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* * *Section 1 - IDENTIFICATION* * *

Product Identifier: IJ Primer PR-200

Product Description

PR200-Z-22 / PR200-Z-60 / PR200-Z-BA / PR200-Z-B2

Chemical Family

UV curable ink

Product Use

IJ Ink Primer of UV Cure.

Restrictions on Use

None known.

Manufacturer Information

Mimaki Engineering Co., Ltd 2182-3 Shigeno-otsu, Tomi-shi, Nagano 389-0512 Japan Telephone number: +81-268-64-2413

Emergency telephone number: +81-268-64-2281

Importer / Distributor Information

MIMAKI AUSTRALIA PTY LTD. Unit 14, 38-46 South Street, Rydalmere, NSW 2116, Australia Telephone number: + 61-2-8036-4500

* * *Section 2 - HAZARDS IDENTIFICATION* * *

GHS Classification

Skin corrosion/irritation, Category 2

Serious Eye Damage/Eye Irritation, Category 2A

Skin sensitizer, Category 1

Carcinogenicity, Category 2

Toxic to reproduction, Category 2

Specific Target Organ Toxicity - Repeated Exposure, Category 2 (respiratory system, liver)

Hazardous to the aquatic environment - acute hazard, Category 2

Hazardous to the aquatic environment - chronic hazard, Category 2

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

DANGER

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Hazard Statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause allergic skin reaction.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to respiratory system and liver through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

Prevention

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

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

P273 Avoid release to the environment.

Response

P308+P313 IF exposed or concerned: Get medical advice/attention.

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.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Storage

P405 Store locked up.

Disposal

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

Other Hazards which do not Result in Classification

None known.

Main Symptoms and Emergency Overview

Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to respiratory system and liver through prolonged or repeated exposure.

* * *Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS* * *

CAS	Component	Percent			
Trade Secret	Aliphatic monomer	40-50			
Trade Secret	Acryl type oligomer	25-35			
2495-35-4	2-Propenoic acid, phenylmethyl ester	10-15			
Trade Secret	Aromatic monomer	10-15			
162881-26-7	Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-	<10			
28961-43-5	Trimethylolpropane polyoxyethylene triacrylate	<1			



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122-60-1	Phenyl glycidyl ether	<0.5
Trade Secret	Others	<10
128-37-0	2,6-Di-tert-butyl-p-cresol	<0.5

* * *Section 4 - FIRST AID MEASURES* * *

Inhalation

Remove person to fresh air and keep comfortable for breathing. Give artificial respiration if not breathing. Call a POISON CENTER or doctor/physician.

Skin

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before re-use.

Eyes

Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation or pain persists after fifteen minutes of eye irrigation, seek medical attention.

Ingestion

If swallowed, get medical attention. If vomiting occurs, keep head lower than hips to help prevent aspiration.

Note to Physicians

Treat symptomatically and supportively.

Symptoms: Immediate

eye irritation, skin irritation, allergic skin reaction

Symptoms: Delayed

cancer, reproductive effects, liver damage, respiratory system damage

* * *Section 5 - FIRE FIGHTING MEASURES* * *

Extinguishing Media

carbon dioxide, regular dry powder, regular dry chemical, water spray, alcohol resistant foam

Unsuitable Extinguishing Media

Do not scatter spilled material with high-pressure water streams.

Flammable Properties

Irritating fumes and gases may be released upon thermal processing or during combustion.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Avoid inhalation of material or combustion by-products.

Hazardous Combustion Products

Combustion: oxides of carbon, oxides of phosphorus

Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

* * *Section 6 - ACCIDENTAL RELEASE MEASURES* * *

Personal Precautions

Wear personal protective clothing and equipment, see Section 8.

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Environmental Precautions

Avoid release to the environment.

Methods and Materials for Containment and Cleanup

Eliminate all ignition sources if safe to do so. Stop leak if possible without personal risk. Reduce vapors with water spray. **Small spills:** Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. **Large spills:** Dike for later disposal. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.

* * *Section 7 - HANDLING AND STORAGE* * *

Handling Procedures - Technical measures

Avoid heat, flames, sparks and other sources of ignition.

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapor or mist. Avoid contact with eyes, skin and clothing. Do not eat, drink, or smoke when using this product. Wear protective gloves and eye/face protection. Wash thoroughly after handling.

Handling precautions for contact with incompatible substances of mixtures

Avoid contact with incompatible materials.

Conditions for Safe Storage

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Keep separated from incompatible substances.

Incompatibilities: acids, bases, oxidizing materials

Safe container/packaging material

No information available for the product.

* * *Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION* * *

Component Analysis

Phenyl glycidyl ether (122-60-1)

Australia: 1 ppm TWA; 6.1 mg/m3 TWA

sensitiser

ACGIH: 0.1 ppm TWA

Skin - potential significant contribution to overall exposure by the cutaneous route

2,6-Di-tert-butyl-p-cresol (128-37-0)

Australia: 10 mg/m3 TWA

ACGIH: 2 mg/m3 TWA (inhalable fraction and vapor)

Component Biological Limit Values

There are no biological limit values for the component(s) of this product.

Engineering Controls

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eve Protection

Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Body Protection

Wear appropriate chemical resistant clothing.



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Hands protection

Wear appropriate chemical resistant gloves.

Respiratory Protection

Consult with a health and safety professional for specific respirators appropriate for your use.

* * *Section 9 - PHYSICAL AND CHEMICAL PROPERTIES* * *

Physical State:	Liquid	Appearance:	yellow liquid
Color:	yellow	Physical Form:	liquid
Odor:	faint odor	Odor Threshold:	Not available
pH:	Not available	Melting Point:	Not available
Boiling Point:	181 °C	Flash Point:	106 °C
Decomposition	Not available	Evaporation Rate:	Not available
Temperature:			
LEL:	Not available	UEL:	Not available
Vapor Pressure:	Not available	Vapor Density (air = 1):	Not available
Density:	Not available	Specific Gravity (water = 1):	1.1 mg/cm3
Water Solubility:	Not available	Log KOW:	Not available
Coeff. Water/Oil Dist:	Not available	Auto Ignition Temperature:	Not available
Viscosity:	Not available	Volatility:	Not available
Oxidizing Properties:	Not available	Explosive Properties:	Not available
Flammability (solid, gas):	Not applicable		

Other Property Information

No additional information is available.

* * *Section 10 - STABILITY AND REACTIVITY* * *

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal conditions of use. Avoid contact with incompatible materials.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid flames, sparks, and other sources of ignition. Avoid contact with incompatible materials.

Incompatible Materials

acids, bases, oxidizing materials

Hazardous Decomposition

Combustion: oxides of carbon, oxides of phosphorus



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* * *Section 11 - TOXICOLOGICAL INFORMATION* * *

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The component(s) of this material have been reviewed in various sources and the following selected endpoints are published:

Aliphatic monomer (Trade Secret)

Oral LD50 Rat 4890 mg/kg

Phenyl glycidyl ether (122-60-1)

Dermal LD50 Rabbit 1500 mg/kg; Inhalation LC50 Rat >100 ppm 8 h; Oral LD50 Rat 2600 mg/kg

2,6-Di-tert-butyl-p-cresol (128-37-0)

Oral LD50 Rat 890 mg/kg; Dermal LD50 Rat >2000 mg/kg

Immediate Effects

eye irritation, skin irritation, allergic skin reaction

Delayed Effects

cancer, reproductive effects, liver damage, respiratory system damage

Irritation/Corrosivity Data

eye irritation, skin irritation

Respiratory Sensitizer

No information available for the product.

Dermal Sensitizer

May cause an allergic skin reaction

Germ Cell Mutagenic Data

No information available for the product.

Carcinogenicity

Component Carcinogenicity

Phenyl glycidyl ether (122-60-1)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans))

DFG: Category 2 (considered to be carcinogenic for man)

OSHA: Present

2,6-Di-tert-butyl-p-cresol (128-37-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Supplement 7 [1987]; Monograph 40 [1986] (Group 3 (not classifiable))

DFG: Category 4 (no significant contribution to human cancer)

Reproductive Effects Data

Available data characterizes components of this product as reproductive hazards.

Specific Target Organ Toxicity - Single Exposure

No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure

liver, respiratory system

Aspiration Hazard

Not expected to be an aspiration hazard.



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Medical Conditions Aggravated by Exposure

No information available for the product.

* * *Section 12 - ECOLOGICAL INFORMATION* * *

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Analysis - Aquatic Toxicity

2,6-Di-tert-butyl-p-cresol (128-37-0)

Algae: 72 Hr EC50 Pseudokirchneriella subcapitata: 6 mg/L; 72 Hr EC50 Desmodesmus subspicatus: >0.42 mg/L

Invertebrate Toxicity

aliphatic monomers: 48 hours 1-10 mg/L EC50 Water flea

Persistence and Degradability

No data available for the product.

Bioaccumulation Potential

No information available for the product.

Mobility in Soil

No information available for the product.

Hazardous to ozone layer

No data available for the product.

* * *Section 13 - DISPOSAL CONSIDERATIONS* * *

Disposal Methods

Dispose in accordance with all applicable regulations.

Disposal Guidelines

Empty containers may contain product residue. Dispose in accordance with all applicable regulations.

* * *Section 14 - TRANSPORT INFORMATION* * *

IATA Information

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Contains: 2-Propenoic acid,

phenylmethyl ester)

UN #: UN3082 Hazard Class: 9 Packing Group: III

Required Label(s): 9 Special Provision : A197 *1

ICAO Information

Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Contains: 2-Propenoic acid, phenylmethyl

ester)

UN #: UN3082 Hazard Class: 9 Packing Group: III

Required Label(s): 9

IMDG Information

Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Contains: 2-Propenoic acid, phenylmethyl

ester)



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UN #: UN3082 Hazard Class: 9 Packing Group: III

Required Label(s): 9

Special Provision: 2.10.2.7 *1

ADG Information

Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Contains: 2-Propenoic acid, phenylmethyl

ester)

UNNA Number: UN3082 Hazard Class: 9 Packing Group: III

Required Labels: 9

Special precautions

No information available for the product.

*1 Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) is excepted from Dangerous Goods regulations -- see UN Special Provision.

* * *Section 15 - REGULATORY INFORMATION* * *

Australia Regulations

Work Health and Safety Regulations - Prohibited Carcinogens

No component(s) are listed on the Prohibited Carcinogens list.

Work Health and Safety Regulations - Restricted Carcinogens

No component(s) are listed on the Restricted Carcinogens list.

Work Health and Safety Regulations - Restricted Hazardous Chemicals

No component(s) are listed on the Restricted Hazardous Chemicals list.

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PHIL	JP	KR	CN	NZ
Aliphatic monomer	Trade Secret	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Acryl type oligomer	Trade Secret	No	No	No	No	No	Yes	No	Yes	No
2-Propenoic acid,	2495-35-4	Yes	NSL	EIN	No	No	Yes	No	Yes	Yes
phenylmethyl ester										
Phosphine oxide,	162881-26-7	Yes	DSL	ELN	Yes	Yes	Yes	No	Yes	Yes
phenylbis(2,4,6-										
trimethylbenzoyl)-										
Trimethylolpropane	28961-43-5	Yes	DSL	No	Yes	Yes	No	Yes	Yes	Yes
polyoxyethylene triacrylate										
Phenyl glycidyl ether	122-60-1	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
2,6-Di-tert-butyl-p-cresol	128-37-0	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes



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* * *Section 16 - OTHER INFORMATION* * *

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; CAS - Chemical Abstracts Service; CLP - Classification, Labelling and Packaging; EEC - European Economic Community; EIN (EINECS) - European Inventory of Existing Commercial Chemical Substances; ELN (ELINCS) - European List of Notified Chemical Substances; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; IBC Code - International Bulk Chemical Code; Kow - Octanol/water partition coefficient; LC50 - Lethal Concentration, 50%; LD50 - Lethal Dose, 50%; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NTP = National Toxicology Program; REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - European Rail Transport; STEL - Short-term Exposure Limit; TWA - Time Weighted Average; UEL - Upper Explosive Limit

Other Information

The information set forth in this Safety Data Sheet does not purport to be all-inclusive and should be used only as a guide. While the information and recommendations set forth herein are believed to be accurate, the company makes no warranty regarding such information and recommendations and disclaims all liability from reliance thereon. Read the Material Safety Data Sheet before handling product.

End of Sheet 037-O061006