



SAFETY DATA SHEET

Single-Ply Etching Primer

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union REACH Regulations

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Single-Ply Etching Primer**
CHEMICAL FAMILY NAME: Mixture
U.N. NUMBER: UN1993
U.N. DANGEROUS GOODS CLASS: Flammable Liquid, n.o.s. See Section 14 for details
SUPPLIER/MANUFACTURER'S NAME: **Marlin Coatings, LLC**
ADDRESS: 321 Hausfeldt Lane, New Albany, IN 47150 USA
EMERGENCY PHONE: **National Poison Control Center (U.S.)** 1-800-222-1222
BUSINESS PHONE: 812-725-3542 (Product Information)
WEB SITE: www.marlinroofcoatings.com
DATE OF CURRENT REVISION: July 20, 2021
DATE OF LAST REVISION: November 18, 2019

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Product Description: This product is a liquid, various colors, with a slight odor.

Health Hazards: Exposure to the product may cause skin and eye irritation. May be harmful if inhaled. Ingestion is not a normal route of exposure under normal product use. If swallowed, product may cause gastrointestinal irritation.

Flammability Hazards: This product is a flammable liquid as defined by OSHA with a flash point of approximately 40°F

Reactivity Hazards: None known.

Environmental Hazards: The environmental effects of this product have not been investigated; however it is expected to cause adverse effects in the environment.

Emergency Considerations: Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

US DOT SYMBOLS



GHS Hazard Symbols



Signal Word: **Danger!**

GHS CLASSIFICATION OF SUBSTANCE OR MIXTURE IN ACCORDANCE WITH 29 CFR 1200 (OSHA HCS) AND THE EUROPEAN UNION DIRECTIVES:

This product does meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910. 1200 AND the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

EU HAZARD CLASSIFICATION OF INGREDIENTS:

EC# 208-760-7 This substance is not classified in the Annex VI

EC# 201-083-8 Annex VI Index# 014-005-00-0

EC# 241-866-1 This substance is not classified in the Annex VI

EC# 200-661-7 Annex VI Index# 603-117-00-0

EC# 215-535-7 Annex VI Index# 601-022-00-9

Component(s) Contributing to Classification(s)

Tert-Butyl Acetate, Tetraethyl Orthosilicate, Titanium Acetylacetonate, Isopropanol, Xylene

GHS Hazard Classification(s):

Flammable Liquid Category 2

Acute Toxicity Category 4 (Inhalation)

Skin Irritation Category 2

Eye Irritation Category 2A

Specific Target Organ Toxicity Category 3 (Respiratory Irritation)



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Hazard Statement(s):

- H225: Highly flammable liquid and vapour
- H332: Harmful if inhaled
- H315: Causes skin irritation
- H319: Causes serious eye irritation
- H335: May cause respiratory irritation

Prevention Statement(s):

- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233: Keep container tightly closed.
- P240: Ground and bond container and receiving equipment.
- P241: Use explosion proof equipment.
- P242: Use non-sparking tools.
- P243: Take action to prevent static discharges.
- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264: Wash hands thoroughly after handling.
- P271: Use only outdoors or in a well-ventilated area.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response Statement(s):

- P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P370+P378: In case of fire: Use media defined in Section 5 to extinguish.
- P321: Specific treatment (See Section 4 of this SDS).
- P332+P313: If skin irritation occurs: Get medical advice/attention.
- P362+P364: Take off contaminated clothing and wash it before reuse.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313: If eye irritation persists: Get medical advice/attention.
- P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312: Call a POISON CENTER/doctor if you feel unwell.

Storage Statement(s):

- P403+P233: Store in a well-ventilated place. Keep container tightly closed.
- P235: Keep cool.
- P405: Store locked up.

Disposal Statement(s):

- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Other Known Hazards:

None known

This product does not meet the criteria for PBT or vPvB in accordance with Annex XIII

HEALTH HAZARDS OR RISKS FROM EXPOSURE:

ACUTE: This material may cause irritation to skin, eye, and respiratory system. May cause skin sensitization. Ingestion of this product may cause gastrointestinal irritation. This product contains an ingredient(s) that are suspected of causing reproductive harm.

CHRONIC: Prolonged or repeated skin contact may cause skin reactions.

TARGET ORGANS: ACUTE: Eye, Skin, Respiratory System CHRONIC: Respiratory System

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	GHS HAZARD CLASSIFICATION(S):
Tert-Butyl Acetate	540-88-5	208-760-7	1123	60-70%	Flammable Liquid Cat 2
Tetraethyl Orthosilicate	78-10-4	201-083-8	1292	15-18%	Flammable Liquid Cat 3, Eye Irritant Cat 2, Acute Toxicity Cat 4 (Inhal), STOT SE Cat 3 (irrit)
Xylene	1330-20-7	215-535-7	Not Listed	7-10	Flammable Liquid Cat 3, Acute Toxicity Cat 4 (Dermal/Inhalation), Skin Irritant Cat 2
Titanium Acetylacetonate	17927-72-9	241-866-1	Not Listed	5-7	Skin Irritant Cat 2, Eye Irritant Cat 2, STOT SE Cat 3 (Respiratory irritant)



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Isopropanol	67-63-0	200-661-7	1219	1-2	Flammable Liquid Cat 2, Eye Irritant Cat 2, STOT SE Cat 3 (Drowsiness)
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

SECTION 4 - FIRST-AID MEASURES

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation develops.

SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder contaminated clothing before re-use.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or MSDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin, or eye problems may be aggravated by exposure to this product.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and reduce over-exposure.

SECTION 5 - FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): Not Established Upper (UEL): Not Established

FIRE EXTINGUISHING MATERIALS: Carbon dioxide, foam, dry chemical, halon, water spray, sand, limestone powder.

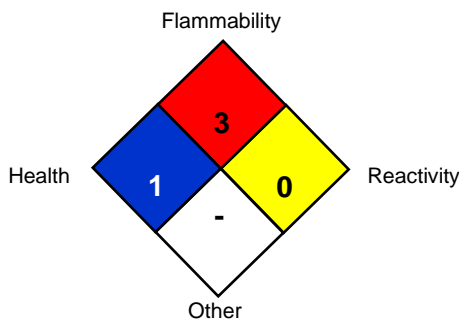
UNUSUAL FIRE AND EXPLOSION HAZARDS: This material has been tested to ASTM D-4206 Standard and found not to sustain combustion.

Explosion Sensitivity to Mechanical Impact: Not Sensitive.

Explosion Sensitivity to Static Discharge: Not Sensitive

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM



HMIS RATING SYSTEM

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM			
HEALTH HAZARD (BLUE)	1		
FLAMMABILITY HAZARD (RED)	3		
PHYSICAL HAZARD (YELLOW)	0		
PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
	See Sect 8		See Sect 8
For Routine Industrial Use and Handling Applications			

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard



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SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Personnel should be trained for spill response operations.

SPILLS: Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up with a non-combustible absorbent material and place in an appropriate container for disposal. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

STORAGE AND HANDLING PRACTICES: Keep container tightly closed and in a dry and cool place.

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

Chemical Name	CAS#	ACGIH TWA	OSHA TWA	WEEL
Tert-Butyl Acetate	540-88-5	200 ppm	200 ppm 950 mg/m ³	Not Listed
Tetraethyl Orthosilicate	78-10-4	10 ppm	100 ppm 850 mg/m ³	Not Listed
Titanium Acetylacetonate	17927-72-9	Not Listed	Not Listed	Not Listed
Isopropanol	67-63-0	200 ppm	400 ppm 980 mg/m ³	Not Listed
Xylene	1330-20-7	100 ppm	100 ppm 435 mg/m ³	Not Listed

Currently, International exposure limits are not established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

HAND PROTECTION: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL STATE:

Liquid

APPEARANCE & ODOR:

Liquid, various colors, with a slight odor.

ODOR THRESHOLD (PPM):

Not Available

FLASH POINT:

~40°F



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AUTOIGNITION TEMPERATURE:	Not Established
VAPOR PRESSURE (mmHg):	Not Available
VAPOR DENSITY:	Not Available
EVAPORATION RATE (nBuAc = 1):	Not Available
BOILING POINT (C°):	Not Available
FREEZING POINT (C°):	Not Available
pH:	Not Available
SPECIFIC GRAVITY 20°C: (WATER =1)	Not Available
SOLUBILITY IN WATER (%):	Not Available
EXPLOSIVE PROPERTIES:	Not Available
OXIDISING PROPERTIES:	Not Available

SECTION 10 - STABILITY and REACTIVITY

STABILITY: Product is stable

DECOMPOSITION PRODUCTS: When heated to decomposition this product produces noxious gases such as CO, CO₂, and others.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Heat and sources of ignition.

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA: Toxicity data is available for this product:

CAS# 540-88-5 LD50 Acute Oral	4100 mg/kg	Rat
CAS# 540-88-5 LD50 Acute Dermal	200 mg/kg	Rabbit
CAS# 78-10-4 LD50 Acute Oral	2500 mg/kg	Rat
CAS# 78-10-4 LD50 Acute Dermal	5878 mg/kg	Rabbit

Acute toxicity	Acute Toxicity Category 4 (Inhalation)
Skin corrosion / irritation	Skin Irritation Category 2
Serious eye damage / irritation	Eye Irritation Category 2A
Respiratory or skin sensitization	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Carcinogenicity	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Specific Target Organ Toxicity – Single Exposure (Respiratory Irritation)
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met

SUSPECTED CANCER AGENT: None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore are not considered to be, or suspected to be a cancer-causing agent by these agencies.

IRRITANCY OF PRODUCT: Contact with this product can be irritating to exposed skin, eyes, and respiratory system.

SENSITIZATION OF PRODUCT: This product is considered a skin sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: No specific data available for this product.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: May cause respiratory irritation.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: None known

ASPIRATION HAZARD: None

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

TOXICITY: No specific data is currently available on this product's effects on aquatic life, however release of this product may have long term effects on the aquatic environment.

PERSISTENCE AND DEGRADABILITY: No specific data available on this product.

BIOACCUMULATIVE POTENTIAL: No specific data available on this product.

MOBILITY IN SOIL: No specific data available on this product.



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RESULTS OF PBT AND vPvB ASSESMENT: No specific data available on this product.

OTHER ADVERSE EFFECTS: No specific data available on this product.

WATER ENDANGERMENT CLASS: Not believed to be water endangering in accordance with EU Guideline 91/155-EWG. At present there are no ecotoxicological assessments for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

RCRA WASTE CODE: None listed

EU WASTE CODE: Not Listed

SECTION 14 - TRANSPORTATION INFORMATION

US DOT; IATA; IMO; ADR:

THIS PRODUCT IS CLASSIFIED AS DANGEROUS GOODS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME: Flammable Liquid, n.o.s. (Contains Tert-Butyl Acetate, Xylene)

HAZARD CLASS NUMBER and DESCRIPTION: Class 3 Flammable

UN IDENTIFICATION NUMBER: UN1993

PACKING GROUP: PGII

DOT LABEL(S) REQUIRED: Flammable class 3

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2016): 128

MARINE POLLUTANT: This product's ingredients that are not classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:

This product is classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

PROPER SHIPPING NAME: Flammable Liquid, n.o.s. (Contains Tert-Butyl Acetate, Xylene)

HAZARD CLASS NUMBER and DESCRIPTION: Class 3 Flammable

UN IDENTIFICATION NUMBER: UN1993

PACKING GROUP: PGIII

DOT LABEL(S) REQUIRED: Flammable class 3

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION:

This product is classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):

This product is classified by the United Nations Economic Commission for Europe to be dangerous goods.
Harmonized Tariff Code Not Listed

SECTION 15 - REGULATORY INFORMATION

UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS: This product is subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows:

SARA 313:

Xylene CAS# 1330-20-7

Isopropanol CAS# 67-63-0

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312:

Acute Health: Yes

Chronic Health: No

Fire: Yes

Reactivity: No

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain chemicals on the Prop 65 list.



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CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Classified per WHMIS 2015

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU LABELING AND CLASSIFICATION:

Classification of the mixture according to Regulation (EC) No1272/2008. See section 2 for details.

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed or exempt from listing on the AICS.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac:	Listed
Australian Inventory of Chemical Substances (AICS):	Listed
Korean Existing Chemicals List (ECL):	Listed
Japanese Existing National Inventory of Chemical Substances (ENCS):	Listed
Philippines Inventory of Chemicals and Chemical Substances (PICCS):	Listed
Swiss Giftlist List of Toxic Substances:	Listed
U.S. TSCA:	Listed

SECTION 16 - OTHER INFORMATION

PREPARED BY: Chris Eigbrett

MSDS to GHS Compliance
www.msdstoghs.com

Disclaimer: The information and recommendations in this document are accurate to the best of our knowledge. User must conduct their own tests to determine the suitability of these products for their particular purposes. Because of numerous factors affecting results, Marlin Coatings, LLC MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PURPOSE, other than the material conforms to our applicable current specifications. Marlin Coatings, LLC assumes no legal responsibility for use or reliance on the information contained in this Safety Data Sheet.

End of SDS Sheet