

SPI Supplies Division

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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: April 01, 2015

SPI # 02825-AB, 02825-CA n-Butyl Methacrylate

Component of 02630-AA, 02630-AB
SPI-Chem™ Low Acid GMA TEM Kit

Section 1: Identification

Chemical Name/Synonyms.....2-Methyl-butylacrylate;2-Methylacrylic acid, butyl ester

Chemical family.....Acrylate

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-527-3887

Worldwide FAX: 1-(703)-741-6090

Toll-free phone: 1-(800)-424-9300 USA only

Product or Trade Name.....SPI # 02825-AB, 02825-CA n-Butyl Methacrylate

CAS #'s.....97-88-1

Chemical Formula.....C₈H₁₄O₄

Hazardous Material Information System USA

Health.....2*

Fire Hazard.....2

Physical Hazard.....0

Personal Protection.....

NFPA Rating (estimated)

Health.....2*

Flammability.....2

Reactivity.....0

Personal Protection.....

GHS Classification

Flammable liquids: Category 3

Skin irritation: Category 2

Eye irritation: Category 2A

Skin sensitization: Category 1

Specific target organ toxicity - single exposure: Category 3

Acute aquatic toxicity: Category 3

Acute toxicity, inhalation: Category 5

Pictograms:



Signal Word: Warning

Hazard Statement(s)

H226: Flammable liquid and vapour.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H333: May be harmful if inhaled.
H335: May cause respiratory irritation.
H402: Harmful to aquatic life.

Precautionary Statement(s)

P210 Keep away from heat/ sparks/ open flames/ hot surfaces – No smoking.
P233 Keep container tightly closed.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312 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.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P403 + P233 + P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Section 2: Composition

Component	CAS#	EC#	Percent
Butyl methacrylate	97-88-1	202-615-1	>99

Section 3: Hazard Identification

Emergency overview: Flammable. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. Light sensitive.

Routes of Entry: Skin and eye contact, ingestion, inhalation

Physical state: Liquid

Color: No data available

Odor: No data available

Target organs: Nerves

Potential health effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Section 4: First Aid Measures

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

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

Skin: Wash off with soap and plenty of water. Consult a physician.

Eye: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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

Section 5: Fire Fighting Measures

Conditions of flammability: Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

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

Special protective equipment for firefighters: Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products: Hazardous decomposition products formed under fire conditions. - Carbon oxides

Further information: Use water spray to cool unopened containers.

Section 6: Accidental Release Measures

Personal precautions: 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.

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.

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).

Section 7: Handling and Storage

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.

Conditions for safe storage: 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. Recommended storage temperature: 2 - 8 °C

Section 8: Exposure Controls and Personal Protection

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose 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).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9: Physical and Chemical Properties

Form: liquid

Color: no data available

pH: no data available

Melting point/freezing point Melting point/range: -75 °C (-103 °F)

Boiling point: 162 - 165 °C (324 - 329 °F) - lit.

Flash point: 54 °C (129 °F) - closed cup

Ignition temperature: 294 °C (561 °F)

Autoignition temperature: no data available

Lower explosion limit: 2 %(V)

Upper explosion limit: 8 %(V)

Vapor pressure: 3 hPa (2 mmHg) at 20 °C (68 °F)

Density: 0.894 g/cm³ at 25 °C (77 °F)

Water solubility: ca.0.2 g/l

Partition coefficient n-octanol/water log Pow: 3.01

Relative vapor density (air=1.0): 4.91

Odor: no data available

Odor Threshold: no data available

Evaporation rate: no data available

Section 10: Stability and Reactivity

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: no data available

Conditions to avoid: Heat, flames and sparks

Materials to avoid: Strong oxidizing agents

Hazardous decomposition products formed under fire conditions: Carbon oxides

Other decomposition products: no data available

Section 11: Toxicological Information

Acute toxicity:

LD50 Oral - rat - 16,000 mg/kg

LC50 Inhalation - rat - 4 h - 4910 ppm

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other. Lungs, Thorax, or Respiration: Dyspnea.

LD50 Dermal - rabbit - 10,125 mg/kg

Skin corrosion/irritation: rabbit - Mild skin irritation

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: May cause allergic skin reaction.

Germ cell mutagenicity: no data available

Carcinogenicity

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: No data available

Teratogenicity: No data available

Specific target organ toxicity-single exposure: Inhalation may cause respiratory irritation

Specific target organ toxicity – repeated exposure: No data available

Potential health effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

RTECS: OZ3675000

Section 12: Ecological Information

Ecotoxicity

Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 11 mg/l - 96 h

Toxicity to daphnia: EC50 - Daphnia magna (Water flea) - 32 mg/l - 48 h

Toxicity to algae: EC50 - Pseudokirchneriella subcapitata (green algae) - 57 mg/l - 96 h

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life. Avoid release to the environment.

Section 13: Disposal Considerations

Disposal must be in accordance with all local, state and federal laws. Contaminated packaging must be disposed of as unused product.

Section 14: Transport Information

DOT

UN number: 2227 **Class:** 3 **Packing group:** III
Proper shipping name: n-Butyl methacrylate, stabilized
Marine pollutant: No
Poison Inhalation Hazard: No



IMDG

UN number: 2227 **Class:** 3 **Packing group:** III **EMS-No:** F-E, S-D
Proper shipping name: n-BUTYL METHACRYLATE, STABILIZED
Marine pollutant: No

IATA

UN number: 2227 **Class:** 3 **Packing group:** III
Proper shipping name: n-Butyl methacrylate, stabilized

Section 15: Regulatory Information

OSHA Hazards: Combustible Liquid, Target Organ Effect, Skin sensitizer, Irritant

SARA 302 Components No chemicals

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

SARA 313 Components: No chemicals

Massachusetts Right To Know: Butyl methacrylate 97-88-1

Pennsylvania Right To Know: Butyl methacrylate 97-88-1

New Jersey Right To Know: Butyl methacrylate 97-88-1

California prop. 65: No components listed

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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