# **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

076620801

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

076620819 076620827 076620835

# SAFETY DATA SHEET



Issue Date 03-Jan-2011 Revision Date 01-May-2013 Version 1

# 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier** 

Product Name Excel Formula Heat-Cure Denture Base Material (Liquid)

Based on Methyl Methacrylate:

CAS No. 80-62-6 EU Index No. 607-035-00-6 REACH No. 01-2119452498-28

EINECS-No. 201-297-1

Other Means of Identification

**SDS #** SGT-003

# Recommended Use of the Chemical and Restrictions on Use

Recommended Use Dental / Denture application.
Uses Advised Against For Professional use only.

# **Details of the Supplier of the Safety Data Sheet**

**Supplier Address** 

St. George Technology, Inc.

P.O. Box 2849

Wilmington, North Carolina 28402-2849

**Emergency Telephone Number** 

Company Phone Number 910-397-0781

Emergency Telephone INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

# 2. HAZARDS IDENTIFICATION

# Classification

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

# Signal Word

Danger

# **Hazard Statements** Causes

skin irritation Causes severe

eye irritation

May cause an allergic skin reaction

May cause respiratory irritation. May cause drowsiness or dizziness

Highly flammable liquid and vapor



Appearance Colorless liquid

Physical State Liquid

**Odor** Characteristic

# **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing should not be allowed out of the workplace Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof equipment Use only non-sparking tools

Keep cool

# **Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Get medical attention if irritation occurs

If skin irritation or rash occurs: Get medical advice/attention

Take precautionary measures against static discharge

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

# **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed Store locked up

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### **Other Hazards**

Harmful to aquatic life with long lasting effects Harmful to aquatic life

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Methyl Methacrylate Monomer	80-62-6	>90%
Ethylene Glycol Dimethacrylate	97-90-5	2.5-10%

Product contains a proprietary mixture of ingredients. \*Unlisted ingredients are not considered hazardous under the OSHA Hazard

Communication Standard (29 CFR 1910.1200).

# 4. FIRST AID MEASURES

### **First Aid Measures**

**General Advice** Provide this SDS to medical personnel for treatment.

Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get

medical attention.

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

clothes and shoes. Seek medical attention if irritation develops.

**Inhalation** Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility

for additional treatment.

Ingestion Rinse mouth. Do NOT induce vomiting. Seek medical advice.

# Most Important Symptoms and Effects, both Acute and Delayed

Symptoms Overexposure by inhalation may cause CNS depression- drowsiness, dizziness, confusion

or loss of coordination. May cause skin and eye irritation. May cause allergic skin reaction.

Will cause gastrointestinal tract irritation.

### Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically. Can cause allergic response in susceptible or hypersensitive

individuals upon repeated or prolonged exposure.

# 5. FIRE-FIGHTING MEASURES

# **Suitable Extinguishing Media**

Foam, Dry chemical, Carbon dioxide (CO2).

Unsuitable Extinguishing Media Water jet.

# **Specific Hazards Arising from the Chemical**

Vapors may travel to source of ignition and flash back.

Sensitivity to Static Discharge Take precautionary measures against static discharge. Flammable mixtures of this product

are readily ignited even by static discharge.

# **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# 6. ACCIDENTAL RELEASE MEASURES

# Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Remove all

sources of ignition. The wet contaminated surface may be slippery.

Environmental Precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and

sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See Section 12 for additional ecological information.

# Methods and Material for Containment and Cleaning Up

Methods for Containment Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth,

diatomaceous earth, vermiculite).

**Methods for Cleaning Up**Use clean non-sparking tools to collect absorbed material. Sweep up absorbed material

and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste

disposal, see section 13 of the SDS. Wash spill area with a mild detergent.

# 7. HANDLING AND STORAGE

### **Precautions for Safe Handling**

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Wear appropriate

personal protective equipment. Wash face, hands, and any exposed skin thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take precautionary measures against static discharges. Ground container and transfer equipment to eliminate static electric sparks. Use spark-proof tools and explosion-proof equipment. Avoid breathing vapors or mists. Contaminated work clothing should not be allowed out of the workplace. Use only in well-ventilated areas. Keep containers closed

when not in use. Keep cool.

# Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store

between 16°-26°C (69°-79°F). Store locked up. Protect from damp. Store away from heat

and incompatible materials.

**Incompatible Materials** Organic peroxides, Reducing agent, Metallic Redox systems, Strong oxidizing agents.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl	STEL: 100 ppm	TWA: 100 ppm TWA: 410	IDLH: 1000 ppm
Methacrylate	TWA: 50 ppm	mg/m³ (vacated) TWA:	TWA: 100 ppm
·		100 ppm	TWA: 410 mg/m <sup>3</sup>
		(vacated) TWA: 410 mg/m <sup>3</sup>	

### **Appropriate Engineering Controls**

**Engineering Controls** Good ventilation is required.

# Individual Protection Measures, such as Personal Protective Equipment

**Eye/Face Protection** Splash goggles or safety glasses.

**Skin and Body Protection** Polyethylene / Nitrile gloves. Do not use cotton gloves. Polyethylene apron is

recommended.

**Respiratory Protection** Ensure adequate ventilation, especially in confined areas. Use NIOSH approved

air-purifying respirator if the potential to exceed established exposure limits exists.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# Information on Basic Physical and Chemical Properties

**Physical State** Liquid

Colorless liquid Characteristic **Appearance** Odor **Odor Threshold** Color Colorless Not determined

Remarks • Method **Property** Values

Not determined pН **Melting Point/Freezing Point** Not determined **Boiling Point/Boiling Range** 100 °C / 212 °F **Flash Point Evaporation** 8 °C / 46.4 °F

Rate Flammability (Solid, +1 Not determined

**Upper Flammability Limits** 12% **Lower Flammability Limit** 1.5%

**Vapor Pressure** 47hPa @ 20°C

**Vapor Density** +1 **Specific Gravity** -1

Water Solubility Slightly soluble Solubility in Other Solvents Not determined **Partition Coefficient** Not determined **Autoignition Temperature** 430°C / 806°F **Decomposition Temperature** Not determined Not determined **Kinematic Viscosity Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

(at 760 mm Hg) Tag Closed Cup (butyl acetate = 1)

(Air=1) (1=Water)

# 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

# **Chemical Stability**

Stable under recommended storage conditions.

### **Possibility of Hazardous Reactions**

Prolonged exposure to elevated temperatures which can cause premature polymerization and release methyl methacrylate vapors.

**Hazardous Polymerization** Hazardous polymerization may occur.

# **Conditions to Avoid**

Temperatures >35°C (95°).

# **Incompatible Materials**

Organic peroxides, Reducing agent, Metallic Redox systems, Strong oxidizing agents.

# **Hazardous Decomposition Products**

None known based on information supplied.

# 11. TOXICOLOGICAL INFORMATION

# Information on Likely Routes of Exposure

**Product Information** 

**Eye Contact** Causes serious eye irritation.

**Skin Contact** Causes skin irritation. May cause allergic skin reaction.

Inhalation May cause irritation to the mucous membranes and upper respiratory tract.

Ingestion

Ingestion may cause irritation to mucous membranes.

# **Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl Methacrylate	= >5000 mg/kg ( Rat )	> 5000 mg/kg (Rabbit)	= 29.8mg/l(Rat)4 h = 400 ppm (Rat)1 h

# Information on Physical, Chemical and Toxicological Effects

**Symptoms** Please see section 4 of this SDS for symptoms.

# Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

**Sensitization** May cause an allergic skin reaction.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Methyl Methacrylate Monomer		Group 3		

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

**STOT - Single Exposure** May cause respiratory irritation. May cause drowsiness or dizziness.

# **Numerical Measures of Toxicity**

Not determined

# 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

gae/aquatic plants	Fish	Toxicity to	Crustacea
		microorganisms	
170: 96 h Pseudokirchneriella bcapitata mg/L EC50	h Poecilia reticulata mg/L		69: 48 h Daphnia magna mg/L EC50
_	170: 96 h Iseudokirchneriella ocapitata mg/L EC50	170: 96 h Iseudokirchneriella ocapitata mg/L EC50  10w-through 125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 170 - 206: 96 h Lepomis macrochirus mg/L LC50 flow-through 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 79: 96 h Oncorhynchus mykiss mg/L LC50 static 326.4 - 426.9: 96	microorganisms  243 - 275: 96 h Pimephales promelas mg/L LC50 flow-through 125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 170 - 206: 96 h Lepomis macrochirus mg/L LC50 flow-through 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 79: 96 h Oncorhynchus mykiss mg/L LC50 static 326.4 - 426.9: 96 h Poecilia reticulata mg/L

# Persistence and Degradability

Not determined

### **Bioaccumulation**

Not determined

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# **Mobility**

Chemical Name	Partition Coefficient
Methyl Methacrylate Monomer	0.7

### **Other Adverse Effects**

Not determined

# 13. DISPOSAL CONSIDERATIONS

# **Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Trade Secret	U162	Included in waste stream:		U162
		F039		

Chemical Name	California Hazardous Waste Status
Methyl Methacrylate Monomer	Toxic
	Ignitable

# 14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

**DOT** Consumer Commodity

IATA

UN/ID No UN1247

Proper Shipping Name Methyl methacrylate monomer, stabilized

Hazard Class 3
Packing Group II

**IMDG** 

UN/ID No UN1247

Proper Shipping Name Methyl methacrylate monomer, stabilized

Hazard Class 3
Packing Group II

# 15. REGULATORY INFORMATION

# **International Inventories**

Not Determined

Legend:

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

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

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

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ENCS - Japan Existing and New Chemical Substances IECSC

- China Inventory of Existing Chemical Substances KECL -

Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

# US Federal Regulations

# **CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methyl Methacrylate Monomer	1000 lb		RQ 1000 lb final RQ
			RQ 454 kg final RQ

# **SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Trade Secret -		Proprietary	1.0

# **CWA (Clean Water Act)**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Methyl Methacrylate Monomer ( Proprietary )	1000 lb			X

### **US State Regulations**

# U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Trade Secret	X	X	X

# **16. OTHER INFORMATION**

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	Not determined	Not determined	Not determined	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	Not determined	Not determined	Not determined	Not determined

Issue Date03-Jan-2011Revision Date01-May-2013Revision NoteNew format

# **Disclaimer**

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**End of Safety Data Sheet** 

# St. George Technology Performance Polymers

# SAFETY DATA SHEET

Issue Date 03-Jan-2011 Revision Date 31-May-2016 Version 1

# 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier** 

**Product Name** Excel Formula™ Heat-Cure Denture Base Material (Liquid)

Based on Methyl Methacrylate:

CAS No. 80-62-6 EU Index No. 607-035-00-6 REACH No. 01-2119452498-28

EINECS-No. 201-297-1

Other Means of Identification

**SDS #** SGT-003

# Recommended Use of the Chemical and Restrictions on Use

Recommended Use Dental / Denture application.
Uses Advised Against For Professional use only.

### **Details of the Supplier of the Safety Data Sheet**

**Supplier Address** 

St. George Technology, Inc.

P.O. Box 2849

Wilmington, North Carolina 28402-2849

**Emergency Telephone Number** 

Company Phone Number 910-397-0781

Emergency Telephone INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

# 2. HAZARDS IDENTIFICATION

### Classification

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

# Signal Word

Danger

# **Hazard Statements** Causes

skin irritation Causes severe

eye irritation

May cause an allergic skin reaction

May cause respiratory irritation. May cause drowsiness or dizziness

Highly flammable liquid and vapor



Appearance Colorless liquid

Physical State Liquid

**Odor** Characteristic

### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing should not be allowed out of the workplace Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment

Use explosion-proof equipment
Use only non-sparking tools

Take precautionary measures against static discharge Keep cool

# **Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Get medical attention if irritation occurs

If skin irritation or rash occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

# **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed Store locked up

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### **Other Hazards**

Harmful to aquatic life with long lasting effects Harmful to aquatic life

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Methyl Methacrylate Monomer	80-62-6	>90%
Ethylene Glycol Dimethacrylate	97-90-5	2.5-10%

Product contains a proprietary mixture of ingredients. \*Unlisted ingredients are not considered hazardous under the OSHA Hazard

Communication Standard (29 CFR 1910.1200).

# 4. FIRST AID MEASURES

### **First Aid Measures**

**General Advice** Provide this SDS to medical personnel for treatment.

Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get

medical attention.

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

clothes and shoes. Seek medical attention if irritation develops.

**Inhalation** Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility

for additional treatment.

**Ingestion** Rinse mouth. Do NOT induce vomiting. Seek medical advice.

### Most Important Symptoms and Effects, both Acute and Delayed

Symptoms Overexposure by inhalation may cause CNS depression- drowsiness, dizziness, confusion

or loss of coordination. May cause skin and eye irritation. May cause allergic skin reaction.

Will cause gastrointestinal tract irritation.

### Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically. Can cause allergic response in susceptible or hypersensitive

individuals upon repeated or prolonged exposure.

# 5. FIRE-FIGHTING MEASURES

# Suitable Extinguishing Media

Foam, Dry chemical, Carbon dioxide (CO2).

Unsuitable Extinguishing Media Water jet.

# **Specific Hazards Arising from the Chemical**

Vapors may travel to source of ignition and flash back.

Sensitivity to Static Discharge Take precautionary measures against static discharge. Flammable mixtures of this product

are readily ignited even by static discharge.

# **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# 6. ACCIDENTAL RELEASE MEASURES

# Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Remove all

sources of ignition. The wet contaminated surface may be slippery.

Environmental Precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and

sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See Section 12 for additional ecological information.

# Methods and Material for Containment and Cleaning Up

Methods for Containment Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth,

diatomaceous earth, vermiculite).

**Methods for Cleaning Up**Use clean non-sparking tools to collect absorbed material. Sweep up absorbed material

and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste

disposal, see section 13 of the SDS. Wash spill area with a mild detergent.

# 7. HANDLING AND STORAGE

### **Precautions for Safe Handling**

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Wear appropriate

personal protective equipment. Wash face, hands, and any exposed skin thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take precautionary measures against static discharges. Ground container and transfer equipment to eliminate static electric sparks. Use spark-proof tools and explosion-proof equipment. Avoid breathing vapors or mists. Contaminated work clothing should not be allowed out of the workplace. Use only in well-ventilated areas. Keep containers closed

when not in use. Keep cool.

# Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store

between 16°-26°C (69°-79°F). Store locked up. Protect from damp. Store away from heat

and incompatible materials.

**Incompatible Materials**Organic peroxides, Reducing agent, Metallic Redox systems, Strong oxidizing agents.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl	STEL: 100 ppm	TWA: 100 ppm TWA: 410	IDLH: 1000 ppm
Methacrylate	TWA: 50 ppm	mg/m³ (vacated) TWA:	TWA: 100 ppm
		100 ppm	TWA: 410 mg/m <sup>3</sup>
		(vacated) TWA: 410 mg/m <sup>3</sup>	-

### **Appropriate Engineering Controls**

**Engineering Controls** Good ventilation is required.

# Individual Protection Measures, such as Personal Protective Equipment

**Eye/Face Protection** Splash goggles or safety glasses.

**Skin and Body Protection** Polyethylene / Nitrile gloves. Do not use cotton gloves. Polyethylene apron is

recommended.

**Respiratory Protection** Ensure adequate ventilation, especially in confined areas. Use NIOSH approved

air-purifying respirator if the potential to exceed established exposure limits exists.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# Information on Basic Physical and Chemical Properties

Physical State Liquid

AppearanceColorless liquidOdorCharacteristicColorColorlessOdor ThresholdNot determined

(at 760 mm Hg)

Property <u>Values</u> <u>Remarks • Method</u>

pH Not determined
Melting Point/Freezing Point Not determined
Boiling Point/Boiling Range 100 °C / 212 °F

Flash Point Evaporation 8 °C / 46.4 °F Tag Closed Cup Rate Flammability (Solid, +1 (butyl acetate = 1)

Gas) Not determined

Upper Flammability Limits 12%

Lower Flammability Limit 1.5%

Vapor Pressure 47hPa @ 20°C

Vapor Density +1 (Air=1) Specific Gravity -1 (1=Water)

Water Solubility Slightly soluble **Solubility in Other Solvents** Not determined Not determined **Partition Coefficient Autoignition Temperature** 430°C / 806°F **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

# 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

# **Chemical Stability**

Stable under recommended storage conditions.

### **Possibility of Hazardous Reactions**

Prolonged exposure to elevated temperatures which can cause premature polymerization and release methyl methacrylate vapors.

**Hazardous Polymerization** Hazardous polymerization may occur.

# **Conditions to Avoid**

Temperatures >35°C (95°).

# **Incompatible Materials**

Organic peroxides, Reducing agent, Metallic Redox systems, Strong oxidizing agents.

# **Hazardous Decomposition Products**

None known based on information supplied.

# 11. TOXICOLOGICAL INFORMATION

# Information on Likely Routes of Exposure

**Product Information** 

**Eye Contact** Causes serious eye irritation.

**Skin Contact** Causes skin irritation. May cause allergic skin reaction.

**Inhalation** May cause irritation to the mucous membranes and upper respiratory tract.

Ingestion

Ingestion may cause irritation to mucous membranes.

# **Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl Methacrylate	= >5000 mg/kg ( Rat )	> 5000 mg/kg (Rabbit)	= 29.8mg/l(Rat)4 h = 400 ppm (Rat)1 h

# Information on Physical, Chemical and Toxicological Effects

**Symptoms** Please see section 4 of this SDS for symptoms.

# Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

**Sensitization** May cause an allergic skin reaction.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Methyl Methacrylate Monomer		Group 3		

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

**STOT - Single Exposure** May cause respiratory irritation. May cause drowsiness or dizziness.

# **Numerical Measures of Toxicity**

Not determined

# 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methyl Methacrylate	170: 96 h Pseudokirchneriella subcapitata mg/L EC50	243 - 275: 96 h Pimephales promelas mg/L LC50 flow-through 125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 170 - 206: 96 h Lepomis macrochirus mg/L LC50 flow-through 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 79: 96 h Oncorhynchus mykiss mg/L LC50 static 326.4 - 426.9: 96 h Poecilia reticulata mg/L LC50 static		69: 48 h Daphnia magna mg/L EC50

# Persistence and Degradability

Not determined

### **Bioaccumulation**

Not determined

### Mobility

Chemical Name	Partition Coefficient
Methyl Methacrylate Monomer	0.7

### **Other Adverse Effects**

Not determined

# 13. DISPOSAL CONSIDERATIONS

# **Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Trade Secret	U162	Included in waste stream:		U162
		F039		

Chemical Name	California Hazardous Waste Status
Methyl Methacrylate Monomer	Toxic
	Ignitable

# 14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

**DOT** Consumer Commodity

IATA

UN/ID No UN1247

Proper Shipping Name Methyl methacrylate monomer, stabilized

Hazard Class 3
Packing Group ||

**IMDG** 

UN/ID No UN1247

Proper Shipping Name Methyl methacrylate monomer, stabilized

Hazard Class 3
Packing Group ||

# 15. REGULATORY INFORMATION

# **International Inventories**

Not Determined

Legend:

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

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

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

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ENCS - Japan Existing and New Chemical Substances IECSC

- China Inventory of Existing Chemical Substances KECL -

Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

# US Federal Regulations

# **CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methyl Methacrylate Monomer	1000 lb		RQ 1000 lb final RQ
			RQ 454 kg final RQ

# **SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Trade Secret -		Proprietary	1.0

# **CWA (Clean Water Act)**

CWA - Reportable Quantities	OWA-TOXICT Ollutarits	CWA - Priority Pollutants	CWA - Hazardous Substances
1000 lb			X
	Quantities	Quantities	Quantities

# **US State Regulations**

# U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Trade Secret	X	X	X

# **16. OTHER INFORMATION**

NFPA_	Health Hazards	Flammability	Instability	Special Hazards
	Not determined	Not determined	Not determined	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	Not determined	Not determined	Not determined	Not determined

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# **Disclaimer**

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**End of Safety Data Sheet**