

SAFETY DATA SHEET

1. Identification of the substance or mixture and of the supplier

Product name : PA-1210-035
Reference number : CPS-W-0319G22L
Recommended use of the chemical and restrictions on use : Electronic materials; Do not use it other purposes.
Company name : JNC CORPORATION IT & Materials Division
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2. Hazards identification

GHS classification

Skin corrosion/irritation : Category 2
Skin sensitization : Category 1
Hazardous to the aquatic environment, short-term (Acute) : Category 1

*) The hazards without the above mention are "Not applicable", "Not classified" or "Classification not possible".

GHS label element

Pictograms :



Signal word : Warning

Hazard statement

H315 Causes skin irritation
H317 May cause an allergic skin reaction
H400 Very toxic to aquatic life

Precautionary statement

Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

Storage : None

Disposal

P501 Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

Other hazards which do not result in classification : No data available

3. Composition/information on ingredients

Single chemical substance or mixture : Mixture
Chemical name or common name : Acrylate mixture
Ingredients and content

Name of ingredients	CAS No.	content [wt%]	Chemical or structural formula
Acrylate compound1	Trade secret	1-10	—
Acrylate compound2			
(octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate	42594-17-2	10-20	—
Acrylate compound3			
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	30-40	—
Acrylate compound4			
2-Propenoic acid, octahydro-4,7-methano-1H-indenyl ester	79637-74-4	30-40	—
Additive	Trade secret	1-10	—

The chemical name and CAS number of ingredients are confidential business information.

4. First-aid measures

IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF ON SKIN : Take off immediately all contaminated clothing. Wash skin with plenty of water and soap.

IF IN EYES : Rinse cautiously with clean water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF INGESTED : Rinse mouth with water.

*) For above cases, take emergency measures and then, get medical advice/attention.

Most important symptoms/effects

: [Skin] Redness. Pain. Burning sensation.

5. Fire-fighting measures

Suitable extinguishing media : Water spray, alcohol-resistant foam, dry powder, carbon dioxide, dry sand.

Unsuitable extinguishing media : No data available.

Specific hazards arising from the mixture : Irritant, toxic or corrosive gas / dust / fume / mist / vapours may be generated in a fire.

Specific fire-fighting procedures : Work from the windward side during fire-fighting. Move movable containers to safe place. When containers cannot be moved, keep surroundings cool with spray water.

Special protective equipment for precautions for fire-fighting : Wear air respirators, protective clothing (heat-resistant) during fire fighting.

6. Accidental release measures

- Personal precautions, protective equipment and emergency procedures : Isolate spill or leak area immediately for appropriate distance in all directions. Keep unauthorized personnel away. Workers shall wear personal protective equipment such as eye protection, protective gloves, long-sleeve working clothes, face protection and a mask, and avoid contact with eyes and skin, inhalation and intake by mistake.
- Environmental precautions : Attention should be given to no discharging of released products or contaminated waste water into rivers or the like so as to avoid causing of environmental effects.
- Method and materials for containment and cleaning up : Absorb with dry soil, sand or noncombustible material, and collect into sealable containers. Always wear personal protective equipment upon working, and work in the windward.
- Secondary disaster prevention measures : Remove all sources of ignition around the area to prevent secondary disaster such as fire, etc.

7. Handling and storage

- Precautions for safe handling : Keep away from heat, sparks, open flames, or hot surfaces, and avoid use of other equipment which may be ignition sources. Wear suitable protective equipment to prevent inhalation or contact with eyes, skin and clothing.
- Handle within local exhaust ventilation when working indoors. Take precautionary measures against static discharge. Apply engineering controls described in "Section 8. Exposure Controls/Personal Protection." See "Section 10. Stability and reactivity" for incompatible materials.
- Do not eat, drink or smoke during working. Wash hands thoroughly after handling the product.
- Conditions for safe storage : Store away from any heat or ignition sources and avoid sunlight and keep in a well-ventilated, cool and dry place. Use sealable the container made of polyethylene.

8. Exposure controls/personal protection

- Control parameters : Not specified as the product.
- ACGIH (2012) : No data available
- Appropriate engineering controls : Use explosion-proof electrical/ventilating equipment/lighting. Needed to take precautionary measures against static discharge, such as electrostatic shoes. Perform ventilation for exhaust so as to avoid inhalation of vapors or mist in air. Provide eye wash and body flushing facilities in working place for storing or handing this product.
- Seal the process, use local exhaust ventilation and other engineering controls for preventing inhalation of vapors or the like generated from the product.
- Individual protection measures, such as personal protective equipment
- Respiratory protection : The mask is recommended to be done so as not to inhale it.
- Hand protection : Heavy-duty protective gloves resistant to solvents in the ingredients (gloves made from polyethylene, polypropylene, silicone rubber or the like).
- Eye protection : Suitable eye protection (protective spectacles having a significant mist sealing effect, such as a goggle type).
- Skin and body protection : Long sleeve working clothes and antistatic work shoes.

9. Physical and chemical properties

- Physical state : Liquid
- Color : Clear colored
- Odor : Characteristic odor

Odor threshold	: No data available
pH	: This item cannot be substantially measured, because it's solubility in water is low.
Melting point [°C]	: No data available
Boiling point and boiling range [°C]	: 115 (400Pa) (Supplier SDS)
Flash point [°C]	: 97 (Minimum)
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper/lower flammability or explosive limits [vol %]	: No data available
Vapor pressure [Pa]	
Acrylate compound3	: 1.3 (20°C) (ECHA)
Acrylate compound4	: ≤100 (25°C, estimated) (Supplier SDS)
Vapor density	: No data available
Relative density	: Ca. 1
Solubility	: Water: not soluble Methanol, toluene, ethyl acetate: soluble
Partition coefficient (n-octanol/water) [Log Pow]	: No data available
Auto-ignition temperature [°C]	: 375 (ECHA)
Decomposition temperature [°C]	: No data available
Viscosity	: No data available

10. Stability and reactivity

Reactivity	: Not reactive at normal temperature under shading.
Chemical stability	: Stable at normal temperature under shading.
Possibility of hazardous reactions	: No data available
Conditions to avoid	: Sunlight, UV light, heat, open flames, hot surfaces, sparkover, static discharge, other ignition sources.
Incompatible materials	: Peroxides, oxidants, strong acids, strong bases, amines
Hazardous decomposition products	: No data available

11. Toxicological information

Acute toxicity (Oral)	
Acrylate compound2	: LD50>2,000mg/kg (OECD TG423, Rat) (ECHA)
Acrylate compound3	: LD50=4,350mg/kg (Rat) (ECHA)
Acrylate compound4	: LD50>2,000mg/kg (Rat) (Supplier SDS)
Acute toxicity (Dermal)	
Acrylate compound2	: LD50>2,000mg/kg (OECD TG402, Rat) (ECHA)
Acrylate compound3	: LD50>3,000mg/kg (OECD TG402, Rat) (ECHA)
Acute toxicity (Inhalation : Gases)	: Not applicable
Acute toxicity (Inhalation : Vapours)	: No data available
Acute toxicity (Inhalation : Dusts and Mists)	: No data available
Skin corrosion/irritation	
Acrylate compound3	: not irritating (Rabbit) (NTIS vol.OTS0536067)
Acrylate compound4	: moderately irritating, P.I.I.=2.5 (Rabbit) (Supplier SDS)
Serious eye damage/eye irritation	
Acrylate compound3	: not irritating (Rabbit) (NTIS vol.OTS0536067)
Respiratory sensitization	: No data available
Skin sensitization	

Acrylate compound2 : Sensitizing (OECD TG406, Guinea pig) (ECHA)
Acrylate compound3 : Sensitizing (LLNA method, Mouse) (ECHA)
Germ cell mutagenicity
Acrylate compound2 : Ames test: positive (In-house data), In Vitro Mammalian Cell Gene Mutation Test: negative(OECD TG476) (ECHA)
Acrylate compound3 : Ames test: negative (In-house data)
Acrylate compound4 : Ames test: negative (Supplier SDS)
Carcinogenicity : This product is not listed by IARC, EPA, EU, NTP, ACGIH or JSOH as a carcinogen.
Reproductive toxicity : No data available
Specific target organ toxicity (Single exposure) : No data available
Specific target organ toxicity (Repeated exposure) : No data available
Aspiration hazard : No data available

12. Ecological information

Ecotoxicity
Acrylate compound2 : LC50(96h)=1.65mg/L (OECD TG203, Danio rerio) (ECHA)
Acrylate compound3 : LC50(96h)=0.704mg/L (OECD TG203, Danio rerio) (ECHA)
Persistence and degradability : No data available
Bioaccumulative potential : No data available
Mobility in soil : No data available
Other adverse effects : No data available

13. Disposal considerations

Observe all federal, state, and local regulations when disposing of this substance. Dispose of empty containers after completely removing contents. Do not dispose of waste into sewer.

14. Transport information

UN Number : UN3082
UN Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class : Class 9
Packing group : III
Marine pollutant (Yes/No) : No
Specific transport measures and precautionary conditions : Confirm whether there is leakage in the container before transporting. Load luggage so as not to cause the fall and the tumble and the damage. Prevent the collapse of cargo piles.
General information : Depending on the applicable transport regulation (such as: IMO-IMDG code, ICAO-TI / IATA-DGR).

15. Regulatory information

The Montreal Protocol on Substances that Deplete the Ozone Layer : Not applicable
The Stockholm Convention on Persistent Organic Pollutants : Not applicable
The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade : Not applicable

16. Other information

Issue Date : 2024/04/09
Revision Date : 2024/04/09
Version : PE24v001
Source of Data : References are described in each data.
Note on the information in the Safety Data Sheet (SDS)

- : The SDS is prepared based on the currently available latest materials and data, but is not always perfect.
- : The SDS may be revised based on new information.
- : The precautionary statements in the SDS are appropriate under conditions of normal handling, and when users specially handle the product, the users shall confirm the safety.
- : Each numerical value provided in the SDS is not a guaranteed value.