

**Product name: Metacrylics TPO Primer****Issue Date: 07/28/2015****Print Date: 11/05/2015**

Metacrylics encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

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**1. IDENTIFICATION**

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**Product name:** Metacrylics TPO Primer**Recommended use of the chemical and restrictions on use****Identified uses:** This product is used in coatings, textiles, binders and adhesives.**COMPANY IDENTIFICATION**METACRYLICS  
365 Obata Court  
Gilroy, CA 95020**Customer Information Number:**

408 280-7733

[sales@metacrylics.com](mailto:sales@metacrylics.com)**EMERGENCY TELEPHONE NUMBER****24-Hour Emergency Contact:** 1 408 427-2557**Local Emergency Contact:** 800-660-6950

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**2. HAZARDS IDENTIFICATION**

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**Hazard classification**

This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Carcinogenicity - Category 2

**Label elements****Hazard pictograms**Signal word: **WARNING!**

**Hazards**

Suspected of causing cancer.

**Precautionary statements****Prevention**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

**Response**

IF exposed or concerned: Get medical advice/ attention.

**Storage**

Store locked up.

**Disposal**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

No data available

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

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**Chemical nature:** Acrylic emulsion

This product is a mixture.

<b>Component</b>	<b>CASRN</b>	<b>Concentration</b>
Acrylic polymer(s)	Not hazardous	>= 53.0 - <= 56.0 %
Residual monomers	Not required	< 0.05 %
Aqua ammonia	1336-21-6	<= 0.65 %
Water	7732-18-5	>= 44.0 - <= 47.0 %
Diphenyl Ketone	119-61-9	>= 0.1 - <= 0.3 %

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**4. FIRST AID MEASURES**

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**Description of first aid measures**

**Inhalation:** Move to fresh air.

**Skin contact:** Wash with water and soap as a precaution. If skin irritation persists, call a physician.

**Eye contact:** Rinse with plenty of water. If eye irritation persists, consult a specialist.

**Ingestion:** Drink 1 or 2 glasses of water. Consult a physician if necessary. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

**Indication of any immediate medical attention and special treatment needed**

**Notes to physician:** Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

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## 5. FIREFIGHTING MEASURES

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**Suitable extinguishing media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable extinguishing media:** No data available

**Special hazards arising from the substance or mixture**

**Hazardous combustion products:** No data available

**Unusual Fire and Explosion Hazards:** Material can splatter above 100C/212F. Dried product can burn.

**Advice for firefighters**

**Fire Fighting Procedures:** No data available

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus and protective suit.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Personal precautions, protective equipment and emergency procedures:** Wear a NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode or a full-facepiece airline respirator in the pressure demand mode with emergency escape provisions. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

**Environmental precautions:** CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water. NOTE: Spills on porous surfaces can contaminate groundwater.

**Methods and materials for containment and cleaning up:** Keep spectators away. Ventilate the area. Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

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## 7. HANDLING AND STORAGE

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**Precautions for safe handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container tightly closed. Do not breathe vapors, mist or gas.

**Conditions for safe storage:** Keep from freezing - product stability may be affected. STIR WELL BEFORE USE.

**Storage stability**

**Storage temperature:** 1 - 49 °C (34 - 120 °F)

Other data: Monomer vapors can be evolved when material is heated during processing operations. See SECTION 8, for types of ventilation required. NOTE: Formaldehyde will be generated under acidic conditions. Maintain adequate ventilation under these conditions to prevent exposure to formaldehyde above the Rohm and Haas Co. recommended ceiling of 0.3 ppm.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Control parameters**

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
Aqua ammonia	Rohm and Haas	TWA	10 ppm, As Ammonia
	OSHA Z-1	TWA	35 mg/m3 50 ppm
	ACGIH	TWA	25 ppm, Ammonia
	ACGIH	STEL	35 ppm, Ammonia
Diphenyl Ketone	Rohm and Haas	TWA	5 mg/m3
	Rohm and Haas	STEL	10 mg/m3
	US WEEL	TWA	0.5 mg/m3

**Exposure controls**

**Engineering controls:** Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

**Protective measures:** Facilities storing or utilizing this material should be equipped with an eyewash facility.

**Individual protection measures**

**Eye/face protection:** Eye protection worn must be compatible with respiratory protection system employed. Use chemical splash goggles (ANSI Z87.1 or approved equivalent).

**Skin protection**

**Hand protection:** The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Neoprene gloves

**Respiratory protection:** A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Up to 10 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Up to 50 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) full-facepiece, air-purifying respirator, OR full-facepiece, airline respirator in the pressure demand mode. Above 50 times the exposure limit or Unknown: Wear a properly fitted NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode, OR full-facepiece, airline respirator in the pressure demand mode with emergency escape provision. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) ammonia/methylamine cartridges and N95 filters. If oil mist is present, use R95 or P95 filters.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance**

Physical state	liquid milky
Color	white
Odor	Ammonia
Odor Threshold	No data available
pH	9.5 - 11.0
Melting point/range	0 °C ( 32 °F) Water
Freezing point	No data available
Boiling point (760 mmHg)	100 °C ( 212 °F) Water
Flash point	Noncombustible
Evaporation Rate (Butyl Acetate = 1)	<1.0 Water
Flammability (solid, gas)	Not Applicable
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor Pressure	17 mmHg at 20 °C (68 °F)
Relative Vapor Density (air = 1)	<1.0 Water
Relative Density (water = 1)	1.0 - 1.2
Water solubility	soluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Dynamic Viscosity	100 - 300 mPa.s
Kinematic Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Molecular weight	No data available
Percent volatility	44 - 47 % Water

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## 10. STABILITY AND REACTIVITY

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**Reactivity:** No data available

**Chemical stability:** No data available

**Possibility of hazardous reactions:** None known.  
Product will not undergo polymerization.  
Stable

**Conditions to avoid:** No data available

**Incompatible materials:** There are no known materials which are incompatible with this product.

**Hazardous decomposition products:** Thermal decomposition may yield acrylic monomers.

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## **11. TOXICOLOGICAL INFORMATION**

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*Toxicological information appears in this section when such data is available.*

### **Acute toxicity**

#### **Acute oral toxicity**

LD50, Rat, > 5,000 mg/kg

#### **Acute dermal toxicity**

LD50, Rabbit, > 5,000 mg/kg

#### **Acute inhalation toxicity**

Product test data not available. Refer to component data.

### **Skin corrosion/irritation**

May cause transient irritation.

### **Serious eye damage/eye irritation**

No eye irritation

### **Sensitization**

Product test data not available. Refer to component data.

### **Specific Target Organ Systemic Toxicity (Single Exposure)**

Product test data not available. Refer to component data.

### **Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Product test data not available. Refer to component data.

### **Carcinogenicity**

Product test data not available. Refer to component data.

### **Teratogenicity**

Product test data not available. Refer to component data.

### **Reproductive toxicity**

Product test data not available. Refer to component data.

### **Mutagenicity**

Product test data not available. Refer to component data.

### **Aspiration Hazard**

Product test data not available. Refer to component data.

**Additional information**

No data are available for this material. The information shown is based on profiles of compositionally similar materials.

**COMPONENTS INFLUENCING TOXICOLOGY:**

**Acrylic polymer(s)**

**Acute inhalation toxicity**

The LC50 has not been determined.

**Residual monomers**

**Acute inhalation toxicity**

The LC50 has not been determined.

**Aqua ammonia**

**Acute inhalation toxicity**

LC50, Rat, male, 1 Hour, dust/mist, 9.850 mg/l

**Sensitization**

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

**Carcinogenicity**

Did not cause cancer in laboratory animals.

**Teratogenicity**

Available data are inadequate for evaluation of potential to cause fetotoxicity.

**Reproductive toxicity**

Available data are inadequate to determine effects on reproduction.

**Mutagenicity**

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

**Diphenyl Ketone**

**Acute inhalation toxicity**

At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous. The LC50 has not been determined.

**Sensitization**

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**

The substance or mixture is not classified as specific target organ toxicant, single exposure.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

In animals, effects have been reported on the following organs:

Blood  
Liver  
Kidney  
Bone Marrow

**Carcinogenicity**

Has caused cancer in laboratory animals. However, the relevance of this to humans is unknown.

**Teratogenicity**

Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

**Reproductive toxicity**

In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

**Mutagenicity**

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

**Carcinogenicity****Component**

Diphenyl Ketone

**List**

IARC

**Classification**

Group 2B: Possibly carcinogenic to humans

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## 12. ECOLOGICAL INFORMATION

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*Ecotoxicological information appears in this section when such data is available.*

**General Information**

There is no data available for this product.

**Toxicity****Acrylic polymer(s)****Acute toxicity to fish**

No relevant data found.

**Residual monomers****Acute toxicity to fish**

No relevant data found.

**Aqua ammonia**



**Acute toxicity to fish**

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

LC50, Fish, 96 Hour, 0.89 mg/l

**Acute toxicity to aquatic invertebrates**

LC50, Daphnia magna (Water flea), static test, 48 Hour, 101 mg/l

**Diphenyl Ketone**

**Acute toxicity to fish**

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50, Fathead minnow (Pimephales promelas), 96 Hour, 14.7 mg/l, Method Not Specified.

**Acute toxicity to aquatic invertebrates**

EC50, ceriodaphnia dubia (water flea), 48 Hour, 7.6 mg/l, Method Not Specified.

**Acute toxicity to algae/aquatic plants**

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate, 3.5 mg/l, Method Not Specified.

**Chronic toxicity to fish**

NOEC, Pimephales promelas (fathead minnow), flow-through test, 32 d, survival, 0.54 mg/l

LOEC, Pimephales promelas (fathead minnow), flow-through test, 32 d, survival, 0.99 mg/l

MATC (Maximum Acceptable Toxicant Level), Pimephales promelas (fathead minnow), flow-through test, 32 d, survival, 0.73 mg/l

**Chronic toxicity to aquatic invertebrates**

NOEC, Daphnia (water flea), 21 d, 0.20 mg/l

**Persistence and degradability**

**Acrylic polymer(s)**

**Biodegradability:** No relevant data found.

**Residual monomers**

**Biodegradability:** No relevant data found.

**Aqua ammonia**

**Biodegradability:** Material is expected to be readily biodegradable. Biodegradation may occur under aerobic conditions (in the presence of oxygen).

**Theoretical Oxygen Demand:** 3.76 mg/mg Estimated.

**Diphenyl Ketone**

**Biodegradability:** Material is not readily biodegradable according to OECD/EEC guidelines.

10-day Window: Not applicable

**Biodegradation:** 0 %

**Exposure time:** 14 d

**Method:** OECD Test Guideline 301C or Equivalent

**Theoretical Oxygen Demand:** 2.63 mg/mg

**Photodegradation**

**Test Type:** Half-life (indirect photolysis)  
**Sensitizer:** OH radicals  
**Atmospheric half-life:** 3.009 d  
**Method:** Estimated.

**Bioaccumulative potential**

**Acrylic polymer(s)**

**Bioaccumulation:** No relevant data found.

**Residual monomers**

**Bioaccumulation:** No relevant data found.

**Aqua ammonia**

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

**Diphenyl Ketone**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water(log Pow):** 3.18 Measured

**Bioconcentration factor (BCF):** 3.4 - 9.2 Cyprinus carpio (Carp) 42 d Measured

**Mobility in soil**

**Residual monomers**

No relevant data found.

**Diphenyl Ketone**

Potential for mobility in soil is medium (Koc between 150 and 500).

**Partition coefficient(Koc):** 430 Measured

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### 13. DISPOSAL CONSIDERATIONS

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**Disposal methods:** Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. For disposal, incinerate this material at a facility that complies with local, state, and federal regulations.

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### 14. TRANSPORT INFORMATION

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**DOT**

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

Not regulated for transport

**Transport in bulk  
according to Annex I or II  
of MARPOL 73/78 and the  
IBC or IGC Code**

Consult IMO regulations before transporting ocean bulk

**Classification for AIR transport (IATA/ICAO):**

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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## 15. REGULATORY INFORMATION

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### OSHA Hazard Communication Standard

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Chronic Health Hazard

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### Pennsylvania

Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

### California (Proposition 65)

This product contains a component or components known to the state of California to cause cancer:

Components	CASRN
Diphenyl Ketone	119-61-9

### California (Proposition 65)

This product contains trace levels of a component or components known to the state of California to cause cancer:

Components	CASRN
Acetaldehyde	75-07-0
Dioxane	123-91-1

### California (Proposition 65)

This product contains trace levels of a component or components known to the state of California to cause cancer and birthdefects or other reproductive harm:

Components	CASRN
Ethylene Oxide	75-21-8

### California (Proposition 65)

This product contains trace levels of a component or components known to the state of California to cause birth defects or other reproductive harm:

<b>Components</b>	<b>CASRN</b>
Methanol	67-56-1

**United States TSCA Inventory (TSCA)**

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**16. OTHER INFORMATION**

**Hazard Rating System**

**HMIS**

Health	Flammability	Physical Hazard
1*	0	0

\* = Chronic Effects (See Hazards Identification)

**Revision**

Identification Number: 101168283 / 1001 / Issue Date: 07/28/2015 / Version: 4.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
Rohm and Haas	Rohm and Haas OEL's
STEL	Short-term exposure limit
TWA	Time weighted average
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

**Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

METACRYLICS urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

