Safety Data Sheet

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

Product identifier:

- Product name : Kanase Lite
- Product code (SDS NO) : BQN-G-41337_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)	9011-14-7	>= 95
Methyl methacrylate	80-62-6	< 2
Titanium dioxide	13463-67-7	< 2
Turpentine oil	8006-64-2	< 0.7
Carbon black	1333-86-4	< 0.2
Ferric oxide	1309-37-1	< 0.2
C.I. Pigment green 7	1328-53-6	< 0.2
Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester	52829-07-9	< 0.1

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.

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

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

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.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED(dust/fume generated in working process)

Rinse mouth.

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

Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

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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 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 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.

Take action to prevent static discharges.

(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 data is not available.

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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)
      (Titanium dioxide)
      ACGIH(2021) TWA: 2.5mg/m3(R) (LRT irr; pneumoconiosis)
      (Turpentine oil)
      ACGIH(2014) TWA: 20ppm (Lung irr)
      (Carbon black)
      ACGIH(2011) TWA: 3mg/m3(I) (Bronchitis)
      (Ferric oxide)
      ACGIH(2006) TWA: 5mg/m3(R) (Pneumoconiosis)
    [ACGIH] Notation
      (Methyl methacrylate)
      DSEN
      (Turpentine oil)
      DSEN
  OSHA-PEL
      (Carbon black)
      TWA: 3.5mg/m3
      (Ferric oxide)
      TWA: 10mg/m3(fume)
      (Methyl methacrylate)
      TWA: 100ppm, 410mg/m3
      (Turpentine oil)
      TWA: 100ppm, 560mg/m3
      (Titanium dioxide)
      TWA: 15mg/m3
  NIOSH-REL
      (Carbon black)
      TWA: 3.5mg/m3 (without PAHs); when PAHs are present, NIOSH considers carbon black to be a
      potential carcinogen.
      See Appendix A, See Appendix C.
      (Ferric oxide)
      TWA: 5mg/m3(dust & fume)
      (Methyl methacrylate)
      TWA: 100ppm
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(Turpentine oil)

TWA: 100ppm

(Titanium dioxide)

Ca(ultrafine particles); TWA: 2.4 mg/m3 (fine);

TWA: 0.3 mg/m3 (ultrafine);

See Appendix A; See NIOSH Intelligence Bulletin 63

Exposure controls

Appropriate engineering controls

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

Wear protective clothing.

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Solid (Board)

Color: Clear/Translucent/Opaque

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 100° C.

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: 280 – 300℃

Auto-ignition temperature: 450 - 462℃

Decomposition temperature: 220 - 300℃

pH data is not available.

Kinematic viscosity: Not applicable

Solubility:

Solubility in water: Insoluble

Solubility in solvent data is not available.

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

Vapor pressure data is not available.

Density and/or relative density: 1.19

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

At >=250℃, thermal decomposition may yield methyl methacrylate, that can irritate the eyes

and respiratory system, causing dizziness, nausea, headache, and other symptoms.

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

Hazardous decomposition products

The following substances are produced by pyrolysis.

Carbon oxides, Methyl methacrylate

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]

(Turpentine oil)

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]

(Turpentine oil)

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]

(Turpentine oil)

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

(Turpentine oil)

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]

(Turpentine oil)

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

(Turpentine oil)

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]

(Poly(methyl methacrylate))

Group 3 : Not classifiable as to its carcinogenicity to humans

(Methyl methacrylate)

Group 3 : Not classifiable as to its carcinogenicity to humans

(Titanium dioxide)

Group 2B : Possibly carcinogenic to humans

(Carbon black)

Group 2B : Possibly carcinogenic to humans

(Ferric oxide)

Group 3 : Not classifiable as to its carcinogenicity to humans

[ACGIH]

(Methyl methacrylate)

A4(2015) : Not Classifiable as a Human Carcinogen

(Titanium dioxide)

A3(as Finescale particles)(2021) : Confirmed Animal Carcinogen with Unknown Relevance to

Humans

(Turpentine oil)

A4(2014) : Not Classifiable as a Human Carcinogen

(Carbon black)

A3(2011) : Confirmed Animal Carcinogen with Unknown Relevance to Humans

(Ferric oxide)

A4(2006) : 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

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]

[cat.1]

[Table 3 of Annex VI to the CLP Regulations]

(Turpentine oil)

Category 1

Section 12. Ecological Information

Toxicity

Aquatic toxicity

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

Hazardous to the aquatic environment, long-term (chronic)

[Table 3 of Annex VI to the CLP Regulations]

(Turpentine oil)

Category 2

Water solubility

(Methyl methacrylate)

1.6g/100mL (20°C) (ICSC, 2003)

(Titanium dioxide)

none (ICSC, 2002)

(Turpentine oil)

none (ICSC, 2002)

(Carbon black)

none (ICSC, 2010)

(Ferric oxide)

none (ICSC, 2004)

Persistence and degradability

[Data for components of the product]

(Methyl methacrylate)

BOD_Degradation : 94.3% (CSCL DB, 1976)

(Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl)ester)

Not rapidly degradable (OECD301B_28 days Degradation : 10-24% (SIAP (Conclusions Agreed in

SIAM 26, 2008)))

Bioaccumulative potential

[Data for components of the product]

(Methyl methacrylate)

log Pow=1.38 (PHYSPROP DB, 2005);

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

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. X Turpentine oil Noxious Liquid Substances ; Cat. Y Methyl methacrylate Noxious Liquid Substances ; Cat. Z Titanium dioxide 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; C.I. Pigment green 7; Ferric oxide; Carbon black ; Turpentine oil;

Poly(methyl methacrylate); Titanium dioxide;

Decanedioic acid bis(2,2,6,6-tetramethyl-4-piperidinyl) ester

Superfund Amendments and Reauthorizations Act (SARA), Title III

SARA 313 (TRI)

Methyl methacrylate

California proposition 65

This product does not contain any chemicals known to State of California to cause cancer,

birth defects, or any other reproductive harm.

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.