



SAFETY DATA SHEET

Issuing Date 24-May-2015

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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 Number 775-885-9959

Europe	112
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Section 2. Hazards identification

2.1. - Classification of the substance or mixture

REGULATION (EC) No 1272/2008

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)	No data available
Trimethylolpropane triacrylate	Present	15625-89-5	5-10	Xi; R36/38 R43	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)	No data available
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.
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

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

Derived No Effect Level

No information available

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures	Ensure adequate ventilation, especially in confined areas.
Personal protective equipment	
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

Physical State	Viscous liquid	Appearance	Green
Odor	Mild Solvent		
<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>	
pH	No data available	None known	
Melting Point/Range	No data available	None known	
Boiling Point/Boiling Range	No data available	None known	
Flash Point	127 °C	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/water	No data available	None known	
Autoignition Temperature	No data available	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)	0
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****Eye Contact****Skin Contact****Ingestion**

There is no data available for this product.

Causes serious eye irritation.

Causes skin irritation. May cause allergic skin reaction

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**Mutagenic Effects****Carcinogenic Effects**

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

No information available.

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****Target Organ Effects****Aspiration Hazard**

No information available.

No information available.

No information available.

No information available.

Eyes. Lungs. Respiratory system.

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.

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

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.
14.5. Marine Pollutant	None.
14.6. Special Provisions	None.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available.

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.

ADR

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.

ICAO

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.

IATA

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.

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 eye 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

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End of Safety Data Sheet