SAFETY DATA SHEET

1. CHEMICAL PRODUCT & COMPANY INDETIFICATION

PRODUCT CODE: 403044

PRODUCT NAME: Jewel Color for UV Resin Black

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

 $\begin{array}{ccc} \text{Person in charge} & \text{Yuta Endo} \\ \text{Fax} & 0550\text{-}89\text{-}5951 \\ \text{Emergency telephone} & 0550\text{-}89\text{-}7536 \\ & \text{E-mail} & & & & & & & \\ & & & & & & & \\ \end{array}$

Recommended use of product Coloring of UV curing resin

and restrictions on use

2. HAZARD IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE PHYSICAL HAZARDS

Explosives Not classified Flammable gases Not classified Flammable aerosols Not classified Not classified Oxidizing gases Gases under pressure Not classified Flammable liquids Category 4 Flammable solids Not classified Self-reactive substances and mixtures Not classified Not classified Pyrophoric liquids Not classified Pyrophoric solids Self-heating substances and mixtures Not classified Substances and mixture which, in contact Not classified

with water, emit flammable gases

Oxidizing liquids : Not classified
Oxidizing solids : Not classified
Organic peroxides : Not classified
Corrosive to metals : Not classified

HEALTH HAZERDS

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

Carcinogenicity : Category 2
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 HAZERDS

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

GHS LABEL ELEMENTS INCLUDING: PRECAUTIONRY STATEMENTS

SYMBOL :

SIGNAL WARD : Warning

HAZARD STATEMENT : Flammable liquid

Suspected of causing cancer.

PRECAUTINARY STATEMENTS

[Prevention] : Do not handle until all safety precautions have been read

and understood.

Keep away from flames and hot surfaces. No smoking. Wear protective gloves/ protective clothing/ eye protection/

face protection.

Wash the hands thoroughly after handling.

Wear eye protection/ face protection.

Obtain special instructions before use.

Do not handle until all safety precautions have been read

and understood.

[Response] : IF SWALOWED: Call a POISON CNETER/ doctor if you

feel unwell.

IF INHALED: Call a POISON CENTER/ doctor if you feel

unwell.

IF IN EYES: 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.

In case of fire: use foam, powder (Dry chemical), carbon

dioxide and sand to extinguish.

If exposed or concerned: Get medical advice/ attention.

[Storage] : Store in a well-ventilated place. Keep cool.

Store locked up.

[Disposal] : Dispose of contents/ container to waste in accordance with

local/regional/national/international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS SUBSTANCE/MIXTURE:

Component	Content (%)	Cas No.
glycols	70-80	Registered
Synthetic resin	20-30	Registered
Carbon black	0.1-0.5	1333-86-4

4. FIRST AID MEASURES

IF IN EYES Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do.

Continue rinsing.

IF ON SKIN Shed clothes that are attached content.

Wash with plenty of soap and water. Get medical attention

IF INHALED Call a POISON CENTER/ doctor if you feel unwell.

IF SWALOWED Rinse mouth with water.

Call a POISON CNETER/ doctor if you feel unwell.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING foam, powder (Dry chemical), carbon dioxide, dry

MEDIA UNSUITABLE EXTINGUISHING Water

MEDIA

SPECIFIC EXTINGTION There is a possibility that the fire by heat, sparks

METHOD and fire.

Burn to vigorously heating.

In event of a fire, there is a possibility to generate

a corrosive, toxic and irritation gas.

SPECIAL PROTECTIVE FOR Remove all ignition sources if be able to do in safe.

FIRE-FIGHTERS Not move when the container is exposed to heat.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, Remove all ignition sources.

PROTECTIVE EQUIPMENT AND Isolate the location of the possibility of

EMERGENCY PROCEDURES

Ventilate in the case of an enclosed area.

ENVIROMENTAL PRECAUTIONS Do not release into the environment.

METHODS AND MATERIALS FOR Stop leak if without risk.

CONTAINMENT AND CLEANING UP

RECOVERY AND NEUTRALIZATION Recover with inert material and put in a

container.

MEASURES TO PREVENT Remove all ignition sources immediately.

SECONDARY DISASTER Stop leak into the environment.

7. HANDLING AND STORAGE HANDLING

TECHNICAL MEASURE

Take measures of as described in chepter"8. (LOCAL-VENTILATION/WHLE-EXPOSURE CONTROLS / PERSONAL

VENTILATION) PROTECTION".

As much as possible to prevent the scattering of

the vapor and the leakage of the liquid.

NOTES : Wash the hands after handling.

Do not eat, drink, or smoke when using this

product.

Avoid breathing dust/ fume/ gas/ mist/ vapors/

spray.

Use only outdoors or in a well-ventilated area.

Do not swallow.

Do not put in eyes.

Avoid contact with skin.

CONTACT EVASION : See chapter 10" STABILATY AND REACTIVITY".

STORAGE

APPROPRIATE SAFEKEEPING : Avoid strong oxidizing agent.

CONDITION Seal the container and storage in a well-ventilated

area.

PACAGING MATERIALS : No data

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL LIMIT : Not set OCCUPATIONAL : Not set

EXPOSURE LIMITS

FACILITY AND : Provide shower and eye washer at place where is stored

EQUIPMENT MEASURES and handled this material.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection : Wear respiratory protective device.

Hand protection : Wear rubber gloves. Eye protection : Wear safety goggles.

Skin and body protection Wear personal protective equipment and protective

shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical condition : Liquid Color : Black

Odour : Few specific odor

pH : No date Freezing point : No data Boiling point : $\leq 161^{\circ}$

Flash point : $\geq 64.5^{\circ}$ C(closed method)

Explosion properties : No data
Vapor pressure : No data
Specific gravity : No data

Solubility : Insoluble in water. Soluble in alcohol.

Octanol/water partition coefficient : No data Autoignition temperature : No data $\geq 239^{\circ}\text{C}$ Decomposition temperature : No data

10. STABILATY AND REACTIVITY

REACTIVITY : Nothing

STABILITY : Stabile under the usual handling. POSSIVILITY OF HAZARDOUS : Reacts with strong oxidants.

REACTIONS

CONDITIONS TO AVOID : Burning.

INCOMPATIBLE MATERIALS : Strong oxidants.

HAZARDOUS DECOMPOSITION : Toxic gas included the carbon monoxide.

PRODUCTS

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY [ORAL] : Category 5
ACUTE TOXICITY [SKIN] : No data
ACUTE TOXICITY [INHALATION] : Category 5
SKIN CORROSION/IRRITATION : No data
SERIOUS EYE DAMAGE/EYE IRRITATION : Category 2
RESPIRATIORY OR SKIN SENSITIZATION : No data
GERM CELL MUTAGENICITY : No data

CARCINOGENICITY : Category 2 (Carbon black)

REPRODUCTIVE TOXICITY : No data SPECIFIC TARGET ORGAN TOXICITY : No data

[SINGLE EXPOSURE]

SPECIFIC TARGET ORGAN TOXICITY : No data

[REPEATED EXPOSURE]

ASPIRATION HAZARD : No data

12. ECOLOGICAL INFORMATION

ECOTOXICITY : No data
DEGRADABILITY AND PERSISTENCE : No data
BIOACCUMULATION POTENTIAL : No data
MOBILITY IN SOIL : No data
HARMFUL EFFECT ON THE OZONE LAYER : No data

13. DISPOSAL CONSIDERATION

THE REMAINDER WASTE : Dispose of contents/ container to waste in

accordance with local/ regional/ national/

international regulations.

POLLUTION CONTAINER AND

PACKING

Dispose of contents/ container to waste in

accordance with local/ regional/ national/

international regulations.

14. TRANSPORT INFORMATION INTERNATIONAL REGULATIONS

UN number : Not applicable
Hazard class : Not applicable
Packing Group : Not applicable

15. REGULATORY INFORMATION

The evaluation of chemical substances and regulation of their manufacture,

etc. (JAPAN)

Dangerous goods (flammability)
Notification substance: Carbon black

Industrial Safety and Health act : Not applicable

(JAPAN)

Fire and Disaster Management act

(JAPAN)

Class 4 petroleum No.2

Poisonous and Deleterious Substances : Not applicable control act (JAPAN)

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
- National Institute of Health Sciences (NIHS), "International Chemical Safety Cards (ICSC) -Japanese Versionhttp://www.nihs.go.jp/ICSC/
- 4. UNITED NATTONS, "GLOVALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OG CHEMICALS (GHS) Rev.4 (2011)

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.