# SAFETY DATA SHEET



Issuing Date 24-May-2015 Revision Date 24-May-2015 Revision Number 0

# Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) 400234

Product Name FOC-800 (USA)

Contains Quartz, 2-Hydroxyethyl methacrylate, Trimethylolpropane triacrylate

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use UV Cure Solder Mask

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company

Taiyo America, Inc. 2675 Antler Drive Carson City, NV 89701 TEL: 775-885-9959

For further information, please contact

**E-mail Address** No information available.

1.4. Emergency telephone number

Emergency Telephone 775-885-9959

Number

Europe 112

# Section 2. Hazards identification

#### 2.1. - Classification of the substance or mixture

#### **REGULATION (EC) No 1272/2008**

REGULATION (EC) NO 1212/2000	
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1

## **Physical Hazards**

None

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbol(s) T - Toxic

**R-code(s)** Carc. cat. 1;R49 - Xn;R48/20 - Xi;R36/38 - R43

For the full text of the R-phrases mentioned in this Section, see Section 16

#### 2.2. Label Elements



### Signal Word

### Warning

#### **Hazard Statements**

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

EUH208 - May produce an allergic reaction

#### **Precautionary Statements**

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

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

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P362 - Take off contaminated clothing and wash before reuse

P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention

#### 2.3. Other information

Contains 2,4-diamino-6-vinyl-S-triazine

# Section 3. Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Chemical Name	EC-No	CAS-No	Weight %	Classification	EU - GHS Substance Classification	REACH No.
Talc	238-877-9	14807-96-6	30-60	-		No data available
Quartz	Present	14808-60-7	10-30	-	STOT RE 2 (H373)	No data available
2-Hydroxyethyl methacrylate	212-782-2	868-77-9	10-30	Xi; R36/38 R43	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)	
Trimethylolpropane triacrylate	Present	15625-89-5	5-10	Xi; R36/38 R43	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)	
Silicon dioxide	Present	7631-86-9	1-5	-		No data available

For the full text of the R-phrases mentioned in this Section, see Section 16
For the full text of the H-Statements mentioned in this Section, see Section 16

# Section 4. First aid measures

#### 4.1. Description of first-aid measures

**General Advice** 

Immediate medical attention is required. If symptoms persist, call a physician.

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 rinsing. If symptoms

persist, call a physician.

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

shoes. If skin irritation persists, call a physician.

**Ingestion** Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an

unconscious person. If symptoms persist, call a physician.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

#### 4.2. Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available.

#### 4.3. Indication of immediate medical attention and special treatment needed

**Notes to Physician** May cause sensitization of susceptible persons. Treat symptomatically.

# Section 5. Fire-fighting measures

#### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Water spray. Dry powder. Foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

#### 5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by skin contact.

#### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

## Section 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

# 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Prevent entry into waterways, sewers, basements or confined areas.

### 6.3. Methods and materials for containment and cleaning up

Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

#### 6.4. Reference to other sections

See Section 12 for additional information.

# Section 7. Handling and storage

#### 7.1. Precautions for Safe Handling

#### Handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.

#### **Hygiene Measures**

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

# 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.

#### 7.3. Specific end use(s)

### **Exposure Scenario**

No information available.

#### **Other Guidelines**

No information available.

# Section 8. Exposure controls/personal protection

#### 8.1. Control parameters

#### **Exposure Limits**

Chemical Name	EU	The United Kingdom	France	Spain	Germany
Talc 14807-96-6		STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>		TWA: 2 mg/m <sup>3</sup>	
Quartz 14808-60-7		STEL: 0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	
Silicon dioxide 7631-86-9		STEL: 18 mg/m³ STEL: 7.2 mg/m³ TWA: 6 mg/m³ TWA: 2.4 mg/m³			TWA: 4 mg/m <sup>3</sup>
Component	Italy	Portugal	The Netherlands	Finland	Denmark
Talc 14807-96-6 ( 30-60 )		TWA: 2 mg/m <sup>3</sup>	TWA: 0.25 mg/m <sup>3</sup>	TWA: 0.5 fiber/cm3 TWA: 5 mg/m <sup>3</sup>	TWA: 0.3 fiber/cm3
Quartz 14808-60-7 ( 10-30 )		TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.075 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>
Silicon dioxide 7631-86-9 ( 1-5 )				TWA: 5 mg/m <sup>3</sup>	
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Talc 14807-96-6	TWA: 2 mg/m³	TWA: 2 mg/m <sup>3</sup>	TWA: 4.0 mg/m <sup>3</sup> TWA: 1.0 mg/m <sup>3</sup>	TWA: 6 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup> STEL: 12 mg/m <sup>3</sup> STEL: 4 mg/m <sup>3</sup>	TWA: 10 mg/m³ TWA: 0.8 mg/m³
Quartz 14808-60-7	TWA: 0.15 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> TWA: 0.3 mg/m <sup>3</sup> TWA: 4.0 mg/m <sup>3</sup> TWA: 1.0 mg/m <sup>3</sup>	TWA: 0.3 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> STEL: 0.9 mg/m <sup>3</sup> STEL: 0.3 mg/m <sup>3</sup>	TWA: 0.1 mg/m³ STEL: 0.3 mg/m³
2-Hydroxyethyl methacrylate 868-77-9				TWA: 2 ppm TWA: 11 mg/m <sup>3</sup> STEL: 4 ppm STEL: 16.5 mg/m <sup>3</sup>	
Silicon dioxide 7631-86-9	TWA: 4 mg/m <sup>3</sup> TWA: 0.3 mg/m <sup>3</sup>	TWA: 4 mg/m <sup>3</sup> TWA: 0.3 mg/m <sup>3</sup>		TWA: 1.5 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	TWA: 6 mg/m <sup>3</sup> TWA: 2.4 mg/m <sup>3</sup>

**Derived No Effect Level** 

No information available

Predicted No Effect Concentration No information available.

(PNEC)

8.2. Exposure controls

**Engineering Measures** 

Personal protective equipment

Ensure adequate ventilation, especially in confined areas.

**Eye Protection** Safety glasses with side-shields. **Skin and Body Protection** Lightweight protective clothing.

**Hand Protection** Protective gloves.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, approved respiratory protection

should be worn.

**Environmental Exposure Controls** No information available.

# Section 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Viscous liquid **Physical State** Green **Appearance** 

Odor Mild Solvent

**Property** Values Remarks/ - Method No data available None known

Melting Point/Range No data available None known **Boiling Point/Boiling Range** No data available None known 127 °C Flash Point None known **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known

**Vapor Pressure** No data available None known **Vapor Density** No data available None known **Relative Density** 1.60 None known Water Solubility No data available None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/waterNo data available None known No data available **Autoignition Temperature** None known **Decomposition Temperature** No data available None known **Viscosity** No data available None known

Flammable Properties Combustible material: may burn but does not ignite readily.

**Explosive Properties** No data available **Oxidizing Properties** No data available

9.2. Other information

**VOC Content (%)** 0 VOC (g/l)

Flammability Limits in Air No data available

# Section 10. Stability and reactivity

### 10.1. Reactivity

No data available.

#### 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

None under normal processing.

#### 10.4. Conditions to avoid

Incompatible products.

#### 10.5. Incompatible materials

Oxidizing agents. Peroxides. Free radical initiators.

#### 10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon oxides.

# **Section 11. Toxicological information**

#### 11.1. Information on toxicological effects

**Acute Toxicity** 

**Product Information** 

**Inhalation** There is no data available for this product.

**Eye Contact** Causes serious eye irritation.

Skin Contact Causes skin irritation. May cause allergic skin reaction

**Ingestion** May be harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Quartz	= 500 mg/kg (Rat)		
2-Hydroxyethyl methacrylate	= 5050 mg/kg (Rat)	>3000 mg/kg (Rabbit)	
Trimethylolpropane triacrylate	> 5000 mg/kg (Rat)	= 5000 mg/kg ( Rabbit )	
Silicon dioxide	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>2.2 mg/L (Rat) 4 h

Sensitization May cause sensitization of susceptible persons. May cause sensitization by skin contact.

Mutagenic Effects No information available.

Carcinogenic Effects This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of

crystalline silica is unlikely to occur from exposure to this product

Reproductive Toxicity

Developmental Toxicity

STOT - single exposure

STOT - repeated exposure

No information available.

No information available.

No information available.

Target Organ Effects Eyes. Lungs. Respiratory system.

Aspiration Hazard No information available.

# Section 12. Ecological information

### 12.1. Toxicity

#### **Ecotoxicity Effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Talc		LC50 96 h: > 100 g/L semi-static (Brachydanio rerio)		
2-Hydroxyethyl methacrylate		LC50 96 h: 213-242 mg/L flow-through (Pimephales promelas) LC50 96 h: = 227 mg/L (Pimephales promelas)		
Silicon dioxide	EC50 72 h: = 440 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: = 5000 mg/L static (Brachydanio rerio)		EC50 48 h: = 7600 mg/L (Ceriodaphnia dubia)

#### 12.2. Persistence and degradability

No information available.

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#### 12.3. Bioaccumulative potential.

Chemical Name	Log Pow
2-Hydroxyethyl methacrylate	0.47

#### 12.4. Mobility in soil

Adsorbs on soil.

#### 12.5. Results of PBT and vPvB assessment

No information available.

#### 12.6. Other adverse effects

This product does not contain any known or suspected endocrine disruptors.

# Section 13. Disposal considerations

#### 13.1. Waste treatment methods

Waste from Residues / Unused

**Products** 

Dispose of in accordance with local regulations.

Contaminated Packaging En

Empty containers should be taken to an approved waste handling site for recycling or

disposal.

# **Section 14. Transport information**

#### IMDG/IMO

14.1. UN-Number	Not regulated.
14.2. Proper Shipping Name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
44 E. Marina Dallutant	None

14.5. Marine Pollutant None.14.6. Special Provisions None.

**14.7. Transport in bulk according** No information available.

to Annex II of MARPOL 73/78 and

the IBC Code

### RID

14.1. UN-Number	Not regulated.
14.2. Proper Shipping Name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable

14.5. Environmental hazard None.14.6. Special Provisions None.

## <u>ADR</u>

14.1. UN-NumberNot regulated.14.2. Proper Shipping NameNot regulated.14.3. Hazard ClassNot regulated.14.4. Packing GroupNot regulated.DescriptionNot applicable.

14.5. Environmental hazard None.

**14.6. Special Provisions** None.

**ICAO** 

14.1. UN-NumberNot regulated.14.2. Proper shipping nameNot regulated.14.3. Hazard ClassNot regulated.14.4. Packing GroupNot regulated.DescriptionNot applicable.

**14.5. Environmental hazard** None. **14.6. Special Provisions** None.

IATA

14.1.UN-NumberNot regulated.14.2.Proper Shipping NameNot regulated.14.3.Hazard ClassNot regulated.14.4.Packing GroupNot regulated.DescriptionNot applicable.14.5.Environmental hazardNone.

14.6. Special Provisions None.

# Section 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Inventories

TSCA Complies EINECS/ELINCS Complies

DSL/NDSL PICCS ENCS IECSC AICS KECL -

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

#### 15.2. Chemical Safety Assessment

No information available

# **Section 16. Other information**

#### Full text of R-phrases referred to under Sections 2 and 3

R49 - May cause cancer by inhalation

R43 - May cause sensitization by skin contact

R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation

R36/38 - Irritating to eyes and skin

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H319 - Causes serious eve irritation

H317 - May cause an allergic skin reaction

H373 - May cause damage to organs through prolonged or repeated exposure if inhaled

EUH208 - May produce an allergic reaction

#### Key literature references and sources for data

www.ChemADVISOR.com/

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Revision Note Initial Release.

This safety data sheet complies with the requirements of Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No. 1907/2006

#### **General Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**