1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: ULTRA SPEC HP D.T.M ACRYLIC SEMI-GLOSS ENAMEL BASE

Product Code: HP291X

Alternate Product Code: HP291X

Product Class: Water thinned paint

Color: All

Recommended use: Industrial 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 (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)

Reproductive toxicity: Category 2

Label elements

Warning

Hazard statements
Suspected of damaging fertility or the unborn child

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

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage
Store locked up

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

3. COMPOSITION INFORMATION ON COMPONENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>15 - 20</td>
</tr>
<tr>
<td>2,2,4-trimethyl-1,3-propanediol diisobutyrate</td>
<td>6846-50-0</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Zinc phosphate</td>
<td>7779-90-0</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General Advice
No hazards which require special first aid measures.

Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation
Move to fresh air. If symptoms persist, call a physician.

Ingestion
Clean mouth with water and afterwards drink plenty of water. Consult a physician if necessary.

Most Important Symptoms/Effects
None known.

Notes To Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES
Suitable Extinguishing Media

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

Closed containers may rupture if exposed to fire or extreme heat.

Sensitivity to mechanical impact

No

Sensitivity to static discharge

No

Flash Point Data

<table>
<thead>
<tr>
<th>Method</th>
<th>Flash Point (°F)</th>
<th>Flash Point (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMCC</td>
<td>250.0</td>
<td>121.1</td>
</tr>
</tbody>
</table>

Flammability Limits In Air

| Lower flammability limit: | Not applicable |
| Upper flammability limit: | Not applicable |

**NFPA**

Health: 1  Flammability: 1  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.

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### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

**Other Information**

Prevent further leakage or spillage if safe to do so.

**Environmental precautions**

See Section 12 for additional Ecological Information.

**Methods for Cleaning Up**

Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

---

### 7. HANDLING AND STORAGE

**Handling**

Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.
Storage  
Keep container tightly closed. Keep out of the reach of children.

Incompatible Materials  
No information available

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Limits

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>10 mg/m³ - TWA</td>
<td>15 mg/m³ - TWA</td>
</tr>
<tr>
<td>Kaolin</td>
<td>2 mg/m³ - TWA</td>
<td>15 mg/m³ - TWA</td>
</tr>
</tbody>
</table>

#### 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**: Protective gloves and impervious clothing.
- **Respiratory Protection**: In case of insufficient ventilation wear suitable respiratory equipment.

#### 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>little or no odor</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>Density (lbs/gal)</td>
<td>10.1 - 10.2</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.21 - 1.23</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity (cps)</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>No information available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Wt. % Solids</td>
<td>45 - 55</td>
</tr>
<tr>
<td>Vol. % Solids</td>
<td>35 - 45</td>
</tr>
<tr>
<td>Wt. % Volatiles</td>
<td>45 - 55</td>
</tr>
<tr>
<td>Vol. % Volatiles</td>
<td>55 - 65</td>
</tr>
<tr>
<td>VOC Regulatory Limit (g/L)</td>
<td>&lt; 150</td>
</tr>
<tr>
<td>Boiling Point (°F)</td>
<td>212</td>
</tr>
<tr>
<td>Boiling Point (°C)</td>
<td>100</td>
</tr>
<tr>
<td>Freezing point (°F)</td>
<td>32</td>
</tr>
<tr>
<td>Freezing Point (°C)</td>
<td>0</td>
</tr>
<tr>
<td>Flash point (°F)</td>
<td>250.0</td>
</tr>
</tbody>
</table>
### 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point (°C)</td>
<td>121.1</td>
</tr>
<tr>
<td>Method</td>
<td>PMCC</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Autoignition Temperature (°F)</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition Temperature (°C)</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition Temperature (°F)</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition Temperature (°C)</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
</tr>
</tbody>
</table>

### 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**  
No information available

**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**

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>May cause slight irritation.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Substances may cause slight skin irritation. Prolonged or repeated contact may dry skin and cause irritation.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>May cause irritation of respiratory tract.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.</td>
</tr>
<tr>
<td>Sensitization</td>
<td>No information available</td>
</tr>
<tr>
<td>Neurological Effects</td>
<td>No information available</td>
</tr>
<tr>
<td>Mutagenic Effects</td>
<td>No information available</td>
</tr>
<tr>
<td>Reproductive Effects</td>
<td>Possible risk of impaired fertility. Possible risk of harm to the unborn child.</td>
</tr>
<tr>
<td>Developmental Effects</td>
<td>No information available</td>
</tr>
</tbody>
</table>
Target organ effects  No information available.
STOT - single exposure  No information available.
STOT - repeated exposure  No information available.
Other adverse effects  No information available.
Aspiration Hazard  No information available

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

<table>
<thead>
<tr>
<th>Component Information</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2,2,4-trimethyl-1,3-propanediol diisobutyrate</td>
<td>&gt; 3200 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Zinc phosphate</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>2B - Possible Human Carcinogen</td>
<td>Listed</td>
<td></td>
</tr>
</tbody>
</table>

• 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

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

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
No information available

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.

14. TRANSPORT INFORMATION

DOT
Not regulated

ICAO / IATA
Not regulated

IMDG / IMO
Not regulated

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   No  
Chronic Health Hazard  Yes  
Fire hazard         No  
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:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>CERCLA/SARA 313 (de minimis concentration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc phosphate</td>
<td>7779-90-0</td>
<td>1 - 5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

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

None

US State Regulations

California Proposition 65

⚠️ WARNING: Cancer and Reproductive Harm— www.P65warnings.ca.gov

State Right-to-Know

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Kaolin</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Zinc phosphate</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Legend
X - Listed

16. OTHER INFORMATION

HMIS -  
Health: 1*  Flammability: 1  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

**Revision Date:** 07-May-2019

**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**