies) No information available

Water solubilityNo information availableEvaporation RateNo information availableVapor pressure @20 °C (kPa)No information availableVapor densityNo information available

 Wt. % Solids
 65 - 75

 Vol. % Solids
 45 - 55

 Wt. % Volatiles
 25 - 35

 Vol. % Volatiles
 45 - 55

Vol. % Volatiles45 - 55VOC Regulatory Limit (g/L)< 340</th>Boiling Point (°F)208Boiling Point (°C)98

Freezing Point (°F)

Freezing Point (°C)

No information available

No information available

Flash Point (°F) 55

V225-86 - HIGH SOLIDS RAPID DRY ENAMEL

TINTABLE WHITE

Flash Point (°C) 13
Method PMCC

Flammability (solid, gas) Not applicable

Upper flammability limit:

Lower flammability limit:

Autoignition Temperature (°F)

Autoignition Temperature (°C)

Decomposition Temperature (°F)

Decomposition Temperature (°C)

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

Revision Date: 20-Jul-2018

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.

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.

V225-86 - HIGH SOLIDS RAPID DRY ENAMEL TINTABLE WHITE

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

Revision Date: 20-Jul-2018

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 May cause an allergic skin reaction

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.

Causes damage to organs through prolonged or repeated exposure.

STOT - single exposure May cause disorder and damage to the. Respiratory system.

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) 3505 mg/kg
ATEmix (dermal) 8113 mg/kg
ATEmix (inhalation-dust/mist) 13.4 mg/L
ATEmix (inhalation-vapor) 83.5 mg/L

Acute Toxicity

Component Information

Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

2-Pentanone

LD50 Oral: 1600 mg/kg (Rat) LD50 Dermal: 6500 mg/kg (Rabbit)

Silica, crystalline

LD50 Oral: 500 mg/kg (Rat)

Solvent naphtha, petroleum, light aromatic

LD50 Oral: 8400 mg/kg (Rat)

Kaolin

LD50 Oral: > 5000 mg/kg (Rat)

1,2,4-Trimethylbenzene LD50 Oral: 5000 mg/kg (Rat)

LC50 Inhalation (Vapor): 18000 mg/m3 (Rat, 4 hr.)

Xylene

LD50 Oral: 4300 mg/kg (Rat)

LD50 Dermal: > 1700 mg/kg (Rabbit)

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

Silica, amorphous

LD50 Oral: > 5000 mg/kg (Rat)

V225-86 - HIGH SOLIDS RAPID DRY ENAMEL TINTABLE WHITE

Revision Date: 20-Jul-2018

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.)

Methyl ethyl ketoxime LD50 Oral: 930 mg/kg (Rat) LD50 Dermal: 200 μL/kg (Rabbit)

LC50 Inhalation (Vapor): > 4.8 mg/L (Rat)

Cumene

LD50 Oral: > 1400 mg/kg (Rat) LD50 Dermal: 12300 µL/kg (Rabbit)

LC50 Inhalation (Vapor): 39000 mg/kg (Rat, 4 hr.)

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		
	1 - Human Carcinogen	Known Human	Listed
Silica, crystalline		Carcinogen	
	2B - Possible Human		Listed
Ethyl benzene	Carcinogen		
	2B - Possible Human	Reasonably	Listed
Cumene	Carcinogen	Anticipated Human	
		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."

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

Revision Date: 20-Jul-2018

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

Not applicable

Component Information

Acute Toxicity to Fish

Titanium dioxide

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

Xylene

LC50: 13.5 mg/L (Rainbow Trout - 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, 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

TINTABLE WHITE

Revision Date: 20-Jul-2018

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

TSCA: United States DSL: CanadaYes - All components are listed or exempt.
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-%	CERCLA/SARA 313 (de minimis concentration)
1,2,4-Trimethylbenzene	95-63-6	5	1.0
Xylene	1330-20-7	5	1.0
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>
Xylene	1330-20-7	5	Listed
Ethyl benzene	100-41-4	0.5	Listed
Cumene	98-82-8	0.5	Listed

US State Regulations

Revision Date: 20-Jul-2018

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
t-Butyl acetate	X	X	X
2-Pentanone	X	X	X
Silica, crystalline	X	X	X
Kaolin	X	X	X
1,2,4-Trimethylbenzene	X	X	X
Xylene	X	X	X
Silica, amorphous	X	X	X
2-Butoxyethanol	X	X	X

Legend

X - Listed

16. OTHER INFORMATION

HMIS - Health: 2* Flammability: 3 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 Product Stewardship Department

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645

800-225-5554

V225-86 - **HIGH SOLIDS RAPID DRY ENAMEL TINTABLE WHITE**

Revision Date: 20-Jul-2018

Revision Date: 20-Jul-2018 **Revision Summary** Not available

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