

## SAFETY DATA SHEET

Revision : September 1, 2016

INFORMATION ON THIS FORM IS PROPRIETARY INFORMATION AND FURNISHED SOLELY FOR THE USE OF OUR CUSTOMERS.

**SECTION 1 : Identification of the substance/preparation and of the company/undertaking****Product details**

Trade name : SUPER-UV NO.1 ROYAL GOLD BLUISH

MSDS number : SUNRGB20160901

Application of the substance / the preparation : Printing Ink

**Manufacturer/Supplier:**

MITSUBOSHI PRINTING INK CO.,LTD.

HIGASHI 1-103 HAMADERAFUNAO-CHO NISHIKU SAKAI OSAKA 5928341 JAPAN

PHONE : +81-72-261-8250 FAX : +81-72-264-1421

EMERGENCY PHONE : +81-72-261-8250

**SECTION 2 : Hazards identification****GHS Classification**

<u>Physical hazards</u>	<u>Category</u>
Flammable solids	Not classified
<u>Health hazards</u>	<u>Category</u>
Acute toxicity – oral	Classification not possible
Acute toxicity – dermal	Classification not possible
Acute toxicity – inhalation (gas)	Not applicable
Acute toxicity – inhalation (vapor)	Classification not possible
Acute toxicity – inhalation (dust, mist)	Classification not possible
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Respiratory sensitization	Classification not possible
Skin sensitization	Category 1
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Toxic to reproduction	Classification not possible
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Classification not possible
Respiratory tract irritation	Classification not possible
<u>Environmental hazards</u>	<u>Category</u>
Hazardous to the aquatic environment – acute	Category 2
Hazardous to the aquatic environment – chronic	Category 2

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Trade name : SUPER-UV NO.1 ROYAL GOLD BLUISH

## GHS Label Elements

Symbols :



Signal word : Warning

Hazard statement : H315 Causes skin irritation  
 : H320 Causes eye irritation  
 : H317 May cause an allergic skin reaction.  
 : H335 May cause respiratory irritation  
 : H401 Toxic to aquatic life  
 : H411 Toxic to aquatic life with long lasting effects

## Precautionary Statements

General : Be sure to read Safety Data Sheet (SDS) in use.

Prevention : P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 : P264 Wash hands thoroughly after handling.  
 : P271 Use only outdoors or in a well-ventilated area.  
 : 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+352 If on skin : Wash with plenty of soap and water.  
 : P304+340 IF INHALED : Remove person to fresh air and keep comfortable for breathing.  
 : P305+351 IF IN EYES : Rinse cautiously with water for several minutes.  
 : +338 Remove contact lenses, if present and easy to do. Continue rinsing.  
 : P312 Call a POISON CENTER/doctor/...if you feel unwell.  
 : P321 Specific treatment.

Storage : P332+P313 If skin irritation occurs : Get medical advice/attention.  
 : P333+P313 If skin irritation or rash occurs : Get medical advice / attention.  
 : P337+313 If eye irritation persists : Get medical advice/attention.  
 : P362+364 Take off contaminated clothing and wash it before reuse.  
 : P391 Collect spillage.

Disposal : P403+233 Store in a well-ventilated place. Keep container tightly closed.  
 : P405 Store locked up.  
 : P501 Dispose of contents/container by entrust to the industrial waste disposal contractors who obtain permission of the prefectural governors.

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## SECTION 3 : Composition/information on ingredients

Classification of Substance or Mixture : Mixture

Chemical name or General name : Offset Printing Ink

Substance	CAS No.	Content
Copper	7440-50-8	25-35%
Zinc	7440-66-6	10-20%
Pigment	Undisclosed	<1%
Photo-sensitive resin	Undisclosed	20-30%
Photo-sensitive monomer	Registered	10-20%
Photo initiator	Undisclosed	5-10%
Additive	Registered	1-5%

## SECTION 4 : First-aid measures

- If inhaled : Remove person to fresh air and keep comfortable for breathing.  
: Get medical advice/attention if necessary.
- If on skin : Wash with plenty of soap and water.  
: If skin irritation or rash occurs ; Get medical advice/attention.
- If in eye : Rinse cautiously with for several minutes. Get medical advice/attention.  
: If eye irritation persists : get medical advice/attention.
- If swallowed : Do NOT induce vomiting. Immediately call a doctor.

## SECTION 5 : Fire-fighting measures

- Suitable extinguishing agents : Powder, Foam, Carbon dioxide, Water, Dry sand, Misty agent.
- Unsuitable extinguishing agents : Straight stream
- Special hazards : Move containers to safe places immediately.

## SECTION 6 : Accidental release measures

## Personal precautions

## Protective equipment and emergency procedures

- : Wear protective gloves/protective clothing/eye protection.
- : Ventilate well until completely-processed if indoor.
- : Evacuate people downwind.
- : Seal off the place which materials leaked out by loping.
- : Clear immediately nearby ignition sources.

## Environmental precautions

- : Avoid release to the environment.

## Methods and materials for contaminant and cleaning up

- : Wash away the contaminated place with plenty of water and dispersing agent after collecting spillage in an empty container.



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## SECTION 11 : Toxicological information

Toxicological information as production : No toxicological information as production.

## Toxicological information of components :

	Acute toxicity (oral)	Acute toxicity (dermal)	Acute toxicity (gas)	Acute toxicity (vapor)
Copper	Not Classified	Classification not possible	Classification not possible	Classification not possible
Zinc	Not Classified	Classification not possible	Not applicable	Classification not possible
Photo-Sensitive Resin	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Photo-Sensitive Monomer	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Photo Initiator	Classification not possible	Classification not possible	Classification not possible	Classification not possible

	Acute toxicity (dust, mist)	Skin corrosion /irritation	Serious eye damage/irritation	Respiratory sensitization
Copper	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Zinc	Not Classified	Not Classified	Category 2B	Classification not possible
Photo-Sensitive Resin	Classification not possible	Category 2	Category 2	Classification not possible
Photo-Sensitive Monomer	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Photo Initiator	Classification not possible	Category 2	Category 2B	Classification not possible

	Skin sensitization	Germ cell mutagenicity	Carcinogenicity	Toxic to reproduction
Copper	Category 1A	Classification not possible	Classification not possible	Classification not possible
Zinc	Not Classified	Classification not possible	Classification not possible	Classification not possible
Photo-Sensitive Resin	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Photo-Sensitive Monomer	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Photo Initiator	Category 1	Classification not possible	Classification not possible	Classification not possible

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	Specific target organ toxicity (single exposure)	Specific target organ toxicity (repeated exposure)	Aspiration hazard
Copper	Category 1(Digestive organ) Category 3 (Respiratory tract irritation)	Classification not possible	Classification not possible
Zinc	Classification not possible	Classification not possible	Classification not possible
Photo-Sensitive Resin	Category 3 (Respiratory tract irritation)	Classification not possible	Classification not possible
Photo-Sensitive Monomer	Classification not possible	Classification not possible	Classification not possible
Photo Initiator	Classification not possible	Classification not possible	Classification not possible

## SECTION 12 : Ecological information

Ecological information as production :

	Hazardous to the aquatic environment (acute)	Hazardous to the aquatic environment (long-term)
Copper	Classification not possible	Category 4
Zinc	Category 1	Category 1
Photo-Sensitive Resin	Classification not possible	Classification not possible
Photo-Sensitive Monomer	Classification not possible	Classification not possible
Photo Initiator	Category 2	Category 2

## SECTION 13 : Disposal consideration

Entrust to waste disposers licensed from such prefectural governors or to local governments if they dispose.  
Do not release the drainage cleansing container, equipment or devise on the ground or to water ditches directory.  
Keep container tightly closed for contents not to outflow when toppling.

## SECTION 14 : Transport information

## •Japan domestic regulations

UN number : N/A

Land regulatory information : Comply with transportation specified by the Fire Defense Law, Industrial Safety and Health Law, or Poison Law.

Maritime regulatory information : Comply with transportation specified by Ship Safety Act.

Aviation regulatory information : Comply with transportation specified by Civil Aeronautics Act.

•Transport/Additional information : Not dangerous according to IMDG/IATA/ADR/AND.

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Trade name :	SUPER-UV NO.1 ROYAL GOLD BLUIISH
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SECTION 15 : Regulatory information
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- Industrial Safety and Health Act :
- Fire Service Act ; Fire Prevention Ordinan: Specified flammable material (flammable solid type)
- Law concerning Pollutant Release and Transfer Register (PRTR Law)
- Waste Management and Public Cleansing Act
- Safety, health and environmental regulations/legislation specific for the substance or mixture.  
: This product complies with Japanese regulations. Follow all regulations in your country.

SECTION 16 : Other information
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If used this product, take appropriate measures to actual condition on users' own responsibilities.

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MSDS number : SUNRGR20160901

Application of the substance / the preparation : Printing Ink

**Manufacturer/Supplier:**

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## SECTION 7 : Handling and storage

## Handling

- Technical countermeasure : Conduct the facility measures in Section 8. Wear protective equipment.  
 Local exhaust/General ventilation : Seal the source or install general ventilation device if indoor.  
 Precaution for safe handling : Close a container each use. (For prevention of drying or ink film)  
 : Eliminate contaminant if attached on work clothing.  
 : Wash hands and rinse mouth thoroughly after handling.  
 : Burn/dispose a rag wiped out the product immediately.

## Storage

- Conditions for safe storage : If over designated, comply with the fire prevention ordinance.  
 : Store away from ignition sources.

## SECTION 8 : Exposure controls / personal protection

Control parameters of Compositional substances : Not set

	Control parameter	ACGIH
Copper		1mg/m <sup>3</sup> (powder)

Equipment provision : Install ventilation device if generated mist or vapor.

## Protective equipment

- Respiratory protection : Use a mask in case mist or vapor is produced.  
 Protection of hands : Protective gloves  
 Eye protection : Protective eye protection  
 Skin protection : Protective clothing, protective boots

## SECTION 9 : Physical and chemical properties

## Information on basic physical and chemical properties

- Appearance : Pasty  
 Smell : Characteristic  
 Boiling point/Initial boiling point : Not determined  
 Flash point : Not determined  
 Specific Gravity : Not determined  
 Solubility : Insoluble in water, soluble in organic solvent

	Boiling point	Flash point	Ignition point	Density	Solubility in water	Explosion limit
Copper	2566°C			8.96	Insoluble	
Zinc	907°C			7.13	Insoluble	

## SECTION 10 : Stability and reactivity

- Chemical stability : Stable under normal storage conditions, ordinary temperature and pressure.  
 Conditions to avoid : Ultraviolet, heating  
 Hazardous decomposition products : Generation of toxic gas like CO/NOX by combustion.

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## SECTION 11 : Toxicological information

Toxicological information as production : No toxicological information as production.

## Toxicological information of components :

	Acute toxicity (oral)	Acute toxicity (dermal)	Acute toxicity (gas)	Acute toxicity (vapor)
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Photo-Sensitive Monomer	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Photo Initiator	Classification not possible	Classification not possible	Classification not possible	Classification not possible

	Acute toxicity (dust, mist)	Skin corrosion /irritation	Serious eye damage/irritation	Respiratory sensitization
Copper	Classification not possible	Classification not possible	Classification not possible	Classification not possible
Zinc	Not Classified	Not Classified	Category 2B	Classification not possible
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	Skin sensitization	Germ cell mutagenicity	Carcinogenicity	Toxic to reproduction
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Photo Initiator	Category 1	Classification not possible	Classification not possible	Classification not possible

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Photo-Sensitive Monomer	Classification not possible	Classification not possible	Classification not possible
Photo Initiator	Classification not possible	Classification not possible	Classification not possible

## SECTION 12 : Ecological information

## Ecological information as production :

	Hazardous to the aquatic environment (acute)	Hazardous to the aquatic environment (long-term)
Copper	Classification not possible	Category 4
Zinc	Category 1	Category 1
Photo-Sensitive Resin	Classification not possible	Classification not possible
Photo-Sensitive Monomer	Classification not possible	Classification not possible
Photo Initiator	Category 2	Category 2

## SECTION 13 : Disposal consideration

Entrust to waste disposers licensed from such prefectural governors or to local governments if they dispose.  
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Keep container tightly closed for contents not to outflow when toppling.

## SECTION 14 : Transport information

## •Japan domestic regulations

UN number : N/A

Land regulatory information : Comply with transportation specified by the Fire Defense Law, Industrial Safety and Health Law, or Poison Law.

Maritime regulatory information : Comply with transportation specified by Ship Safety Act.

Aviation regulatory information : Comply with transportation specified by Civil Aeronautics Act.

•Transport/Additional information : Not dangerous according to IMDG/IATA/ADR/AND.

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