

Safety Data Sheet (SDS)

Tuf-Top Coatings

Duraplate 289 Series Commercial Floor Coating

SDS Number: 289

Revision Date: 11/24/2015

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1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

Marine Industrial Paint Co., Inc.
4590 60th Ave.
St. Petersburg, FL 33714

Vendor

Marine Industrial Paint Co., Inc.
4590 60th Ave.
St. Petersburg, FL 33714

Contact: Marine Industrial Paint Co., Inc.
Phone: (727) 527-3382 // (800) 459-3382
Fax: (727) 521-1405
Web: <http://marineindustrial.com>

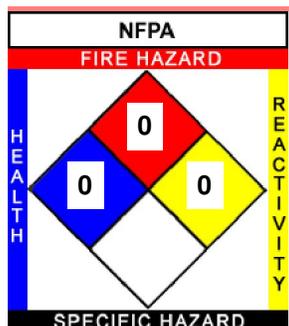
Contact: Marine Industrial Paint Co., Inc.
Phone: (727) 527-3382 // (800) 459-3382
Fax: (727) 521-1405 <http://tuf-top.com>
Web:

Product Name: 289-series
Revision Date: 11/24/2015
Version: 1
SDS Number: 491
Common Name: Paint product
CAS Number: MIXTURE
Chemical Family: Paint products
Chemical Formula: *** PROPRIETARY ***
Product Use: Marine paint product.
Emergency Phone: (800) 255-3924 (CHEMTEL, 24 Hours)

2 HAZARDS IDENTIFICATION

NFPA:
HMIS III:

Health = 0, Fire = 0, Reactivity = 0
H*0/F0/PH0



HMIS III	
HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PERSONAL PROTECTION B I Safety Glasses, Gloves	

PERSONAL PROTECTION INDEX							
A	Safety Glasses			G	Safety Glasses + Gloves + Respirator		
B	Safety Glasses + Gloves			H	Safety Glasses + Gloves + Boots + Respirator		
C	Safety Glasses + Gloves + Boots			I	Safety Glasses + Gloves + Respirator		
D	Safety Glasses + Gloves + Boots + Respirator			J	Safety Glasses + Gloves + Boots + Respirator		
E	Safety Glasses + Gloves + Boots + Respirator			K	Safety Glasses + Gloves + Boots + Respirator		
F	Safety Glasses + Gloves + Boots + Respirator			X	Consult your supervisor or S.O.P. for "SPECIAL" handling directions		
A	n	o	p	q	r	s	
Safety Glasses	Splash Goggles	Face Shield & Eye Protection	Gloves	Boots	Synthetic Airtight	Full Suit	
t	u	w	y	z	Additional Information		
Dust Respirator	Vapor Respirator	Dust & Vapor Respirator	Full Face Respirator	Airline Hood or Apron			

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GHS Signal Word:
WARNING

GHS Hazard Pictograms:



GHS Classifications:

Health, Skin sensitization, 1
Health, Carcinogenicity, 2

GHS Phrases:

H317 - May cause an allergic skin reaction
H351 - Suspected of causing cancer

GHS Precautionary Statements:

P262 - Do not get in eyes, on skin, or on clothing.
P264 - Wash skin thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+352 - IF ON SKIN: Wash with soap and water.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P333+313 - If skin irritation or a rash occurs: Get medical advice/attention.
P337+313 - If eye irritation persists: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P403+233 - Store in a well ventilated place. Keep container tightly closed.
P405 - Store locked up.
P410+412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P501 - Dispose of contents/container to an approved waste disposal plant

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COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas #	I Percentage	I Chemical Name
N/A	>83.5%	I Proprietary, non-hazardous, non-regulated
13463-67-7	<15%	I Titanium dioxide
14808-60-7	<0.5%	I Quartz (SiO ₂)
104810-47-1	<0.5%	I Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-
104810-48-2	<0.5%	I Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-

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FIRST AID MEASURES

- Inhalation:** Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.
- Skin Contact:** Take off contaminated clothing and shoes immediately. Promptly flush skin with water for at least 15 minutes to ensure all chemical is removed. If reddening and/or a rash develops and/or persists, obtain medical attention.
- Eye Contact:** Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Remove contact lenses if present and easy to do so. If eye irritation persists, obtain medical attention.
- Ingestion:** Rinse mouth with water. Do NOT induce vomiting unless instructed to do so. Give 3-4 glasses of water or milk to dilute stomach contents. Never give anything by mouth to an unconscious person. If symptoms develop and/or persist, obtain medical attention.

Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11.

Indication of any immediate medical attention and special treatment needed:

No data available.

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FIRE FIGHTING MEASURES

- Flammability:** No data available
- Flash Point:** DNA
- Flash Point Method:** DNA
- Burning Rate:** No data available
- Autoignition Temp:** No data available
- LEL:** DNA
- UEL:** DNA

Extinguishing Media:

Water Fog
Water Spray
Carbon Dioxide
Alcohol-Resistant Foam
Dry Chemical

Special Hazards Arising From the Substance or Mixture:

Aluminum Oxides
Ammonia Carbon
Oxides Formaldehyde
Magnesium Oxides
Nitrogen Oxides (NOx)
Silicon Oxides
Titanium Oxides

Advice for Firefighters:

Firefighters should wear full-face, positive-pressure respirators.

Further Information:

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If incinerated, may release toxic fumes.
Use water spray to cool unopened containers.
Do NOT use high volume water jet to extinguish fire, as the force of the water jet may cause fire to spread.
See Section 7 for more information on safe handling.
See Section 8 for more information on personal protection equipment.
See Section 13 for disposal information.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment.
Keep from contacting skin or eyes.
Avoid breathing vapors, mist or gas.
Ensure adequate ventilation.
Evacuate personnel to safe areas.

Environmental Precautions:

Prevent further release (leakage/spillage) if safe to do so.
Do not allow product to enter drains.
Do not allow to drain to environment.

Methods and Materials for Containments and Cleaning Up:

For large liquid spills (> 200 liters), transfer by mechanical means such as a vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material (sand, diatomite, universal binders, sawdust).
For small liquid spills (< 200 liters), transfer by mechanical means to a labeled, sealable container for product recovery and safe disposal.
Dispose of contaminated material according to Section 13.
After spillage has been collected, and residues have been absorbed and/or evaporated, area may be flushed with water or wet-brushed.
Ensure adequate ventilation.

Reference to Other Sections:

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for information on proper disposal.

7 HANDLING AND STORAGE

Handling Precautions:

Avoid breathing vapors or mist.
Avoid contact with eyes, skin, or clothing.
Keep containers closed when not in use.
Do not expose containers to open flame, excessive heat, or direct sunlight.
Do not smoke while using material.
Do not puncture or drop containers.
Handle with care and avoid spillage on the floor (slippage).
Keep material out of reach of children.
Keep material away from incompatible materials.
Wash thoroughly after handling.
Ensure adequate ventilation.

Storage Requirements:

Keep container tightly closed.
Do not store in direct sunlight.

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Store at temperatures between 10.0 °C (50.0 °F) and 50.0 °C (120.0 °F)
Store away from strong acids, strong bases, strong oxidizing agents, strong reducing agents, amines, turpentine, vegetable oil and hydrofluoric acid.

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EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip:

Eye/face protection:

When using material use safety goggles and gloves according to HMIS PP, B. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection:

Handle with gloves made from Neoprene, Nitrile, PVC or Buna rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices.

Body Protection:

Chemically resistant gloves and safety goggles are recommended. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Respiratory protection:

Full-face vapor respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds. Respiratory protection must comply with 29 CFR 1910.134.

Control of environmental exposure:

Prevent leakage or spillage if safe to do so. Do not let material enter drains.

Components with workplace control parameters:

Component: Titanium dioxide

CAS No: 13463-67-7

USA ACGIH (TWA/TLV): 10 mg/m³

USA OSHA Table Z-1 Limits for Air Contaminants - 1910.1000: 10 mg/m³

USA OSHA Occupational Exposure Limits Table Z-1 Limits for Air Contaminants: 1S mg/m³

Component: Quartz (SiO₂)

CAS No: 14808-60-7

USA ACGIH (TWA/TLV): 10.02S mg/m³

Biological occupational exposure limits:

Contains no substances with biological occupational exposure limits values.

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9 PHYSICAL AND CHEMICAL PROPERTIES

<p>Appearance: White liquid</p> <p>Physical State: Liquid</p> <p>Odor Threshold: Not determined</p> <p>Particle Size: Not determined</p> <p>Spec Grav./Density: 1.1498 g/ml (9.596 lbs/gal)</p> <p>Viscosity: Not determined</p> <p>Sat. Vap. Conc.: Not determined</p> <p>Boiling Point: > 100.0 °C (212.0 °F)</p> <p>Flammability: (solid, gas): Not determined</p> <p>Partition Coefficient: Not determined</p> <p>Vapor Pressure: (mm Hg @ 20 °C): Not determined</p> <p>pH: Not determined</p> <p>Evap. Rate: (N-Butyl Acetate = 1): Not determined</p> <p>Molecular weight: MIXTURE</p> <p>Decomp Temp: Not determined</p>	<p>Odor: Slight amine</p> <p>Molecular Formula: MIXTURE</p> <p>Solubility: Water</p> <p>Softening Point: Not determined</p> <p>Percent Volatile: -0.3%</p> <p>Heat Value: Not determined</p> <p>Freezing/Melting Pt.: < 10.0 °C (50.0 °F)</p> <p>Flash Point: DNA</p> <p>Octanol: Not determined</p> <p>Vapor Density: (air = 1): Not determined</p> <p>VOC: 48 g/l</p> <p>Bulk Density: Not determined</p> <p>Auto-Ignition Temp: Not determined</p> <p>UFL/LFL: Not determined</p>
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10 STABILITY AND REACTIVITY

<p>Stability: Product is stable under normal conditions.</p> <p>Conditions to Avoid: Incompatibilities, flames, ignition sources and temperatures above 50.0 °C (120.0 °F)</p> <p>Materials to Avoid: Strong acids, strong bases, strong oxidizing agents, strong reducing agents, amines, turpentine, vegetable oil and hydrofluoric acid.</p> <p>Hazardous Decomposition: Aluminum Oxides, Ammonia, Carbon Oxides, Formaldehyde, Magnesium Oxides, Nitrogen Oxides (NOx), Silicon Oxides and Titanium Oxides.</p> <p>Hazardous Polymerization: Will not occur.</p>

11 TOXICOLOGICAL INFORMATION

Component(s): Titanium dioxide; Quartz (SiO₂); Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-; Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-

CAS No(s): 13463-67-7; 14808-60-7; 104810-47-1; 104810-48-2

Acute Toxicity:

LDS0 Oral - Rat: > 5,000 mg/kg LDS0
 Dermal - Rat: > 2,000 mg/kg LDS0
 Dermal - Rabbit: > 10,000 mg/kg LCS0
 Inhalation - Rat: > 5.8 mg/l (4 h)

Skin Corrosion/Irritation: Human skin - Mild skin irritation (3 h).

Serious Eye Damage/Eye Irritation: Rabbit eyes - No eye irritation.

Respiratory or Skin Sensitation: Prolonged or repeated exposure may cause allergic reaction in certain sensitive individuals.

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Germ Cell Mutagenicity: No data available.

Carcinogenicity: This product is or contains a component that is carcinogenic to humans (Quartz (SiO₂)) and a component that is possibly carcinogenic to humans (Titanium dioxide) based on its IARC, ACGIH, NTP or OSHA classification.

IARC: 1 - Group 1: Carcinogenic to humans (Quartz (SiO₂)); 28 - Group 28: Possibly carcinogenic to humans (Titanium dioxide).

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: Known to be a human carcinogen (Quartz (SiO₂)).

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity - Single Exposure: No data available.

Specific Target Organ Toxicity - Repeated Exposure: Respiratory system - May cause damage to organs through prolonged or repeated exposure (Quartz (SiO₂)).

Aspiration Hazard: No data available.

Additional Information:

Component: Titanium dioxide; RTECS: XR227S000

Component: Quartz (SiO₂); RTECS: VV7330000

Component: Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-; hydroxyphenyl]-1-oxopropoxy]-; RTECS: N/A

Component: Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-; RTECS: N/A

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ECOLOGICAL INFORMATION

Component(s): Titanium dioxide; Quartz (SiO₂); Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-; hydroxyphenyl]-1-oxopropoxy]-; Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy-

CAS No(s): 13463-67-7; 14808-60-7; 104810-47-1; 104810-48-2

Toxicity:

Toxicity to fish:

LCS0 - Oncorhynchus mykiss (Rainbow Trout): 2.8 mg/l (96 h)

Toxicity to daphnia and other aquatic invertebrates:

ECS0 - Daphnia magna (Water Flea): 4.0 mg/l (48 h)

N0EC - Daphnia magna (Water Flea): 0.78 mg/l (21 d)

Toxicity to algae:

ECS0 - Pseudokirchneriella subcapitata (Green Algae): > 100 mg/l (72 h)

EC10 - Pseudokirchneriella subcapitata (Green Algae): 10 mg/l (72 h)

Toxicity to soil living organisms:

LC0 - Eisenia foetida (Earthworm): > 1,000 mg/l (14 d)

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NOEC - Eisenia foetida (Earthworm): 100 mg/l (S6 d)

Persistence and Degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in Soil:

No data available.

Results of PBT and vPvB assessment:

Not required/conducted.

Other Adverse Effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

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DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

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TRANSPORT INFORMATION

Specify As: Waterbased Paint - Class SS

DOT (US)

Non-regulated material, liquid

IMDG

Non-regulated material, liquid

IATA

Non-regulated material, liquid

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REGULATORY INFORMATION

COMPONENT / (CAS/PERC) / CODES

*Titanium dioxide (13463677 <15%) MASS, NJHS, OSHAWAC, PA, PROP6S, SARA311/312, TSCA, TXAIR

*Quartz (SiO₂) (14808607 <0.5%) MASS, NJHS, NRC, OSHAWAC, PA, SARA311/312, TSCA, TXAIR

*Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]- (104810471 <0.5%) TSCA

*Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-S-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-

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hydroxy- (104810482 <0.5%) TSCA

REGULATORY KEY DESCRIPTIONS

MASS = MA Massachusetts Hazardous Substances List
NJHS = NJ Right-to-Know Hazardous Substances
NRC = Nationally Recognized Carcinogens
OSHA WAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
PROP6S = CA Prop 6S
SARA311/312 = SARA 311/312 Toxic Chemicals
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

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OTHER INFORMATION

Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that Marine Industrial Paint Co., Inc. believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of Marine Industrial Paint Co., Inc.'s control, Marine Industrial Paint Co., Inc. makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

Preparation Information:

GHS Conversion Services
www.ghsconversionservices.com
(414) 336-2S46