1. Identification

Product identifier

Multi-Tech Products Acrylic Liquid Filler Component "A"

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Adhesives, sealants

Uses advised against

Any non-intended use.

Details of the supplier of the safety data sheet

Company name:	JV ENT, LLC (DBA: Multi-Tech Products)
Place:	1177 N Red Gum St Anaheim, CA 92806
Telephone:	+1 (800) 218-2066
Responsible Department:	orders@multitechproducts.com
Emergency phone number:	+CHEMTREC Tel. 800.424-9300, 703-527-3887 (International)

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Flammable liquids: Flam. Liq. 2
Skin corrosion/irritation: Skin Irrit. 2
Respiratory or skin sensitization: Skin Sens. 1
Specific target organ toxicity single exposure: STOT SE 3 (respiratory tract irritation)

Label elements

29 CFR Part 1910.1200

Signal word: Danger

Pictograms:

Hazard statements

Highly flammable liquid and vapor
Causes skin irritation
May cause an allergic skin reaction
May cause respiratory irritation

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center/doctor if you feel unwell.
In case of fire: Use Carbon dioxide (CO2) Dry extinguishing powder. alcohol resistant foam. Atomized water. to extinguish.
Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to local/regional/national/international regulations.

Hazards not otherwise classified

In use, may form flammable/explosive vapor-air mixture.
The components in this formulation do not meet the criteria for classification as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

Hazardous components

CAS No	Components	Quantity
80-62-6	methyl methacrylate	30 - 100 %

Further Information

The following substances are registered in european union (REACH number):
methyl methacrylate: 01-2119452498-28-xxxx

4. First-aid measures

Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Take off immediately all contaminated clothing.
First aider: Pay attention to self-protection!

After inhalation

Remove person to fresh air and keep comfortable for breathing. In case of irregular breathing or respiratory arrest provide artificial respiration. In case of respiratory tract irritation, consult a physician.
In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks).

After contact with skin

Take off immediately all contaminated clothing. Wash with plenty of water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or when symptoms persist, seek medical advice.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2) Dry extinguishing powder. alcohol resistant foam.
In case of major fire and large quantities: Atomized water.

Unsuitable extinguishing media

High power water jet.

Specific hazards arising from the chemical

Can be released in case of fire: Gas/vapors, irritant. Carbon monoxide Carbon dioxide (CO2)

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to protect personnel and to cool endangered containers.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove persons to safety. Remove all sources of ignition. Provide adequate ventilation.
Do not breathe gas/vapor/aerosol. Avoid contact with skin, eyes and clothes.
Wear personal protection equipment. (refer to chapter 8)

Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area.
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations.
Do not breathe gas/vapor/aerosol. Avoid contact with skin, eyes and clothes.
Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.
Flammable vapors can accumulate in head space of closed systems. In use, may form flammable/explosive vapor-air mixture. Heating causes rise in pressure with risk of bursting.

Further information on handling

General protection and hygiene measures: See section 8.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect against direct sunlight.
Ensure adequate ventilation of the storage area.
Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Hints on joint storage

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.
Recommended storage temperature: 20°C
Protect against: Light. UV-radiation/sunlight. heat. moisture.
Do not store at temperatures over: 60°C
Do not keep the container sealed.

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No.	Substance	ppm	mg/m³	f/cc	Category	Origin
80-62-6	Methyl methacrylate	100	410		TWA (8 h)	PEL
		100	410		TWA (8 h)	REL

Exposure controls




Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Protective and hygiene measures

The usual precautions for handling chemicals should be considered.
Keep away from food, drink and animal feeding stuffs.
Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Protect skin by using skin protective cream. Take off contaminated clothing and wash it before reuse.

Eye/face protection

Recommended eye protection brand: Tightly sealed safety glasses.

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves.
Suitable material: Butyl rubber.
Thickness of the glove material 0,5 mm
Breakthrough time >= 480 min. ~ 120 min. (estimated)
In the case of wanting to use the gloves again, clean them before taking off and air them well. Before using check leak tightness / impermeability.
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
The selected protective gloves should satisfy the specifications of standards like EN 374.

Skin protection

Wear fire/flame resistant/retardant clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:

insufficient ventilation.
exceeding exposure limit values
generation/formation of aerosols
Generation/formation of mist
Suitable respiratory protective equipment: Combination filtering device (EN 14387) Type: A / P2/P3
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	viscous
Color:	Various
Odor:	characteristic
pH-Value:	not determined

Changes in the physical state

Melting point/freezing point:	not determined
Initial boiling point and boiling range:	Methyl-methacrylate: 100 °C
Flash point:	Methyl-methacrylate: 10 °C

Explosive properties

none

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined
Decomposition temperature:	not determined

Oxidizing properties

none

Vapor pressure: (at 20 °C)	not determined
Density:	not determined
Water solubility:	miscible.

Solubility in other solvents

not determined

Partition coefficient:	not determined
Viscosity / dynamic: (at 20 °C)	not determined
Viscosity / kinematic: (at 20 °C)	not determined
Flow time:	not determined
Vapor density:	not determined
Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined

Other information

Solid content: not determined

No information available.

10. Stability and reactivity

Reactivity

Stabilization required by: stabilizer and Oxygen.

Chemical stability

Stability: Stable

The product is chemically stable under recommended conditions of storage, use and temperature.
Can polymerize exothermically in the absence of stabilizers, particularly in acid conditions or if shelf life exceeded.
Stabilization required by: Oxygen.

Possibility of hazardous reactions

Hazardous reactions: Will not occur

Hazardous polymerization: Protect against direct sunlight.
Can polymerize exothermically in the absence of stabilizers, particularly in acid conditions or if shelf life exceeded.

Conditions to avoid

Protect against: Light. UV-radiation/sunlight. heat. Cold moisture.
Do not store at temperatures over: 60°C
In use may form flammable/explosive vapor-air mixture.
Heating causes rise in pressure with risk of bursting.

Incompatible materials

Materials to avoid: Strong acid. Oxidizing agents, strong. Alkalis (alkalis), concentrated.

Hazardous decomposition products

Can be released in case of fire: Gas/vapors, irritant. Carbon monoxide Carbon dioxide (CO2)

11. Toxicological information

Information on toxicological effects

Route(s) of Entry

Ingestion: May be harmful. Inhalation: May be harmful. Skin Contact: May cause an allergic skin reaction. Causes skin irritation. Eye Contact: May cause eye irritation.

Toxicocinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
80-62-6	methyl methacrylate				
	dermal	LD50 > 5000 mg/kg	Rabbit	ECHA Dossier	
	inhalation aerosol	LC50 29,8 mg/l	Rat	ECHA Dossier	

Irritation and corrosivity

Causes skin irritation
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitizing effects

May cause an allergic skin reaction (methyl methacrylate)
The product is: sensitizing.
People who suffer from skin sensitaization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate:
In-vitro mutagenicity: Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay); Result: negative. Literature information: ECHA Dossier; Carcinogenicity: negative. Method: OECD Guideline 451 (Carcinogenicity Studies, 6h/d); Species: Rat,oral.; Exposure duration: 2 years; Result: NOAEC >= 2000 ppm; Literature information: ECHA Dossier; Reproductive toxicity: Method: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study); Species: Rat; Result: NOAEL = 400 mg/kg; Literature information: ECHA Dossier; 1. Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Species: Rabbit. Exposure duration: 28d; Result: NOAEL = 450 mg/kg
2. Developmental toxicity/teratogenicity: Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Species: Rat; Result: NOAEC >= 8,3 mg/l ; Literature information: ECHA Dossier

Specific target organ toxicity (STOT) - single exposure

May cause respiratory irritation (methyl methacrylate)

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met.
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate:
Chronic oral toxicity: Method: -; Species: Rat;Exposure duration: 2 years; Results: NOAEL = 2000 ppm. Literature information: ECHA Dossier; 1. Chronic inhalation toxicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies, 6h/d); Species: Rat; Exposure duration: approx. 2 years; Results: LOAEC = 250 ppm.
2. Chronic inhalation toxicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies, 6h/d); Species: Rat; Exposure duration: approx. 2 years; Results: NOAEC = 1,64 m/l; Literature information: ECHA Dossier

Carcinogenicity (OSHA):	No ingredient of this mixture is listed.
Carcinogenicity (IARC):	Methyl methacrylate (CAS 80-62-6) is listed in group 3.
Carcinogenicity (NTP):	No ingredient of this mixture is listed.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No information available.

12. Ecological information

Mobility in soil

No data available.

Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

13. Disposal considerations

Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal.
Non-contaminated packages may be recycled.

RCRA Hazardous wastes (Resource Conservation and Recovery Act)

D001 Ignitability

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

14. Transport information

US DOT 49 CFR 172.101

UN/ID number:	UN 1263
Proper shipping name:	Adhesives
Transport hazard class(es):	3
Packing group:	II
Hazard label:	3

Marine transport (IMDG)

UN number:	UN 1263
UN proper shipping name:	Adhesives
Transport hazard class(es):	3
Packing group:	II
Hazard label:	3

Marine pollutant:	No
Limited quantity:	20 liter
Excepted quantity:	E2
EmS:	F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

UN number:	UN 1263
UN proper shipping name:	Adhesives
Transport hazard class(es):	3
Packing group:	II
Hazard label:	3

Limited quantity Passenger:	1 L
Passenger LQ:	Y341
Excepted quantity:	E2
IATA-packing instructions - Passenger:	351
IATA-max. quantity - Passenger:	20 L
IATA-packing instructions - Cargo:	361
IATA-max. quantity - Cargo:	30 L

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user

See section 8.

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

not relevant.

15. Regulatory information

U.S. Regulations

National Inventory TSCA

CAS 80-62-6 not listed under TSCA 12(b); CAS 80-62-6 listed in the TSCA inventory

National regulatory information

SARA Section 304 CERCLA:
Methyl methacrylate (80-62-6): Reportable quantity = 1,000 (454) lbs. (kg)
SARA Section 311/312 Hazards:
Methyl methacrylate (80-62-6): Fire hazard, Immediate (acute) health hazard
SARA Section 313 Toxic release inventory:
Methyl methacrylate (80-62-6): De minimis limit = 1.0 %, Reportable threshold = Standard
Clean Air Act Section 112(b):
Methyl methacrylate (80-62-6)

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Hazardous Materials Information Label (HMIS)

Health:	2
Flammability:	3
Physical Hazard:	1
Personal Protection:	B

NFPA Hazard Ratings

Health:	1
Flammability:	3
Reactivity:	1
Unique Hazard:	-

Changes

Revision date:	12.02.2019
Revision No:	1,0

Rev. 1,00, 12.02.2019, Initial release

Abbreviations and acronyms

ACGIH:American Conference of Governmental Industrial Hygienists
ASTM: American Society for Testing and Materials.
CAS Chemical Abstracts Service
CFR: Code of Federal Regulations
DNEL: Derived No Effect Level
DOT: Department of Transportation
EPA: Environmental Protection Agency
HMIS: Hazardous Materials Identification System
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IBC: Intermediate Bulk Container
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
MARPOL: marine pollution
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
NFPA: National Fire Protection Association
UN: United Nations
OSHA: Occupational Safety and Health Administration
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
STEL: short-term exposure limits
TSCA: Toxic Substances Control Act
TWA: time weighted average
VOC: Volatile Organic Compounds

Other data

Classification according 29 CFR Part 1910.1200: - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data. and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)