Monteck® GMA

SAFETY DATA SHEET

Section 1 – Product and Company Identification

1.1 Product identifiers

Product name:	Monteck® GMA
Product description:	Glycidyl Methacrylate
CAS No.:	106-91-2

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

Relevant identified uses:	Used in the manufacturing of polymers including coatings and finishes, adhesives, plastics, and elastomers.
Uses advised against:	No information available

1.3 Details of the supplier of the safety data sheet

Company:	Teckrez, Inc. 4209 Baymeadows Road, Suite 3 Jacksonville, FL 32217 USA
Telephone:	+1 904-215-7885

1.4 Emergency telephone number

Within USA and Canada: +1 800-424-9300
Outside USA and Canada: +1 703-527-3887
Teckrez Chemtrec registration number: **CCN803926**

Section 2 – Hazards Identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 3), H311
Skin corrosion (Category 1C), H314
Serious eye damage (Category 1), H318
Skin sensitisation (Category 1), H317
Germ cell mutagenicity (Category 2), H341
Carcinogenicity (Category 1B), H350
Reproductive toxicity (Category 1B), H360
Specific target organ toxicity - single exposure, Inhalation (Category 1), Respiratory Tract, H370

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

2.2 GHS Label elements, including precautionary statements

Pictogram:

Signal word:	Danger
Hazard statement(s):	
H227	Combustible liquid.
H302 + H332	Harmful if swallowed or if inhaled.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H370	Causes damage to organs (Respiratory Tract) if inhaled.
H401	Toxic to aquatic life.

Precautionary statement(s):

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P281	Use personal protective equipment as required.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P307 + P311	IF exposed: Call a POISON CENTER or doctor/physician.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

Section 3 – Composition / Information on Ingredients

3.1 Substances

Synonyms:	Methacrylic acid glycidyl ester
Formula:	$C_7H_{10}O_3$
Molecular weight (g/mol):	142.15
CAS No.:	106-91-2
EC No.:	203-441-9

3.2 Hazardous components

Component	Classification	Concentration
Glycidyl Methacrylate	Flam. Liq. 4; Acute Tox. 4; Acute Tox. 3; Skin Corr. 1C; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 1B; Repr. 1B; STOT SE 3; STOT RE 1; Aquatic Acute 2; H227, H302, H332, H311, H314, H318, H317, H341, H350, H360, H370, H370, H401	≤ 100 %

For the full text of the H-Statements mentioned in this Section, see Section 2.

Section 4 – First Aid Measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically and supportively.

Section 5 – Fire Fighting Measures

5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
Use water spray to cool unopened containers.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Further information
For disposal see section 13.

Section 7 – Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. To avoid spontaneous polymerization reactions, keep containers of this material out of direct sunlight and stored at ambient temperatures. Always ensure that the atmosphere above the acrylate contains between 5 - 21% oxygen.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8 – Exposure Controls / Personal Protection

8.1 Control parameters

Components with workplace control parameters.

Component	CAS No.	Value	Control Parameters	Basis
Glycidyl Methacrylate	106-91-2	TWA	0.5 ppm	USA. Workplace Environmental Exposure Levels (WEEL)
	Remarks	Skin Dermal Sensitization Notation		

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Wear protective eyeglasses or chemical safety goggles, eye- and face-protection regulations. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Skin protection
Wear chemically protective gloves, boots, aprons, and gauntlets to prevent skin contact. Take off contaminated clothing and wash before reuse.

Body protection
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: clear, liquid Color: colorless
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting / freezing point	-42 °C (-43 °F)
f)	Boiling point	189 °C (372 °F)
g)	Flash point	76 °C (169 °F) - closed cup
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	Upper explosion limit: 8.0 % (V) Lower explosion limit: 2.0 % (V)
k)	Vapor pressure	4.2 hPa at 25 °C (77 °F)

l)	Vapor density	No data available
m)	Relative density	1.042 g/mL at 25 °C (77 °F)
n)	Water solubility	50 g/L at 25 °C (77 °F)
o)	Partition coefficient n-octanol/water	log Pow = 0.96 at 25 °C (77 °F)
p)	Auto-ignition temperature	No data available
q)	Decomposition temp.	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

9.2 Other safety information
No data available

Section 10 – Stability and Reactivity

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions. See section 7.2 for details. Polymerizes with evolution of heat. Avoid contact with incompatible materials. Unless inhibited, product can polymerize, raising temperature and pressure, possibly rupturing container. Check inhibitor content often adding to bulk liquid if needed. Do not blanket or mix with oxygen-free gas as it renders inhibitor ineffective.

10.3 Possibility of hazardous reactions
Polymerizes readily unless inhibited.

10.4 Conditions to avoid
May polymerize on exposure to light.
Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5 Incompatible materials
Oxidizing agents, Peroxides, Amines, Bases, Acids, Reducing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5.

Section 11 – Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 597 mg/kg
LC50 Inhalation - No data available
LD50 Dermal - Rabbit - 480 mg/kg

Skin corrosion/irritation

Skin - Rabbit
Result: Corrosive, category 1C

Respiratory or skin sensitization

Buehler Test - Guinea pig
Result: positive

Serious eye damage/eye irritation

Eyes - Rabbit
Result: Irreversible effects on the eye

Germ cell mutagenicity

Suspected of causing genetic defects.
Mutagenicity (mammal cell test): chromosome aberration.
Result: positive

Ames test
Salmonella typhimurium
Result: positive

Mouse - male and female - Bone marrow
Result: positive

Carcinogenicity

Presumed to have carcinogenic potential for humans

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
May damage fertility

Specific target organ toxicity - single exposure
Inhalation - May cause respiratory irritation - Respiratory system

Specific target organ toxicity - repeated exposure
Causes damage to organs through prolonged or repeated exposure.
Inhalation - Respiratory Tract

Aspiration hazard
No data available

Additional Information
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence (MEHQ).

Section 12 – Ecological Information

12.1 Toxicity

Toxicity to fish	LC50 - Oryzias latipes (Orange-red killifish) - 2.8 mg/l - 96 h
Toxicity to daphnia And other aquatic Invertebrates	EC50 - Daphnia magna (Water flea) - 24.9 mg/l - 48 h
Toxicity to algae	EC50 - Pseudokirchneriella subcapitata (green algae) - 9.2 mg/l - 96 h

12.2 Persistence and degradability
Biodegradability
Result: 94 % - Readily biodegradable

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life. Avoid release to the environment.

Section 13 – Disposal Considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

Section 14 – Transport Information

DOT (US)

UN number: 2922 Class: 8 (6.1) Packing group: III
Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Glycidyl Methacrylate)
Poison Inhalation Hazard: No

IMDG

UN number: 2922 Class: 8 (6.1) Packing group: III EMS-No: F-A, S-B
Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Glycidyl Methacrylate)

IATA

UN number: 2922 Class: 8 (6.1) Packing group: III
Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Glycidyl Methacrylate)

Section 15 – Regulatory Information

TSCA

Glycidyl Methacrylate (CAS No. 106-91-2) is listed on the TSCA Active inventory, complying with all applicable rules or orders under TSCA.

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
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.

SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Glycidyl Methacrylate	106-91-2	1991-07-01

New Jersey Right To Know Components

	CAS-No.	Revision Date
Glycidyl Methacrylate	106-91-2	1991-07-01

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16 – Additional Information

HMIS Rating

Health hazard:	3
Chronic Health Hazard:	*
Flammability:	1
Physical Hazard:	0

NFPA Rating

Health hazard:	3
Fire Hazard:	1
Reactivity Hazard:	0

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