

SAFETY DATA SHEET

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT CODE: 403236

PRODUCT NAME: LED Curing RESIN Star Drop Hard Type 30g

COMPANY IDENTIFICATION

Company name	PADICO Co., Ltd.
Address	673-3 Jinba Gotenba City, Shizuoka JAPAN 412-0047
Telephone	0550-89-7521
Department	Research and Development section
Person in charge	Yuta Endo
Fax	0550-89-5951
Emergency telephone	0550-89-7536
E-mail	safety@padico.co.jp
Recommended use of product and restrictions on use	Production of handcraft work and accessories

2. HAZARD IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

PHYSICAL HAZARDS

Explosives	: Not classified
Flammable gases	: Not classified
Flammable aerosols	: Not classified
Oxidizing gases	: Not classified
Gases under pressure	: Not classified
Flammable liquids	: Not classified
Flammable solids	: Not classified
Self-reactive substances and mixtures	: Not classified
Pyrophoric liquids	: Not classified
Pyrophoric solids	: Not classified
Self-heating substances and mixtures	: Not classified
Substances and mixture which, in contact with water, emit flammable gases	: Not classified
Oxidizing liquids	: Not classified
Oxidizing solids	: Not classified
Organic peroxides	: Not classified
Corrosive to metals	: Not classified

HEALTH HAZARDS

Acute toxicity(oral)	: Not classified
Acute toxicity(skin)	: Not classified
Acute toxicity(inhalation: gas)	: Not classified
Acute toxicity(inhalation: dust)	: Not classified
Acute toxicity(inhalation: mist)	: Not classified
Skin corrosion / irritation	: Category 2
Serious eye damages / eye irritation	: Category 2A
Respiratory sensitization	: Not classified
Skin sensitization	: Category 1
Germ cell mutagenicity	: Not classified

Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity [single exposure] : Not classified
Specific target organ toxicity [repeated exposure] : Not classified
Aspiration hazard : Not classified

ENVIRONMENTAL HAZARDS

Aquatic toxicity (acute) : Not classified
Aquatic toxicity (chronic) : Not classified
Harmful effect on the ozone layer : Not classified

GHS LABEL ELEMENTS INCLUDING: PRECAUTIONRY STATEMENTS

SYMBOL :



SIGNAL WORD : Warning
HAZARD STATEMENT : Causes slight skin irritation
Causes serious eye irritation

PRECAUTIONRY STATEMENTS

[Prevention] : Use explosion-proof electric apparatus. Remove ignition sources (static electricity and spark etc.).
Avoid inhalation to vapor / mists. Use adequate ventilation system (local exhaust, closed system, general ventilation etc.).
Wash hands and face thoroughly and gargle after handling.
Wear impermeable gloves and safety glasses, etc. and avoid contact with skin, eyes and clothes, etc.
If material is spilled, absorb with inert materials (rag and sand etc.) and put in a disposal container with a lid.

[Response] : Fire: Fire fighting with powder, carbon dioxide or foam.
Inhalation: Remove victim to fresh air and keep at rest in position comfortable for breathing. Get medical attention immediately.
Eye contact: Rinse cautiously with clean water for at least 15 minutes and get medical attention.
Skin contact: Remove attached substances and wash with plenty of soap and water. If skin irritation or rash occurs, get medical attention.
Ingestion: Rinse mouth with water and get medical attention immediately.

[Storage] : Keep in tightly container. Store in cool, dark, dry, well-ventilated cabinet or refrigerator.

[Disposal] : Dispose of according to all applicable federal, state and local environmental regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS**SUBSTANCE/MIXTURE:** Mixture**SYNONYMS:** Acrylic UV Curable resin

Component	Content (%)	Cas No.
Acrylic ester	42-52	Company secret
Acrylic-modified oligomer(I)	12-22	Company secret
Acrylic-modified oligomer(II)	8-18	Company secret
Methacrylic ester	6-12	Company secret
Polythiol	8-18	Company secret
Additives (photo initiator etc.)	<1	Company secret

4. FIRST AID MEASURES

- IF IN EYES : Rinse cautiously with clean water for at least 15 minutes. Remove contact lenses, continue rinsing. Get medical attention.
- IF ON SKIN : Remove attached substance and wash with plenty of soap and water. Take off immediately all contaminated clothing and shoes. If skin irritation or rash occurs, get medical attention.
- IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.
- IF SWALLOWED : Rinse mouth with water and get medical attention immediately.

5. FIRE-FIGHTING MEASURES

- SUITABLE EXTINGUISHING MEDIA : Powder (Dry chemical), carbon dioxide, form
- UNSUITABLE EXTINGUISHING MEDIA : Water
- SPECIFIC HAZARDS : This substance may ignite by heat, spark, flame and burn with intense heating. At fire, irritative, corrosive and toxic gas may be generated.
- SPECIFIC EXTINGTION METHOD : Remove all ignition sources and fight a fire wearing protective equipment. In case of flowing out, dam up it and keep container away from fire.
- SPECIAL PROTECTIVE FOR FIRE-FIGHTERS : Wear respiratory protective equipment to avoid inhalation to toxic gas and fire-extinguishing work is done form windward.

6. ACCIDENTAL RELEASE MEASURES

- PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES : Work is done form windward and avoids inhalation to vapor and contact with skin wearing protective equipment. Keep people away from downwind.
Non-participants are banned from entering around leakage area.
Remove ignition sources and prepare fire extinguishers.
- ENVIROMENTAL PRECAUTIONS METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP : Prevent product from entering drains.
Absorb spilled material in rag or sand and put in a disposal container with a lid.
In case of large amount of spillage, dam up it with sand etc.

7. HANDLING AND STORAGE**HANDLING**

TECHNICAL MEASURE (LOCAL-VENTILATION/WHLE-VENTILATION) : No fire. Use explosion-proof electric apparatus and remove ignition sources (static electricity and spark etc.). Wear suitable protective equipment to avoid inhalation or contact.

Use adequate ventilation system (local exhaust, closed system, general ventilation etc.).

NOTES : Use protective equipment. Avoid inhalation to vapor and contact with skin, eyes, and clothing. Prevent contact to strong acids, strong basses, oxidizing agents (peroxide etc.) and amines. Wash hand and face thoroughly and gargle after handling.

STORAGE

APPROPRIATE SAFEKEEPING CONDITION : Law is followed. Keep container tightly closed. Store in a cool, dark, dry, well-ventilated cabinet or refrigerator.

Store away from incompatible materials such as strong acids, strong bases, oxidizing agents (peroxide etc.) and amines.

PACAGING MATERIALS : Low is followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL LIMIT : Not set up

OCCUPATIONAL : Not set up

EXPOSURE LIMITS

FACILITY AND EQUIPMENT MEASURES : Use adequate ventilation system (local exhaust, closed system, general ventilation etc.) to avoid inhalation to vapor. Near to workplace install hand washer, eye washer and safety shower.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection : Organic vapor respirator. Follow local and national regulations.

Hand protection : Impermeable gloves (polyethylene or rubber gloves).

Eye protection : Safety goggles or safety glasses with side shields.

Skin and body protection : Protective clothing and protective boots (impermeable).

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical condition : High viscosity liquid

Color : Light bluish purple transparent

Odor : Characteristic odor

pH : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : >172°C (calculated)

Explosion properties : No data available

Vapor pressure : No data available

Specific gravity : Approx. 1.17 (25°C)

Solubility : Soluble in organic solvents (toluene, acetone,

	ethanol etc.)
Octanol/water partition coefficient	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: 2600-3800 mPa · s (25°C)

10. STABILATY AND REACTIVITY

REACTIVITY	: Exothermic polymerization may occur under high temperature or photo irradiation. Violet reaction may occur under mixing with strong acids, strong bases, oxidizing agents (peroxide etc.) and amines.
STABILITY	: Stable at moderate condition Exothermic polymerization may occur under high temperature or photo irradiation.
CONDITIONS TO AVOID	: High temperature, Light irradiation
INCOMPATIBLE MATERIALS	: Strong acids, strong bases, oxidizing agents, amines etc.
HAZARDOUS DECOMPOSITION PRODUCTS	: No data available

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY [ORAL]	: No data available
ACUTE TOXICITY [SKIN]	: No data available
ACUTE TOXICITY [INHALATION]	: No data available
SKIN CORROSION/IRRITATION	: Polythiol: Category 2
SERIOUS EYE DAMAGE/EYE IRRITATION	: Polythiol: Category 2A
RESPIRATORY OR SKIN SENSITIZATION	: Polythiol: Category 1
GERM CELL MUTAGENICITY	: No data available
CARCINOGENICITY	: No data available
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	: No data available
DEGRADABILITY AND PERSISTENCE	: No data available
BIOACCUMULATION POTENTIAL	: No data available
MOBILITY IN SOIL	: In view of physical and chemical properties, it is possible to move to atmosphere, water, and soil.
HARMFUL EFFECT ON THE OZONE LAYER	: No data available

13. DISPOSAL CONSIDERATION

THE REMAINDER WASTE	:	Dispose of according to all applicable federal, state, and local environmental regulations.
POLLUTION CONTAINER AND PACKING	:	Cleaning for recycling of dispose of according to all applicable federal, state, and local environmental regulations.

**14. TRANSPORT INFORMATION
INTERNATIONAL REGULATIONS**

Rail and road transportation information	:	Comply with ADR/ RID regulations
Marine transportation information	:	Comply with IMO regulations
Aviation transportation information	:	Not regulated for transport with ICAO/ IATA regulations
UN number	:	Not applicable
Hazard class	:	Not applicable
Proper Shipping Name	:	-
Packing Group	:	Not applicable
Special precaution	:	None

15. REGULATORY INFORMATION

Fire and Disaster Management act (JAPAN)	:	Not applicable
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16. OTHER INFORMATION**REFERENCES**

1. Japan chemical industry association, "GHS correspondence guideline (2012)"
2. National institute of technology and evaluation, "Chemical Risk Information Platform (CHRIP)"
<http://www.safe.nite.go.jp/japan/db.html>
3. National Institute of Health Sciences (NIHS), "International Chemical Safety Cards (ICSC) -Japanese Version-"
<http://www.nihs.go.jp/ICSC/>
4. UNITED NATIONS, "GLOVALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OG CHEMICALS (GHS) Rev.5 (2013)

All specifications are to be created based on the information we can get at this time may be revised by new knowledge.

The content, the physic-chemical property and so on are not a guaranteed-performance. Notes are usually aimed at handling. If special handling, usage, please Usage for safety measures.