# Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name : SUMIPEX E

Product code (SDS NO) : BQN-G-41335\_US-1

Product class:

The product is an article (acrylic board).

Considering generation of dust/fume in working process, the SDS describes hazards of the product as mixture.

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

Relevant identified uses of the product: Various windows, aquariums, furniture, signs, partitions

Details of the supplier of the safety data sheet

Manufacturer/Supplier : Mitsubishi Electric Corporation

Address : 5-1-14, Yada-minami, Higashi-ku, Nagoya-shi, Aichi 461-8670, Japan

Division : Laser Systems Dept.

Telephone number : +81-52-721-2111

FAX : +81-52-721-1941

# Section 2. Hazards identification

GHS classification and label elements of the product

# Classification of the substance or mixture

Classification according to Hazard Communication Standard - 2012 (29 CFR 1910.1200)

**HEALTH HAZARDS** 

Skin sensitization: Category 1

(Note) GHS classification without description: Not classified/Classification not possible

# Label elements

Labelling according to Hazard Communication Standard - 2012 (29 CFR 1910.1200)



Signal word: Warning HAZARD STATEMENT

H317 May cause an allergic skin reaction

### PRECAUTIONARY STATEMENT

# **Prevention**

P261 Avoid breathing dust/fume.

P280 Wear protective gloves.

P272 Contaminated work clothing should not be allowed out of the workplace.

### Response

P321 Specific treatment is required.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

#### Disposal

P501 Dispose of contents/container in accordance with local/national regulation.

# Section 3. Composition/information on ingredients

# Mixture/Substance selection:

#### Mixture

Ingredient name	CAS No.	Content (%)
Poly-(Methyl methacrylate/ Methyl acrylate)	9011-87-4	>=95.3
Methyl methacrylate	80-62-6	< 1.0
Methyl acrylate	96-33-3	< 0.5

Note: The figures shown above are not the specifications of the product.

### Section 4. First-aid measures

# Descriptions of first-aid measures

IF INHALED (dust/fume generated in working process)

Remove person to fresh air and keep comfortable for breathing.

Keep victim warm and quiet.

Give artificial respiration if victim is not breathing.

Administer oxygen if breathing is difficult.

Get immediate medical advice/attention.

IF ON SKIN (or hair) (molten material or dust/fume generated in working process)

If molten material contacts the skin, immediately flush with large amounts of water to cool the affected tissue and polymer.

Do not attempt to peel polymer from skin as this will remove the skin.

Wash with plenty of soap and water.

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

IF IN EYES (dust/fume generated in working process)

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Do not let the victim rub his eyes.

Get medical advice/attention immediately.

IF SWALLOWED (dust/fume generated in working process)

Rinse mouth.

Do NOT induce vomiting.

Do not give an unconscious person anything to drink.

Immediately call a POISON CENTER/doctor/physician.

# Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

# Indication of any immediate medical attention and special treatment needed

Specific treatment is required.

### Section 5. Fire-fighting measures

# Extinguishing media

Suitable extinguishing media

In case of fire, use water mist, foam, dry powder, CO2, dry sand to extinguish.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

# Specific hazards arising from the substance or mixture

Fires involving this material produce large amounts of sooty smoke.

Will form toxic carbon oxides, methyl methacrylate, methyl acrylate upon combustion.

# Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Extinguish from the windward to the extent possible.

### Special protective equipment and precautions for fire-fighters

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

# Section 6. Accidental release measures

(If released dust/fume generated in working process)

# Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Wear proper protective equipment.

Eliminate all sources of ignition and ventilate the area.

Stop leak if safe to do so.

# Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Do not wash away into sewers or waterway.

Avoid raising dust.

# Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Fill the disposal into labelled, closable containers.

# Section 7. Handling and storage

# Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Avoid breathing dust/fume generated in working process.

(Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact the dust/fume which generated working process with skin.

Avoid contact the dust/fume which generated working process with eyes.

Prevent deposition of dust generated in working process.

#### Safety Measures

Use only outdoors or in a well-ventilated area.

Wear protective gloves.

Use personal protective equipment as required.

### Any incompatibilities

Strong oxidizing agents should not be mixed with the chemicals.

Advice on general occupational hygiene

Do not get in eyes, on skin, or on clothing to dust/fume generated in the work process.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash it before reuse.

Wash hands thoroughly after handling.

#### Storage

Conditions for safe storage

Store in a well-ventilated place.

Keep cool. Protect from sunlight.

(Incompatible storage condition)

Avoid direct sunlight, heat and sources of ignition (flames, sparks, etc.).

Keep away from water.

Protect from moisture.

Container and packaging materials for safe handling

Protect the surface with paper or resin film.

### Section 8. Exposure controls/personal protection

# Control parameters

```
Adopted value
     (Methyl methacrylate)
     ACGIH(2015) TWA: 50ppm;
                 STEL: 100ppm (URT & eye irr; body weight eff; pulm edema)
     (Methyl acrylate)
     ACGIH(2014) TWA: 2ppm (Eye, skin & URT irr; eye dam)
   [ACGIH] Notation
     (Methyl methacrylate)
     DSEN
     (Methyl acrylate)
     Skin; DSEN
 OSHA-PEL
     (Methyl methacrylate)
     TWA: 100ppm, 410mg/m3
     (Methyl acrylate)
     TWA: 10ppm, 35mg/m3
 NIOSH-REL
     (Methyl acrylate)
     TWA: 10ppm
     (Methyl methacrylate)
     TWA: 100ppm
Exposure controls
 Appropriate engineering controls
     Handle this material only in a totally enclosed system.
     Exhaust/ventilator should be available.
     Eye wash station should be available.
     Washing facilities should be available.
 Individual protection measures
 Respiratory protection
     In case of inadequate ventilation wear respiratory protection.
 Hand protection
     Wear protective gloves.
 Eye protection
     Wear safety glasses with side-shields or chemical safety goggle.
 Skin and body protection
```

# Section 9. Physical and Chemical Properties

Wear protective clothing.

Information on basic physical and chemical properties

Physical state: Solid (Board)

Color: Colorless, Clear

Odor: None

Odor threshold data is not available.

Melting point/Freezing point: There is no definite melting point.

This product starts to get soft when temperature exceeds 120℃.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids): Combustible

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature: >=400℃

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity: Not applicable

Solubility:

Solubility in water: Insoluble

Solubility in solvent: Soluble in organic solvents (acetone, toluene, chloroform, etc.)

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density: 1.1 - 1.2

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

Evaporation rate data is not available.

# Section 10. Stability and Reactivity

Reactivity

Reactivity data is not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

Conditions to avoid

Avoid direct sunlight, heat and sources of ignition (flames, sparks, etc.).

Keep away from water.

Protect from moisture.

Incompatible materials

Strong oxidizing agents

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Hazardous decomposition products
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The following substances are produced by pyrolysis.

Carbon oxides, Methyl methacrylate, Methyl acrylate

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Section 11. Toxicological Information
  Information on toxicological effects
  Acute toxicity
    Acute toxicity (Oral)
      [Product]
        Classification not possible (Insufficient data available or no data available).
      [Data for components of the product]
        [Table 3 of Annex VI to the CLP Regulations]
        (Methyl acrylate)
        Category 4
    Acute toxicity (Dermal)
      [Product]
        Classification not possible (Insufficient data available or no data available).
      [Data for components of the product]
        [Table 3 of Annex VI to the CLP Regulations]
        (Methyl acrylate)
        Category 4
    Acute toxicity (Inhalation)
      [Product]
        Classification not possible (Insufficient data available or no data available).
      [Data for components of the product]
        [Table 3 of Annex VI to the CLP Regulations]
        (Methyl acrylate)
        Category 4
  Irritant properties
    Skin corrosion/irritation
      [Product]
        Classification not possible (Insufficient data available or no data available).
      [Data for components of the product]
        [Table 3 of Annex VI to the CLP Regulations]
        (Methyl methacrylate)
        Category 2
        (Methyl acrylate)
        Category 2
```

```
Serious eye damage/irritation
    [Product]
      Classification not possible (Insufficient data available or no data available).
    [Data for components of the product]
      [Table 3 of Annex VI to the CLP Regulations]
      (Methyl acrylate)
      Category 2
Sensitization
  Respiratory sensitization
    [Product]
      Classification not possible (Insufficient data available or no data available).
    [Data for components of the product]
      No data available.
  Skin sensitization
    [Product]
      Category 1, May cause an allergic skin reaction
    [Data for components of the product]
      [Table 3 of Annex VI to the CLP Regulations]
      (Methyl methacrylate)
      Category 1
      (Methyl acrylate)
      Category 1
Germ cell mutagenicity
    [Product]
      Classification not possible (Insufficient data available or no data available).
    [Data for components of the product]
      No data available.
Carcinogenicity
    [Product]
      Classification not possible (Insufficient data available or no data available).
    [Data for components of the product]
      [IARC]
      (Methyl methacrylate)
      Group 3: Not classifiable as to its carcinogenicity to humans
      (Methyl acrylate)
      Group 2B: Possibly carcinogenic to humans
      [ACGIH]
```

(Methyl methacrylate)

```
A4(2015): Not Classifiable as a Human Carcinogen
        (Methyl acrylate)
        A4(2014): Not Classifiable as a Human Carcinogen
  Reproductive toxicity
      [Product]
        Classification not possible (Insufficient data available or no data available).
      [Data for components of the product]
        No data available.
  Specific target organ toxicity (STOT)
    STOT-single exposure
      [Product]
        Classification not possible (Insufficient data available or no data available).
      [Data for components of the product]
      [cat.3 (respiratory tract irritation)]
        [Table 3 of Annex VI to the CLP Regulations]
        (Methyl methacrylate)
        Category 3, Respiratory tract irritation
        (Methyl acrylate)
        Category 3, Respiratory tract irritation
    STOT-repeated exposure
      [Product]
        Classification not possible (Insufficient data available or no data available).
      [Data for components of the product]
        No data available.
  Aspiration hazard
      [Product]
        Classification not possible (Insufficient data available or no data available).
      [Data for components of the product]
        No data available.
Section 12. Ecological Information
  Toxicity
  Aquatic toxicity
      [Product]
        Classification not possible (Insufficient data available or no data available).
      [Data for components of the product]
        No data available.
  Water solubility
```

(Methyl methacrylate)

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1.6g/100mL (20^{\circ}) (ICSC, 2003) (Methyl acrylate) 6g/100mL (20^{\circ}) (ICSC, 2003)
```

# Persistence and degradability

[Data for components of the product]

(Methyl methacrylate)

BOD\_Degradation: 94.3% (CSCL DB, 1976)

(Methyl acrylate)

Not rapidly degradable (OECD TG301D\_BOD\_Degradation: 59.8%/28 days (SIAR, 2003))

#### Bioaccumulative potential

[Data for components of the product]

(Methyl methacrylate)

log Pow=1.38 (PHYSPROP DB, 2005);

Log Kow=1.38 (20°C) (MOE Environmental risk assessment vol. 11, 2013)

(Methyl acrylate)

log Pow=0.8 (PHYSPROP DB, 2005)

#### Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

# Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

Dispose to an authorized waste collection point.

Do not dump into sewers, on the ground or into any body of water.

### Contaminated packing

Dispose of container after using the contents completely.

# Section 14. Transport Information

UN No., UN CLASS

UN Number or ID Number: Not regulated UN Proper Shipping Name: Not regulated

Class or division (Transport hazard class): Not regulated

Packing group: Not regulated

IMDG Code (International Maritime Dangerous Goods Regulations)

UN Number or ID Number: Not regulated
UN Proper Shipping Name: Not regulated

Class or division (Transport hazard class): Not regulated

Packing group: Not regulated

IATA (Dangerous Goods Regulations)

UN Number or ID Number: Not regulated
UN Proper Shipping Name: Not regulated

Class or division (Transport hazard class): Not regulated

Packing group: Not regulated

Environmental hazards

Marine pollutants (yes/no): no

Special precautions for user

Special precautions for user is not applicable.

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

Noxious Liquid Substances ; Cat. Y Methyl acrylate; Methyl methacrylate

MARPOL Annex V - HME (Harmful to the Marine Environment)

Synthetic polymers (includes materials that are shredded, milled, chopped or macerated or similar materials)

### Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Methyl methacrylate; Methyl acrylate; Poly-(Methyl methacrylate/ Methyl acrylate)

Superfund Amendments and Reauthorizations Act (SARA), Title III

SARA 313 (TRI)

Methyl acrylate

California proposition 65

WARNING: This product can expose you to chemical(s), which is(are) known to the State of

California to cause cancer, and/or chemical(s), which is (are) known to the State of

California to cause birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

Cancer

Methyl acrylate (Cancer)

Other regulatory information

We are not able to check up the regulatory information with regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

# Section 16. Other information

# GHS classification and labelling

Skin sensitization, Category 1: H317 May cause an allergic skin reaction

# References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN

IMDG Code, 2022 Edition (Incorporating Amendment 41-22)

IATA Dangerous Goods Regulations (65th Edition) 2024

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2024 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard - 2012 (29 CFR 1910.1200)

**GESTIS-Stoffdatenbank** 

Pub Chem (OPEN CHEMISTRY DATABASE)

# General Disclaimer

The GHS classification data given here is based on current EU official data (Consolidated version of the CLP Regulation published in 17/12/2022 and Commission delegated regulation (EU) 2022/692 (ATP18)) & US Hazard Communication Standard - 2012.

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.