1.CHEMICAL PRODUCT AND IDENTIFICATION

Chemical product name:	TURNER ACRYL GOUACHE
Color name:	Ramp Black
Name of manufacturer:	Turner Colour Works Ltd.
Address:	2–15–7, Mitsuyakita, Osaka Shi Yodogawa Ku, Osaka Fu, 532–0032, Japan
Name of section:	R&D
Phone number:	:+81-(0) 6-6308-1216
Emergency call:	:+81-(0) 6-6308-1216
Fax number:	:+81-(0) 6-6305-3018
E-MAIL:	<u>kenkyuu@turner.co.jp</u>
Revised Date / Issued Data:	APR.13.2019
Form No.:	2007-02

GHS Classification

Physical Hazards:

Without the need of classification

Health Hazards:

Carcinogenicity	CATEGORY 2
Reproductive toxicity	CATEGORY 2
Specific target organ systemic toxicity (single exposure) :	CATEGORY 2

Environment Hazards:

Without the need of classification

Hazard symbol



Signal word

warning

Hazard statement

- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child .
- H371 May cause damage to organs . (the central nervous, liver, kidney, blood)

Precautionary statements	
Security precaution:	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fumes/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response:	
P308+P313	IF exposed or concerned: Get medical advice/attention.
storage:	
P405	Store locked up.
Disposal:	
P501	Properly dispose of to be in accordance with the laws and regulations of the contents $/$ container .

3.COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

eneral product description: Acrylic emulsion paints

Ingredients and composition:

components	CAS No.	(%)
Acrylic ester copolymer aqueous emulsion	seclet	13.6%
Calcium carbonate	471-34-1	32.8%
Sodium aluminum silicate	1344-00-9	4.9%
Carbon black	1333-86-4	4.9%
Styrene-maleic acid monoester copolymer soda salt	360050-99-3	3.1%
1,2-Propanediol	57-55-6	1.6%
Thickener	seclet	1.6%
Rheology Modifier	seclet	1.1%
Antifoaming Agent	seclet	0.7%
3-Hydroxy-2,2,4-trimethylpentyl Isobutyrate	25265-77-4	0.7%
Poly (oxy-1,2-ethanediyl),a-phenyl-w-hydroxy-, styrenated	104376-75-2	0.6%
2-Amino-2-methyl-1-propanol	124-68-5	0.4%
Hydroxyethyl Cellulose	9004-62-0	0.3%
1,2-Benzisothiazol-3 (2H) -one	2634-33-5	0.2%
Sodium Hexametaphosphate	10124-56-8	0.2%
2-Butylbenzo [d] isothiazol-3 (2H) -one	4299-07-4	0.1%
2-Chloroacetamide	79-07-2	0.0%
 Water	7732-18-5	33.2%
		100.0%

	4.FIRST – AID MEASURES
	Immediately wash it with plenty of clean running water for at least 15 minutes. Remove contact lenses when worn and can be easily removed.
	Wash thoroughly to the back of the eyelids.
	Get medical attention as soon as possible.
Skin contact:	Quickly wipe off deposits with cloth.
	Wash thoroughly with large amounts of water and soap or skin detergent. Do not use solvent or thinner.
	If there is a change in appearance, stimulation / pain, if you feel uncomfortable get a doctor's diagnosis.
Inhalation:	If you feel bad by inhaling steam, gas, etc.move to a fresh air place and rest in a posture that is easy to breathe.
	If you feel unwell, call a doctor.
	If symptoms persist, call a doctor.
Ingestion:	If swallowed by mistake, it and consult a doctor immediately to rest.
	Be so as not to swallow the vomit.
	Do not induce vomiting except in the physician's instructions.

5.FIRE – FIGHTING MEASURES

Specific hazards regarding with fire fighting measure:

Apply water from a safe distance to cool and project surrounding area.

Firefighters should wear proper protective equipment and self-breathing apparatus.

Suitable extinguishing media: Water/Dry chemical powder/Carbon dioxide/Foam and dry sand.

Hazardous combustion products: Carbon monoxide, smoke, fumes and oxides of carbon.

	6.ACCIDENTAL RELEASE MEASURES
Personal precautions:	Wear proper protective equipment.
	In case of insufficient ventilation, wear suitable respiratory equipment.
	Shut off all sources of ignition.
	Avoid contact with skin and eyes.
	Remove ignition sources and ventilate the area.
	Evacuate personnel to safe area.evacuate non-essential personnel.
Environmental precautions:	Do not wash away into sewer,watercourse or river.
	Prevent product from discharging into the environment.
	After collecting spills, wash with plenty of water and dispersing agent.
Methods for cleaning up:	Collect the spill into a sealable container and transfer it to a safe place.
	Handle deposits, waste, etc. according to relevant laws and regulations.
	Recovers with scoops, waste etc.
	Put all wastes in a plastic bag for disposal and seal it tightly.
	In case of large amount of embankment etc. to prevent spills. Washing with water, etc.,
	also cause emissions to rivers and the like, causing environmental pollution, so be careful.
	7.HANDLING AND STORAGE
Handling: Handle in a v	vell-ventilated place.
Keep contair	ners tightly closed each time.
Touch the sk	kin, mucosa, or clothing, and wear protective equipment to prevent contact with eyes.
Wash hands,	face etc thoroughly after handling, do not bring pollution protective equipment such as gloves to resting place etc.

Storage: Keep out of the reach of children. Keep container in a well-ventilated place. Keep away from food,drink and animal feedingstuffs.

8.EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient(s)	Exposure Limits (ACGIH-TLV)
Carbon black	3 mg/m3

Exposure controls

Occupational exposure controls: Provide adequate local exhaust ventilation to maintainworker exposure below exposure limits.

Personal protective equipment

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection: Wear suitable gloves.

Eye protection: Wear safety glasses with side shields.

Skin protection: Wear suitable protective clothing.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

Appearance: Liquid. Colour: black Odour: Singular smell pH: 8.0 - 9.0 Boiling point / boiling range: 100℃(Water) Melting point / melting range: No information available. Flash point: No flash point Flammability (solid, gas): No flammable Explosive properties: No information available. Oxidising properties: No information available. Vapour pressure: No information available. Relative density (of concentrate): 1.36 Solutility (in water) (of concentrate): Complete. Solutility (in oil) (of concentrate): Impossible Partition coefficient: n-octanol/water: No information available. Viscosity (of concentrate): No information available. Miscibility: No information available. Vapor density: No information available. Evaporation rate: No information available. Auto-ignition temperature: No information available. Lower Flammability Limit: No information available. Upper Flammability Limit: No information available.

10.STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Conditions to avoid: No dangerous reaction known under conditions of normal use.

Incompatible hazardous substance: Reacts with oxidizing substances.

Hazardous decomposition products: If this material does not burn, if the coating etc. burns, it may generate harmful gas such as CO, NOx, halogen gas.

11.TOXICOLOGICAL INFORMATION

No information as mixture Hazard information on ingredients

Carbon Black

Carcinogenicity

CATEGORY 2

Component	Acute toxicity			Carcinogenicity
Component	ORAL(mg/kg)	<pre>DERMAL(mg/kg)</pre>	INHALATION(mg/L)	(IARC)
Carbon Black	Rat:>15400	>3000	_	2B

12.ECOLOGICAL INFORMATION

No information as mixture

Hazard information on ingredients

Component	HAZARDOUS TO THE AQUATIC ENVIRONMENT (ACUTE)	HAZARDOUS TO THE AQUATIC ENVIRONMENT (CHRONIC)
Carbon Black	Not classified	Not classified

13.DISPOSAL CONSIDERATIONS

Do not dump sewers,on the ground or into any of water. Consult an expert on the disposal of recovered material. Be sure to mention name,catalog number quantity of the material. Disposal must be made according to official regulations.

14.TRANSPORT INFORMATION

Land transport

Not classified as a dangerous good under transport regulations.

Inland waterway transport

Not classified as a dangerous good under transport regulations.

Sea transport

Not classified as a dangerous good under transport regulations.

Air transport

Not classified as a dangerous good under transport regulations.

UN No.

Not applicable

It does not fall under the dangerous goods under the UN Recommendation.

15.REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or in your region be examined by your own responsibility.

Japanese Regulatory Data ■Industrial Safety and Health Act Article 57-2 of the Act Article 18-2 of the Enforcement Order Appended Table 9 Carbon Black

16.0THER INFORMATION

Disclaimer: Cary AP mark .

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

1. CHEMICAL PRODUCT AND IDENTIFICATION

Chemical product name: ACRYL GOUACHE① Original Colors

Name of manufacturer: Turner Colour Works Ltd.

Address: 2-15-7 mitsuyakita yodogawa-ku,Osaka-fu,Japan

Name of section: R&D

Phone number: :+81-(0)6-6308-1216

Emergency call: :+81-(0)6-6308-1216

Fax number: :+81-(0)6-6305-3018

E-MAIL: kenkyuu@turner.co.jp

Revised Date / Issued Data: Mar. 29, 2018

Form No. : 1340-03

Colors: ■Mixing White, White, Neutral Grey 8, Neutral Grey 7, Neutral Grey 5, Lamp Black, Opera Red, Pink, Coral Red, Chinese Red, Jaune Brilliant, Naples Yellow, Yellow Ocher, Venetian Red, Emerald Green, Permanent Yellow Green, Permanent Green Light, Permanent Green Deep, Deep Green, Olive Green, Viridian (Hue), Peacock Blue, Sky Blue, Cobalt Blue (Hue), Prussian Blue (Hue), Turquoise Blue, Light Blue, Lilac, Rose Pink, Raw Sienna, Mustard, Apricot, Dandelion, Ivory Yellow, Maize Yellow, Fresh Green, Aqua Green, Ivy Green, Cyprus, Beryl Green, Spring Green, Horizon Blue, Aqua Blue, Blue Compose, Ultramarine Light, Night Blue, Spring Blue, Marine Blue, Brght Magenta, Mixing Magenta, Mixing Violet

2. HAZARDS IDENTIFICATION

GHS Classification

GHS Physical Hazards:	Not applicable.
GHS Health and Environmental Hazards:	Not applicable.
hazard pictograms:	Not applicable.
Signal word:	Not applicable.
Hazard statements:	Not applicable.

Precautionary statements: Other hazards:

Not applicable. Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture General product description: Acrylic emulsion paints

		CAS No.	Remarks
Ingredients and composition:	acrylic emulsion	-	
	carbon black	1333-86-4	
	antimony nickel complex oxide		PRTR Law
	zirconium dioxide	1314-23-4	
	hafnium oxide	12055-23-1	
	silicon oxide	7631-86-9	
	C.I.Pigment Blue 15	147-14-8	
	C.I.Pigment Green 7	1328-53-6	
	titanium dioxide	13463-67-7	
	ferric oxide	1309-37-1	
	iron hydroxide oxide yellow	51274-00-1	

Composition Ingredient(%)	colors	antimony nickel complex oxide	
	NAPLES YELLOW	as Sb 1-2%	as Ni -5%

4. FIRST - AID MEASURES

	4. FINST - AID MEASURES
Eye contact:	Remove any contact lenses at once.
	Flush eyes well with flooding amounts of running water for at least 15minutes.
	assure adequate flushing be separating the eyelids with sterile fingers.
	If irritation oersists, consult a physician.
Skin contact:	Remove all contaminated clothing
	Washthe affected area with plenty of water with mild soap
	If irritation is continued, refer to medical attention.
Inhalation:	Remove the victim from the contamination immediately to fresh air.
	If breathing is weak, irregular or has stopped, open his airway, loosen his and belt
	and adminisiter artificial respiration. And refer for medical attention.
	Do not induce vomiting and refer to medical attention.
	never give anything to someone who is unconscious.

5. FIRE - FIGHTING MEASURES

Specific hazards regarding with fire fighting measure:

Apply water from a safe distance to cool and project surrounding area. Firefighters should wear proper protective equipment and self-breathing apparatus. Suitable extinguishing media: Water/Dry chemical powder/Carbon dioxide/Foam and dry sand. Hazardous combustion products: Carbon monoxide, smoke, fumes and oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

7. HANDLING AND STORAGE

Handling: Keep away from sources of ignition No smoking. Avoid contact with eyes.	
Avoid contact withskin. Do not swallow. Do not breathe gas/fumes/vapour/spray.	
Use only in well-ventilated areas.When using do not eat or drink.	
Wash hands before breaks and immediately after handling the product.	
Storage: Keep out of the reach of children. Keep container in a well-ventilated place.	
Keep away from food, drink and animal feedingstuffs.	

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient (s)	Exposure Limits (ACGIH-TLV)
carbon black	3.5mg/m3
antimony nickel complex oxide	O.5mg/m3,as Sb
antimony nickel complex oxide	O.2mg/m3,as Ni
zirconium dioxide	5mg/m3 (TWA),as Zr
hafnium oxide	0.5mg/m3 (TWA),as Hf
silicon oxide	10mg/m3 (TWA)
C.I.Pigment Blue 15	-
C.I.Pigment Green 7	-
titanium dioxide	10mg/m3
ferric oxide	5mg/m3,as Fe
iron hydroxide oxide yellow	5mg/m3,as Fe

Exposure controls:

Occupational exposure controls: Provide adequate local exhaust ventilation to maintainworker exposure below exposure limits. Personal protective equipment:

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection: Wear suitable gloves.

Eye protection: Wear safety glasses with side shields.

Skin protection: Wear suitable protective clothing.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES
Physical State: Liquid.
Colour: By color
Odour: Slight
pH: 8.0 - 9.0
Boiling point / boiling range: 100°C (water)
Melting point / melting range: No information available.
Flash point: No information available.
Flammability (solid, gas): No information available.
Explosive properties: No information available.
Oxidising properties: No information available.
Vapour pressure: No information available.
Relative density (of concentrate): 1.1 - 1.6
Solutility (in water) (of concentrate): Complete.
Solutility (in oil) (of concentrate): Impossible
Partition coefficient: n-octanol/water: No information available.
Viscosity (of concentrate): No information available.
Miscibility: No information available.
Vapor density: No information available.
Evaporation rate: No information available.
Auto-ignition temperature: No information available.
Lower Flammability Limit: No information available.
Upper Flammability Limit: No information available.

10. STABILITY AND REACTIVITY Stability: Stable under recommended storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Conditions to avoid: No dangerous reaction known under conditions of normal use. Materials to avoid: Acids. Bases. Oxidizers. Reducing agents. Hazardous decomposition products: No information available.

■carbon black		
Acute toxicity-ORAL: LD50:>15400mg/kg(rat)		
■antimony nickel complex oxide		
No information available.		
■antimony nickel complex oxide		
No information available.		
■zirconium dioxide		
No information available.		
■hafnium oxide		
No information available.		
∎silicon oxide		
No information available.		
■C.I.Pigment Blue 15		
Acute toxicity-ORAL: LD50:>2000mg/kg(rat)		
■C.I.Pigment Green 7		
Acute toxicity-ORAL: LD50:≧5000mg/kg(rat)		
■titanium dioxide		
Acute toxicity-ORAL: LD50:>10000mg/kg(rat)		
■ferric oxide		
No information available.		
■iron hydroxide oxide yellow		
No information available.		

12. ECOLOGICAL INFORMATION

Toxicity	No further relevant information available.	
Aquatic toxicity:	No further relevant information available.	
Persistence and degradability:	No further relevant information available.	
Behavior in environmental systems:	No further relevant information available.	
Bioaccumulative potential:	No further relevant information available.	
Mobility in soil:	No further relevant information available.	
Additional ecological information:	No further relevant information available.	

13. DISPOSAL CONSIDERATIONS

Do not dump sewers, on the ground or into any of water. Consult an expert on the disposal of recovered material. Be sure to mention name, catalog number quantity of the material. Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

■Land transport Not classified as a dangerous good under transport regulations.

■ Inland waterway transport Not classified as a dangerous good under transport regulations.

■Sea transport Not classified as a dangerous good under transport regulations.

■Air transport Not classified as a dangerous good under transport regulations.

■UN No. Not applicable It does not fall under the dangerous goods under the UN Recommendation.

15. REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or in your region be examined by your own responsibility.

■Law concerning Pollutant Release and Transfer Register / PRTR Law antimony and its compounds(Class1 No. 31), nickel compounds(class1 No. 309)

16. OTHER INFORMATION

Disclaimer: Original Colors carry AP mark.

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

1. CHEMICAL PRODUCT AND IDENTIFICATION

Chemical product name: ACRYL GOUACHE② Original colors / Japanesque colour series Name of manufacturer: Turner Colour Works Ltd. Address: 2-15-7 mitsuyakita yodogawa-ku,Osaka-fu,Japan Name of section: R&D Phone number: :+81-(0)6-6308-1216 Emergency call: :+81-(0)6-6308-1216 Fax number: :+81-(0)6-6305-3018 E-MAIL: kenkyuu@turner.co.jp Revised Date / Issued Data: Mar.29.2018 Form No.: 1341-03

Colors: ■Permanent Lemon, Permanent Yellow, Permanent Yellow Deep, Permanent Yellow Orange, Permanent Orange, Permanent Scarlet, Permanent Red, Carmine, Rose, Poppy Red, Ultramarine, Red Violet, Blue Violet, Vermilion (Hue), Crimson, Currant Red, Magenta, Aubergine, Deep Purple, J. P. Gohun, J. Gohun, J. Red, J. Red Purple, J. Deep Red

2. HAZARDS IDENTIFICATION

GHS Physical Hazards:	Not applicable.
GHS Health and Environmental Hazards:	Not applicable.
hazard pictograms: Signal word: Hazard statements:	Not applicable. Not applicable. Not applicable.

Precautionary statements: Other hazards: Not applicable. Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture General product description: Acrylic emulsion paints

GHS Classification

		CAS No.	Remarks
Ingredients and composition:	acrylic emulsion	-	

	4.FIRST - AID MEASURES
Eye contact:	Remove any contact lenses at once.
	Flush eyes well with flooding amounts of running water for at least 15minutes.
	assure adequate flushing be separating the eyelids with sterile fingers.
	If irritation oersists, consult a physician.
Skin contact:	Remove all contaminated clothing
	Washthe affected area with plenty of water with mild soap
	If irritation is continued, refer to medical attention.
Inhalation:	Remove the victim from the contamination immediately to fresh air.
	If breathing is weak, irregular or has stopped, open his airway, loosen his and belt
	and adminisiter artificial respiration. And refer for medical attention.
Ingestion:	Do not induce vomiting and refer to medical attention.
	never give anything to someone who is unconscious.

5. FIRE - FIGHTING MEASURES

Specific hazards regarding with fire fighting measure:

Apply water from a safe distance to cool and project surrounding area. Firefighters should wear proper protective equipment and self-breathing apparatus. Suitable extinguishing media: Water/Dry chemical powder/Carbon dioxide/Foam and dry sand.

Hazardous combustion products: Carbon monoxide, smoke, fumes and oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

Personal	precautions:	Wear proper protective equipment.
		In case of insufficient ventilation, wear suitable respiratory equipment.
		Shut off all sources of ignition.
		Avoid contact with skin and eyes.
		Remove ignition sources and ventilate the area.
		Evacuate personnel to safe area.evacuate non-essential personnel.
Environmental	precautions:	Do not wash away into sewer,watercourse or river.
		Prevent spills from entaering a lot of outflow, watercourses or low areas.
		In oder to prevent a lot of outflow, it shoulds with the ground etc.
Methods for	cleaning up:	Take up spilled material with ashes or other absorbents.
		After material is completely picked up, wash the spill site with soap and water
		and ventilate the area.
		Put all wastes in a plastic bag for disposal and seal it tightly.
		Remove, clean, or dispose of contaminated clothing.

	7. HANDLING AND STORAGE
Handling:	Keep away from sources of ignition No smoking. Avoid contact with eyes.
	Avoid contact withskin. Do not swallow. Do not breathe gas/fumes/vapour/spray.
	Use only in well-ventilated areas.When using do not eat or drink.
	Wash hands before breaks and immediately after handling the product.
Storage:	Keep out of the reach of children. Keep container in a well-ventilated place.
	Keep away from food, drink and animal feedingstuffs.

8. EXP	OSURE CONTROLS/PERSONAL PROTECTION
Ingredient (s)	Exposure Limits (ACGIH-TLV)
No inform	nation available.

Exposure controls:

Occupational exposure controls: Provide adequate local exhaust ventilation to maintainworker exposure below exposure limits. Personal protective equipment: Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection: Wear suitable gloves.

Eye protection: Wear safety glasses with side shields.

Skin protection: Wear suitable protective clothing.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

Physical State:	Liquid.
Colour:	By color
Odour:	Slight
;Hq	8.0 - 9.0
Boiling point / boiling range:	100°C (water)
Melting point / melting range:	No information available.
Flash point:	No information available.
Flammability (solid, gas):	No information available.
Explosive properties:	No information available.
Oxidising properties:	No information available.
Vapour pressure:	No information available.
Relative density (of concentrate):	1.1 - 1.5
Relative density (of concentrate): Solutility (in water) (of concentrate):	
	Complete.
Solutility (in water) (of concentrate):	Complete. Impossible
Solutility (in water) (of concentrate): Solutility (in oil) (of concentrate):	Complete. Impossible No information available.
Solutility (in water) (of concentrate): Solutility (in oil) (of concentrate): Partition coefficient: n-octanol/water: Viscosity (of concentrate):	Complete. Impossible No information available.
Solutility (in water) (of concentrate): Solutility (in oil) (of concentrate): Partition coefficient: n-octanol/water: Viscosity (of concentrate): Miscibility:	Complete. Impossible No information available. No information available.
Solutility (in water) (of concentrate): Solutility (in oil) (of concentrate): Partition coefficient: n-octanol/water: Viscosity (of concentrate): Miscibility: Vapor density:	Complete. Impossible No information available. No information available. No information available.
Solutility (in water) (of concentrate): Solutility (in oil) (of concentrate): Partition coefficient: n-octanol/water: Viscosity (of concentrate): Miscibility: Vapor density:	Complete. Impossible No information available. No information available. No information available. No information available. No information available.
Solutility (in water) (of concentrate): Solutility (in oil) (of concentrate): Partition coefficient: n-octanol/water: Viscosity (of concentrate): Miscibility: Vapor density: Evaporation rate:	Complete. Impossible No information available. No information available. No information available. No information available. No information available.
Solutility (in water) (of concentrate): Solutility (in oil) (of concentrate): Partition coefficient: n-octanol/water: Viscosity (of concentrate): Miscibility: Vapor density: Evaporation rate: Auto-ignition temperature:	Complete. Impossible No information available. No information available. No information available. No information available. No information available. No information available.

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Conditions to avoid: No dangerous reaction known under conditions of normal use. Materials to avoid: Acids. Bases. Oxidizers. Reducing agents. Hazardous decomposition products: No information available.

11. TOXICOLOGICAL INFORMATION

No information available.

12. ECOLOGICAL INFORMATION

Toxicity	No further relevant information available.
Aquatic toxicity:	No further relevant information available.
Persistence and degradability:	No further relevant information available.
Behavior in environmental systems:	No further relevant information available.
Bioaccumulative potential:	No further relevant information available.
Mobility in soil:	No further relevant information available.
Additional ecological information:	No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Do not dump sewers, on the ground or into any of water. Consult an expert on the disposal of recovered material. Be sure to mention name, catalog number quantity of the material. Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

■Land transport Not classified as a dangerous good under transport regulations.

■Inland waterway transport Not classified as a dangerous good under transport regulations.

■Sea transport Not classified as a dangerous good under transport regulations.

■Air transport Not classified as a dangerous good under transport regulations.

∎UN No.

Not applicable It does not fall under the dangerous goods under the UN Recommendation.

15. REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or in your region be examined by your own responsibility.

16. OTHER INFORMATION

Disclaimer: Original colors / Japanesque colour series carry AP mark.

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

1. CHEMICAL PRODUCT AND IDENTIFICATION

Chemical product name: ACRYL GOUACHE③

Name of manufacturer: Turner Colour Works Ltd.

Japanesque colour series

Address: 2-15-7 mitsuyakita yodogawa-ku,Osaka-fu,Japan

Name of section: R&D

Phone number: :+81-(0)6-6308-1216

Emergency call: :+81-(0)6-6308-1216

Fax number: :+81-(0)6-6305-3018

E-MAIL: kenkyuu@turner.co.jp

Revised Date∕Issued Data: Mar.29.2018

Form No. : 1342-03

Colors: ■J. White, J. Grey, J. Blue Grey, J. Blue Black, J. Red Black, J. Dark Grey, J. Pale Yellow, J. Enamel, J. Deep Yellow, J. Strong Orange, J. Scarlet, J. Yellow Red, J. Pale Pink, J. Deep Pink, J. Red Brown, J. Strawberry Red, J. Grayish Red, J. Grayish Beige, J. Ivory Yellow, J. Beige, J. Deep Beige, J. Yellow Brown, J. Brown, J. Greyish Brown, J. Burnt Umber, J. Dark Brown, J. Red Brown, J. Pale Green, J. Light Green, J. Yellow Green, J. Green Light, J. Olive Green, J. Deep Green, J. Dark Green, J. Black Green, J. Dark Yellow, J. Pale Blue, J. Light Blue, J. Blue, J. Dark Blue, J. Deep Blue, J. Prussian Blue, J. Black Blue, J. Sky Blue, J. Pale Lilac, J. Lilac, J. Violet, J. Deep Purple, J. Black Purple, J. Grayish Purple, J. Iridfscence-2, J. Iridfscence-3, J. Iridfscence-4

2. HAZARDS IDENTIFICATION

GHS Classification

GHS Physical Hazards:Not applicable.GHS Health and Environmental Hazards:Not applicable.hazard pictograms:Not applicable.Signal word:Not applicable.Hazard statements:Not applicable.

Precautionary statements: Other hazards: Not applicable. Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture General product description: Acrylic emulsion paints

		CAS No.	Remarks
Ingredients and composition:	acrylic emulsion	-	
	carbon black	1333-86-4	
	tin(IV) oxide	18282-10-5	
	silicon oxide	7631-86-9	
	C.I.Pigment Blue 15	147-14-8	
	C.I.Pigment Green 7	1328-53-6	
	titanium dioxide	13463-67-7	
	ferric oxide	1309-37-1	
	iron hydroxide oxide yellow	51274-00-1	

4. FIRST – AID MEASURES
Eye contact: Remove any contact lenses at once.
Flush eyes well with flooding amounts of running water for at least 15minutes.
assure adequate flushing be separating the eyelids with sterile fingers.
If irritation oersists, consult a physician.
Skin contact: Remove all contaminated clothing
Washthe affected area with plenty of water with mild soap
If irritation is continued, refer to medical attention.
Inhalation: Remove the victim from the contamination immediately to fresh air.
If breathing is weak,irregular or has stopped,open his airway,loosen his and belt
and adminisiter artificial respiration. And refer for medical attention.
Ingestion: Do not induce vomiting and refer to medical attention.
never give anything to someone who is unconscious.

5. FIRE - FIGHTING MEASURES
Specific hazards regarding with fire fighting measure:
Apply water from a safe distance to cool and project surrounding area.
Firefighters should wear proper protective equipment and self-breathing apparatus.
Suitable extinguishing media: Water/Dry chemical powder/Carbon dioxide/Foam and dry sand.
Hazardous combustion products: Carbon monoxide, smoke, fumes and oxides of carbon.

	6. ACCIDENTAL RELEASE MEASURES
Personal precautions:	Wear proper protective equipment.
	In case of insufficient ventilation, wear suitable respiratory equipment.
	Shut off all sources of ignition.
	Avoid contact with skin and eyes.
	Remove ignition sources and ventilate the area.
	Evacuate personnel to safe area evacuate non-essential personnel.
Environmental precautions:	Do not wash away into sewer,watercourse or river.
	Prevent spills from entaering a lot of outflow, watercourses or low areas.
	In oder to prevent a lot of outflow, it shoulds with the ground etc.
Methods for cleaning up:	Take up spilled material with ashes or other absorbents.
	After material is completely picked up, wash the spill site with soap and water
	and ventilate the area.
	Put all wastes in a plastic bag for disposal and seal it tightly.
	Remove, clean, or dispose of contaminated clothing.

	7. HANDLING AND STORAGE
Handling:	Keep away from sources of ignition No smoking. Avoid contact with eyes.
	Avoid contact withskin. Do not swallow. Do not breathe gas/fumes/vapour/spray.
	Use only in well-ventilated areas.When using do not eat or drink.
	Wash hands before breaks and immediately after handling the product.
Storage:	Keep out of the reach of children. Keep container in a well-ventilated place.
I	Keep away from food,drink and animal feedingstuffs.

Ingredient (s)	Exposure Limits (ACGIH-TLV)
carbon black	3.5mg/m3
tin(IV) oxide	2. Omg/m3(TWA)(Sn)
silicon oxide	10mg/m3 (TWA)
C.I.Pigment Blue 15	-
C.I.Pigment Green 7	-
titanium dioxide	10mg/m3
ferric oxide	5mg/m3(Fe)
iron hydroxide oxide yellow	5mg/m3(Fe)

Exposure controls:

Occupational exposure controls: Provide adequate local exhaust ventilation to maintainworker exposure below exposure limits. Personal protective equipment:

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection: Wear suitable gloves.

Eye protection: Wear safety glasses with side shields.

Skin protection: Wear suitable protective clothing.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

	PHYSICAL AND CHEMICAL PROPERTIES
Physical State	•
	: By color
0dour	: Slight
Hq	÷ 8.0 – 9.0
Boiling point / boiling range:	100°C (water)
Melting point / melting range	: No information available.
Flash point	: No information available.
Flammability (solid, gas)	:No information available.
Explosive properties	:No information available.
Oxidising properties	\therefore No information available.
Vapour pressure	\therefore No information available.
Relative density (of concentrate)	: 1.0 - 1.3
Solutility (in water) (of concentrate)	: Complete.
Solutility (in oil) (of concentrate)	: Impossible
Partition coefficient: n-octanol/water	: No information available.
Viscosity (of concentrate)	\therefore No information available.
Miscibility	:No information available.
Vapor density	:No information available.
Evaporation rate	:No information available.
Auto-ignition temperature	:No information available.
Lower Flammability Limit	\therefore No information available.
Upper Flammability Limit	\therefore No information available.

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Conditions to avoid: No dangerous reaction known under conditions of normal use. Materials to avoid: Acids. Bases. Oxidizers. Reducing agents. Hazardous decomposition products: No information available.

■carbon black
Acute toxicity-ORAL: LD50:>15400mg/kg(rat)
■tin(IV) oxide
Acutetoxicity-ORAL: LD50:>20g/kg(rat)
■silicon oxide
No information available.
■C.I.Pigment Blue 15
Acute toxicity-ORAL: LD50:>2000mg/kg(rat)
■C.I.Pigment Green 7
Acute toxicity-ORAL: LD50:≧5000mg/kg(rat)
∎titanium dioxide
Acute toxicity-ORAL: LD50:>10000mg/kg(rat)
■ferric oxide
No information available.
■iron hydroxide oxide yellow
No information available.

12. ECOLOGICAL INFORMATION

Toxicity	No	further	relevant	information	available.
Aquatic toxicity:	No	further	relevant	information	available.
Persistence and degradability:	No	further	relevant	information	available.
Behavior in environmental systems:	No	further	relevant	information	available.
Bioaccumulative potential:	No	further	relevant	information	available.
Mobility in soil:	No	further	relevant	information	available.
Additional ecological information:	No	further	relevant	information	available.

13. DISPOSAL CONSIDERATIONS

Do not dump sewers, on the ground or into any of water. Consult an expert on the disposal of recovered material. Be sure to mention name, catalog number quantity of the material. Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

■Land transport Not classified as a dangerous good under transport regulations.

■ Inland waterway transport Not classified as a dangerous good under transport regulations.

■Sea transport Not classified as a dangerous good under transport regulations.

∎Air transport

Not classified as a dangerous good under transport regulations.

∎UN No.

Not applicable It does not fall under the dangerous goods under the UN Recommendation.

15. REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or in your region be examined by your own responsibility.

Disclaimer: Japanesque colour series carry AP mark .

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

1. CHEMICAL PRODUCT AND IDENTIFICATION Chemical product name: ACRYL GOUACHE④ Original colors / Pearl / Japanesque colour Name of manufacturer: Turner Colour Works Ltd. Address: 2-15-7 mitsuyakita yodogawa-ku,Osaka-fu,Japan Name of section: R&D Phone number: :+81-(0)6-6308-1216 Emergency call: :+81-(0)6-6308-1216 Fax number: :+81-(0)6-6305-3018 E-MAIL: kenkyuu@turner.co.jp Revised Date / Issued Data: Mar. 29. 2018 Form No. : 1343-03 Colors: ■Burnt Sienna, Sepia, Raw Umber, Burnt Umber, Chocolate, Permanent Green Middle, Violet, Pearl White, Pearl Red, Pearl Lilac, Pearl Blue, Pearl Green, Pearl Yellow, J. Grayish Green

2. HAZARDS IDENTIFICATION

GHS Classification

GHS

GHS Physical Hazards	Not applicable.
GHS Health and Environmental Hazards	
Hazardous to the aquatic environ	nent (acute) : category 3
Hazardous to the aquatic environment	nt (chronic) : category 3
hazard pictograms: Signal word:	No No signal word
Signal Word.	No Signal wolu
Hazard statements:	
H40	2 Harmful to aquatic life
H41	2 Harmful to aquatic life with long lasting effects
ecautionary statements:	

Precautionary statements:

P273 Avoid release to the environment.

Other hazards:

 $\mathsf{P501}\ \mathsf{D}\mathsf{ispose}$ of contents/container in accordnce with local/regional/national/international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture General product description: Acrylic emulsion paints

	CAS No.	Remarks
Ingredients and composition: acrylic emulsion	-	
carbon black	1333-86-4	
tin(IV) oxide	18282-10-5	
C.I.Pigment Blue 15	147-14-8	
C.I.Pigment Green 7	1328-53-6	
titanium dioxide	13463-67-7	
ferric oxide	1309-37-1	

4. FIRST - AID MEASURES
Eye contact: Remove any contact lenses at once.
Flush eyes well with flooding amounts of running water for at least 15minutes.
assure adequate flushing be separating the eyelids with sterile fingers.
If irritation oersists, consult a physician.
Skin contact: Remove all contaminated clothing
Washthe affected area with plenty of water with mild soap
If irritation is continued, refer to medical attention.
Inhalation: Remove the victim from the contamination immediately to fresh air.
If breathing is weak, irregular or has stopped,open his airway, loosen his and belt
and adminisiter artificial respiration. And refer for medical attention.
Ingestion: Do not induce vomiting and refer to medical attention.
never give anything to someone who is unconscious.

5. FIRE - FIGHTING MEASURES
Specific hazards regarding with fire fighting measure:
Apply water from a safe distance to cool and project surrounding area.
Firefighters should wear proper protective equipment and self-breathing apparatus.
Suitable extinguishing media:Water/Dry chemical powder/Carbon dioxide/Foam and dry sand.
Hazardous combustion products: Carbon monoxide,smoke,fumes and oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES			
Personal precautions:	Wear proper protective equipment. In case of insufficient ventilation, wear suitable respiratory equipment. Shut off all sources of ignition. Avoid contact with skin and eyes. Remove ignition sources and ventilate the area. Evacuate personnel to safe area.evacuate non-essential personnel.		
Environmental precautions:	Do not wash away into sewer,watercourse or river. Prevent spills from entaering a lot of outflow,watercourses or low areas. In oder to prevent a lot of outflow,it shoulds with the ground etc.		
Methods for cleaning up:	Take up spilled material with ashes or other absorbents. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.		

	7. HANDLING AND STORAGE
Handling:	Keep away from sources of ignition No smoking. Avoid contact with eyes.
	Avoid contact withskin. Do not swallow. Do not breathe gas/fumes/vapour/spray.
	Use only in well-ventilated areas.When using do not eat or drink.
	Wash hands before breaks and immediately after handling the product.
Storage:	Keep out of the reach of children. Keep container in a well-ventilated place.
	Keep away from food,drink and animal feedingstuffs.

Ingredient (s)	Exposure Limits (ACGIH-TLV)
carbon black	3.5mg/m3
tin(IV) oxide	2.Omg/m3(TWA), as Sn
C.I.Pigment Blue 15	-
C.I.Pigment Green 7	_
titanium dioxide	10mg/m3
ferric oxide	5mg/m3, as Fe

Exposure controls:

Occupational exposure controls: Provide adequate local exhaust ventilation to maintainworker exposure below exposure limits. Personal protective equipment:

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection: Wear suitable gloves.

Eye protection: Wear safety glasses with side shields.

Skin protection: Wear suitable protective clothing.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

	9. PHYSICAL AND CHEMICAL PROPERTIES
	Physical State: Liquid.
	Colour: By color
	Odour: Slight
	pH: 8.0 - 9.0
	Boiling point / boiling range: 100°C (water)
	Melting point / melting range: No information available.
	Flash point: No information available.
	Flammability (solid, gas): No information available.
	Explosive properties: No information available.
	Oxidising properties: No information available.
	Vapour pressure: No information available.
	Relative density (of concentrate): 1.0 - 1.5
S	Solutility (in water) (of concentrate): Complete.
	Solutility (in oil) (of concentrate): Impossible
F	Partition coefficient: n-octanol/water: No information available.
	Viscosity (of concentrate): No information available.
	Miscibility: No information available.
	Vapor density: No information available.
	Evaporation rate: No information available.
	Auto-ignition temperature: No information available.
	Lower Flammability Limit: No information available.
	Upper Flammability Limit: No information available.

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Conditions to avoid: No dangerous reaction known under conditions of normal use. Materials to avoid: Acids. Bases. Oxidizers. Reducing agents. Hazardous decomposition products: No information available.

11. TOXICOLOGICAL INFORMATION

■carbon black
Acute toxicity-ORAL: LD50:>15400mg/kg(rat)
■tin(IV) oxide
Acute toxicity-ORAL: LD50:>20g/kg(rat)
■C.I.Pigment Blue 15
Acute toxicity-ORAL: LD50:>2000mg/kg(rat)
■C.I.Pigment Green 7
Acute toxicity-ORAL: LD50:≧5000mg/kg(rat)
∎titanium dioxide
Acute toxicity-ORAL: LD50:>10000mg/kg(rat)
■ferric oxide
No information available.

12. ECOLOGICAL INFORMATION

Toxicity:	No further relevant information available.
Aquatic toxicity:	No further relevant information available.
Persistence and degradability:	No further relevant information available.
Behavior in environmental systems:	No further relevant information available.
Bioaccumulative potential:	No further relevant information available.
Mobility in soil:	No further relevant information available.
Additional ecological information:	No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Do not dump sewers, on the ground or into any of water. Consult an expert on the disposal of recovered material. Be sure to mention name, catalog number quantity of the material. Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

■Land transport Not classified as a dangerous good under transport regulations.

■ Inland waterway transport Not classified as a dangerous good under transport regulations.

■Sea transport Not classified as a dangerous good under transport regulations.

■Air transport Not classified as a dangerous good under transport regulations.

■UN No. Not applicable It does not fall under the dangerous goods under the UN Recommendation.

15. REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or in your region be examined by your own responsibility.

16. OTHER INFORMATION

Disclaimer: Original colors / Pearl / Japanesque colour carry AP mark . The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

1. CHEMICAL PRODUCT AND IDENTIFICATION

Chemical product name: ACRYL GOUACHE⑤ Luminous / Gravish / Pastel / Lame Color series / Color Pearl Name of manufacturer: Turner Colour Works Ltd. Address: 2-15-7 mitsuyakita yodogawa-ku,Osaka-fu,Japan Name of section: R&D Phone number: :+81-(0)6-6308-1216 Emergency call: :+81-(0)6-6308-1216 Fax number: :+81-(0)6-6305-3018 E-MAIL: kenkyuu@turner.co.jp Revised Date / Issued Data: Mar. 29. 2018 Form No. : 1344-03 Colors: ■Pastel Enamel, Pastel Peach, Pastel Pink, Pastel Sand, Pastel Lime, Pastel Emerald, Pastel Blue, Pastel Lavender, Pastel Lilac, Pastel Lemon, Pastel Orange, Pastel Rose, Pastel Green, Pastel Olive, Pastel Marine, Grayish Red, Grayish Beige, Grayish Brown, Grayish Green, Grayish Blue, Grayish Purple, Lumi. White, Lumi. Lemon, Lumi. Orange, Lumi. Red, Lumi. Blue, Lumi. Green, Lumi. Rose, Lame. Clear Opal, Lame. Clear Diamond, Lame. Yellow Opal, Lame. Green Emerald, Lame. Pink Coral, Lame. Blue Diamond, Lame. Purple Peridot, Lame Lime Emerald, Lame. Orange Crystal, Lame. Marine Sapphire, Lame. Black Diamond, Lame. Gold, Lame. Silver, Colour Pearl White, Colour Pearl Lemon, Colour Pearl Yellow, Colour Pearl Pink, Colour Pearl Orange, Colour Pearl Red, Colour Pearl Magenta, Colour Pearl Lime, Colour Pearl Emerald, Colour Pearl Green, Colour Pearl Mint, Colour Pearl Aqua, Colour Pearl Turquoise, Colour Pearl Marine,

Colour Pearl Indigo, Colour Pearl Lilac, Colour Pearl Violet, Colour Pearl Blackmixing

2. HAZARDS IDENTIFICATION

GHS Classification

Precautionary statements:	Not applicable.
Other hazards:	Not applicable.
hazard pictograms:	Not applicable.
Signal word:	Not applicable.
Hazard statements:	Not applicable.
GHS Health and Environmental Hazards:	Not applicable.
GHS Physical Hazards:	Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

General product description: Acrylic emulsion paints

Substance/Mixture: Mixture

		CAS No.	Remarks
Ingredients and composition:	acrylic emulsion	—	
	carbon black	1333-86-4	
	C.I.Pigment Blue 15	147-14-8	
	C.I.Pigment Green 7	1328-53-6	
	titanium dioxide	13463-67-7	
	ferric oxide	1309-37-1	
	iron hydroxide oxide yellow	51274-00-1	

	4.FIRST - AID MEASURES
Eye contact	Remove any contact lenses at once.
	Flush eyes well with flooding amounts of running water for at least 15minutes.
	assure adequate flushing be separating the eyelids with sterile fingers.
	If irritation oersists, consult a physician.
Skin contact	Remove all contaminated clothing
	Washthe affected area with plenty of water with mild soap
	If irritation is continued, refer to medical attention.
Inhalation	Remove the victim from the contamination immediately to fresh air.
	If breathing is weak, irregular or has stopped, open his airway, loosen his and belt
	and adminisiter artificial respiration. And refer for medical attention.
Ingestion	Do not induce vomiting and refer to medical attention.
	never give anything to someone who is unconscious.

5. FIRE - FIGHTING MEASURES

Specific hazards regarding with fire fighting measure:

Apply water from a safe distance to cool and project surrounding area. Firefighters should wear proper protective equipment and self-breathing apparatus. Suitable extinguishing media: Water/Dry chemical powder/Carbon dioxide/Foam and dry sand.

Hazardous combustion products: Carbon monoxide, smoke, fumes and oxides of carbon.

	6. ACCIDENTAL RELEASE MEASURES
Personal precau	tions: Wear proper protective equipment.
	In case of insufficient ventilation, wear suitable respiratory equipment.
	Shut off all sources of ignition.
	Avoid contact with skin and eyes.
	Remove ignition sources and ventilate the area.
	Evacuate personnel to safe area.evacuate non-essential personnel.
Environmental precau	tions: Do not wash away into sewer,watercourse or river.
	Prevent spills from entaering a lot of outflow,watercourses or low areas.
	In oder to prevent a lot of outflow, it shoulds with the ground etc.
Methods for cleani	ng up: Take up spilled material with ashes or other absorbents.
	After material is completely picked up, wash the spill site with soap and water
	and ventilate the area.
	Put all wastes in a plastic bag for disposal and seal it tightly.
	Remove, clean, or dispose of contaminated clothing.

	7. HANDLING AND STORAGE
Handling:	Keep away from sources of ignition No smoking. Avoid contact with eyes.
	Avoid contact withskin. Do not swallow. Do not breathe gas/fumes/vapour/spray.
	Use only in well-ventilated areas.When using do not eat or drink.
	Wash hands before breaks and immediately after handling the product.
Storage:	Keep out of the reach of children. Keep container in a well-ventilated place.
	Keep away from food,drink and animal feedingstuffs.

Ingredient (s)	Exposure Limits (ACGIH-TLV)	
carbon black	3.5mg/m3	
C.I.Pigment Blue 15	-	
C.I.Pigment Green 7	-	
titanium dioxide	10mg/m3	
ferric oxide	5mg/m3,as Fe	
iron hydroxide oxide yellow	5mg/m3,as Fe	

Exposure controls:

Occupational exposure controls: Provide adequate local exhaust ventilation to maintainworker exposure below exposure limits. Personal protective equipment:

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Hand protection: Wear suitable gloves. Eye protection: Wear safety glasses with side shields. Skin protection: Wear suitable protective clothing. Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

	9. PHYSICAL AND CHEMICAL PROPERTIES
-	State: Liquid.
	Colour: By color
	Odour: Slight
	pH: 8.0 – 9.0
Boiling point / boiling r	ange: 100°C (water)
Melting point / melting	; range: No information available.
Flash	n point: No information available.
Flammability (solid	l, gas): No information available.
Explosive prop	perties: No information available.
Oxidising prop	perties: No information available.
Vapour pr	essure: No information available.
Relative density (of concen	itrate): 1.0 - 1.5
Solutility (in water) (of concen	itrate): Complete.
Solutility (in oil) (of concen	ıtrate): Impossible
Partition coefficient: n-octanol	/water: No information available.
Viscosity (of concen	ntrate): No information available.
Misci	bility: No information available.
Vapor d	lensity: No information available.
Evaporatio	on rate: No information available.
Auto-ignition tempe	erature: No information available.
Lower Flammability	/Limit: No information available.
Upper Flammability	/Limit: No information available.

10.STABILITY AND REACTIVITY Stability: Stable under recommended storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Conditions to avoid: No dangerous reaction known under conditions of normal use. Materials to avoid: Acids. Bases. Oxidizers. Reducing agents. Hazardous decomposition products: No information available.

11. TOXICOLOGICAL INFORMATION

■carbon black
Acute toxicity-ORAL: LD50:>15400mg/kg(rat)
■C.I.Pigment Blue 15
Acute toxicity-ORAL: LD50:>2000mg/kg(rat)
■C.I.Pigment Green 7
Acute toxicity-ORAL: LD50: \geq 5000mg/kg(rat)
∎titanium dioxide
Acute toxicity-ORAL: LD50:>10000mg/kg(rat)
■ferric oxide
No information available.
■iron hydroxide oxide yellow
No information available.

12. ECOLOGICAL INFORMATION

Toxicity	No further relevant information available.
Aquatic toxicity:	No further relevant information available.
Persistence and degradability:	No further relevant information available.
Behavior in environmental systems:	No further relevant information available.
Bioaccumulative potential:	No further relevant information available.
Mobility in soil:	No further relevant information available.
Additional ecological information:	No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Do not dump sewers, on the ground or into any of water. Consult an expert on the disposal of recovered material. Be sure to mention name, catalog number quantity of the material. Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

■Land transport Not classified as a dangerous good under transport regulations.

■Inland waterway transport Not classified as a dangerous good under transport regulations.

■Sea transport Not classified as a dangerous good under transport regulations.

■Air transport Not classified as a dangerous good under transport regulations.

■UN No. Not applicable It does not fall under the dangerous goods under the UN Recommendation.

15. REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or in your region be examined by your own responsibility.

16. OTHER INFORMATION

Disclaimer: Luminous / Grayish / Pastel / Lame Color series / Color Pearl carry AP mark . The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

1. CHEMICAL PRODUCT AND IDENTIFICATION Chemical product name: ACRYL GOUACHE⑥ Metallic / Japanesque Metallic Name of manufacturer: Turner Colour Works Ltd. Address: 2-15-7 mitsuyakita yodogawa-ku, Osaka-fu, Japan Name of section: R&D Phone number: :+81-(0) 6-6308-1216 Emergency call: :+81-(0) 6-6308-1216 Fax number: :+81-(0) 6-6305-3018 E-MAIL: kenkyuu@turner.co.jp Revised Date / Issued Data: Mar.29.2018 Form No.: 1339-03 Colors: ■Gold Light, Gold Deep, Silver, Gold Orange, Bronze, Copper, Antique Gold, Antique Bronze, Antique Silver, J. Blue Gold, J. Red Gold, J. Green Gold, J. Black Gold, J. Blue Bronze, J. Copper,

J. Red Bronze, J. Silver, J. Black Silver

2. HAZARDS IDENTIFICATION

GHS Classification

GHS Physical Haz	zards:	Not applicable.
GHS Health and Environmental Haz Hazardous to the aquatic env		category 3
Hazardous to the aquatic envir		
hazard pictograms: Signal word:	No nictogram No signal wo	ord
Hazard statements:		
	H4O2 Harmful to a	aquatic life
	H412 Harmful to a	equatic life with long lasting effects
Precautionary statements:	P273 Avoid releas	se to the environment.

Other hazards:

P501 Dispose of contents/container in accordnce with

local/regional/national/international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

General product description: Acrylic emulsion paints

	CAS No.	Remarks
Ingredients and composition: acrylic emulsion	-	
carbon black	1333-86-4	
chromium(iii) oxide	1308-38-9	PRTR Law
chromium and its compounds		
tin(IV) oxide	18282-10-5	
titanium dioxide	13463-67-7	
ferric oxide	1309-37-1	
iron hydroxide oxide yellow	51274-00-1	

Composition Ingredient(%)	colors	chromium(iii) oxide	
		as Cr	
	GOLD LIGHT	-1%	
	GOLD DEEP	-1%	
	GOLD ORANGE	-1%	
	J. BLUE GOLD	-1%	
	J. RED GOLD	-1%	
	J. BLUE BRONZE	-1%	
	J. COPPER	-1%	
	J. SILVER	-1%	

4. FIRST - AID MEASURES
Eye contact: Remove any contact lenses at once.
Flush eyes well with flooding amounts of running water for at least 15minutes.
assure adequate flushing be separating the eyelids with sterile fingers.
If irritation oersists, consult a physician.
Skin contact: Remove all contaminated clothing
Washthe affected area with plenty of water with mild soap
If irritation is continued, refer to medical attention.
Inhalation: Remove the victim from the contamination immediately to fresh air.
If breathing is weak, irregular or has stopped, open his airway, loosen his and belt
and adminisiter artificial respiration. And refer for medical attention.
Ingestion: Do not induce vomiting and refer to medical attention.
never give anything to someone who is unconscious.

5. FIRE - FIGHTING MEASURES		
Specific hazards regarding with fire fighting measure:		
Apply water from a safe distance to cool and project surrounding area.		
Firefighters should wear proper protective equipment and self-breathing apparatus.		
Suitable extinguishing media: Water/Dry chemical powder/Carbon dioxide/Foam and dry sand.		
Hazardous combustion products: Carbon monoxide,smoke,fumes and oxides of carbon.		

6. ACCIDENTAL RELEASE MEASURES
Personal precautions: Wear proper protective equipment.
In case of insufficient ventilation, wear suitable respiratory equipment.
Shut off all sources of ignition.
Avoid contact with skin and eyes.
Remove ignition sources and ventilate the area.
Evacuate personnel to safe area.evacuate non-essential personnel.
Environmental precautions: Do not wash away into sewer,watercourse or river.
Prevent spills from entaering a lot of outflow, watercourses or low areas.
In oder to prevent a lot of outflow, it shoulds with the ground etc.
Methods for cleaning up: Take up spilled material with ashes or other absorbents.
After material is completely picked up, wash the spill site with soap and water
and ventilate the area.
Put all wastes in a plastic bag for disposal and seal it tightly.
Remove, clean, or dispose of contaminated clothing.

7. HANDLING AND STORAGE

Handling: Keep away from sources of ignition. - No smoking. Avoid contact with eyes. Avoid contact withskin. Do not swallow. Do not breathe gas/fumes/vapour/spray. Use only in well-ventilated areas. When using do not eat or drink. Wash hands before breaks and immediately after handling the product. Storage: Keep out of the reach of children. Keep container in a well-ventilated place. Keep away from food, drink and animal feedingstuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient (s)	Exposure Limits (ACGIH-TLV)
carbon black	3.5mg/m3
chromium(iii) oxide	0.5mg/m3, as Cr
tin(IV) oxide	2.Omg/m3(TWA),as Sn
titanium dioxide	10mg/m3
ferric oxide	5mg/m3, as Fe
iron hydroxide oxide yellow	5mg/m3, as Fe

Exposure controls:

Occupational exposure controls: Provide adequate local exhaust ventilation to maintainworker exposure below exposure limits. Personal protective equipment:

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection: Wear suitable gloves.

Eye protection: Wear safety glasses with side shields.

Skin protection: Wear suitable protective clothing.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

9.	PHYSICAL AND CHEMICAL PROPERTIES
Physical State:	Liquid.
Colour:	By color
Odour:	Slight
:Hq	8.0 – 9.0
Boiling point / boiling range:	100°C (water)
Melting point / melting range:	No information available.
Flash point:	No information available.
Flammability (solid, gas):	No information available.
Explosive properties:	No information available.
Oxidising properties:	No information available.
Vapour pressure:	No information available.
Relative density (of concentrate):	1.1 – 1.3
Solutility (in water) (of concentrate):	Complete.
Solutility (in oil) (of concentrate):	Impossible
Partition coefficient: n-octanol/water:	No information available.
Viscosity (of concentrate):	No information available.
Miscibility:	No information available.
Vapor density:	No information available.
Evaporation rate:	No information available.
Auto-ignition temperature:	No information available.
Lower Flammability Limit:	No information available.
Upper Flammability Limit:	No information available.

10.STABILITY AND REACTIVITY Stability: Stable under recommended storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Conditions to avoid: No dangerous reaction known under conditions of normal use. Materials to avoid: Acids. Bases. Oxidizers. Reducing agents. Hazardous decomposition products: No information available.

11. TOXICOLOGICAL INFORMATION

■iron hydroxide oxide yellow

No information available.

12. ECOLOGICAL INFORMATION

Toxicity:	No further relevant information available.
Aquatic toxicity:	No further relevant information available.
Persistence and degradability:	No further relevant information available.
Behavior in environmental systems:	No further relevant information available.
Bioaccumulative potential:	No further relevant information available.
Mobility in soil:	No further relevant information available.
Additional ecological information:	No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Do not dump sewers, on the ground or into any of water. Consult an expert on the disposal of recovered material. Be sure to mention name, catalog number quantity of the material. Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

■Land transport Not classified as a dangerous good under transport regulations.

■Inland waterway transport Not classified as a dangerous good under transport regulations.

■Sea transport Not classified as a dangerous good under transport regulations.

■Air transport Not classified as a dangerous good under transport regulations.

■UN No. Not applicable It does not fall under the dangerous goods under the UN Recommendation.

4 / 5

15. REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or in your region be examined by your own responsibility.

16. OTHER INFORMATION

Disclaimer: Metallic / Japanesque Metallic carry AP mark .

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

1. CHEMICAL PRODUCT AND IDENTIFICATION Chemical product name: ACRYL GOUACHE Jet Black Name of manufacturer: Turner Colour Works Ltd. Address: 2-15-7, Mitsuyakita, Osaka Shi Yodogawa Ku, Osaka Fu, 532-0032, Japan Name of section: R&D Phone number: :+81-(0).6-6308-1216 Emergency call: :+81-(0).6-6308-1216 Fax number: :+81-(0).6-6305-3018 E-MAIL: kenkyuu@turner.co.jp Revised Date / Issued Data: Apr. 09. 2019 Form No.: 1338-04 2. HAZARDS IDENTIFICATION GHS Classification

Health Hazard : Reproductive toxicity: category 2 Environmental Hazards: Not applicable. hazard pictograms: silhouette Signal word: Warning Hazard statements: H361 Suspected of damaging fertility or the unborn child. Precautionary statements: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280f Wear protective gloves/protective clothing/eye protection/face protection. P308+P313 IF exposed or concerned: Get medical advice/attention. Other hazards: P405 Store locked up.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture General product description: Acrylic emulsion paints

		(%)	CAS No.	Remarks
Ingredients and composition:	acrylic emulsion	22%	—	
	Aniline Black	27%	13007-86-8	
	included [chromium(iii) oxide]		1308-38-9	PRTR Law
	included [water-soluble copper salts]			PRTR Law
	Thickener	3.58%	secret	
	1, 2-Propanediol	1.42%	57-55-6	
	3-Hydroxy-2,2,4-trimethylpentyl Isobutyrate	1.16%	25265-77-4	
	olyethyleneglycol octylphenyl ether	0.51%	9036-19-5	
	2-Amino-2-methyl-1-propanol	0. 47%	124-68-5	
	Hydroxyethyl Cellulose	0.37%	9004-62-0	
	Antifoaming Agent	0.31%	secret	
	Sodium alkyl naphthalene sulfonate	0. 27%	secret	
	2, 4, 7, 9-Tetramethy1-5-decyne-4, 7-dio1	0.21%	126-86-3	
	Phthalocyanine	0.11%	secret	
	2-Butylbenzo[d]isothiazol-3(2H)-one	0.10%	4299-07-4	
	1, 2-Benzisothiazol-3(2H)-one	0.09%	2634-33-5	
	Dispersible polymer	0.07%	secret	
	Polyether	0. 03%	secret	
	2-Chloroacetamide	0. 02%	79-07-2	
	Water	42.55%	7732-18-5	
	TOTAL	100%		

	4. FIRST - AID MEASURES
Eye contact:	Remove any contact lenses at once.
	Flush eyes well with flooding amounts of running water for at least 15minutes.
	assure adequate flushing be separating the eyelids with sterile fingers.
	If irritation oersists, consult a physician.
Skin contact:	Remove all contaminated clothing
	Washthe affected area with plenty of water with mild soap
	If irritation is continued, refer to medical attention.
Inhalation:	Remove the victim from the contamination immediately to fresh air.
	If breathing is weak, irregular or has stopped, open his airway, loosen his and belt
	and adminisiter artificial respiration. And refer for medical attention.
Ingestion:	Do not induce vomiting and refer to medical attention.
	never give anything to someone who is unconscious.

5.FIRE - FIGHTING MEASURES

Specific hazards regarding with fire fighting measure:

Apply water from a safe distance to cool and project surrounding area.

Firefighters should wear proper protective equipment and self-breathing apparatus.

Suitable extinguishing Water/Dry chemical powder/Carbon dioxide/Foam and dry sand.

zardous combustion products: Carbon monoxide, smoke, fumes and oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear proper protective equipment.
	In case of insufficient ventilation, wear suitable respiratory equipment.
	Shut off all sources of ignition.
	Avoid contact with skin and eyes.
	Remove ignition sources and ventilate the area.
	Evacuate personnel to safe area.evacuate non-essential personnel.
Environmental precautions:	Do not wash away into sewer,watercourse or river.
	Prevent spills from entaering a lot of outflow, watercourses or low areas.
	In oder to prevent a lot of outflow, it shoulds with the ground etc.
Methods for cleaning up:	Take up spilled material with ashes or other absorbents.
	After material is completely picked up, wash the spill site with soap and water
	and ventilate the area.
	Put all wastes in a plastic bag for disposal and seal it tightly.
	Remove, clean, or dispose of contaminated clothing.

7. HANDLING AND STORAGE

Handling: Keep away from sources of ignition. - No smoking. Avoid contact with eyes. Avoid contact withskin. Do not swallow. Do not breathe gas/fumes/vapour/spray. Use only in well-ventilated areas. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.
Storage: Keep out of the reach of children. Keep container in a well-ventilated place. Keep away from food, drink and animal feedingstuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient (s)	Exposure Limits (ACGIH-TLV)
chromium(iii) oxide	0.5mg/m3,as Cr
water-soluble copper salts	1mg/m3, as Cu

Exposure controls:

Occupational exposure controls: Provide adequate local exhaust ventilation to maintainworker exposure below exposure limits.

Personal protective equipment:

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection: Wear suitable gloves.

Eye protection: Wear safety glasses with side shields.

Skin protection: Wear suitable protective clothing.

Environmental exposure controls:

Maintain levels below Community environmental protection thresholds.

General hygiene considerations:

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid. Colour: Black Odour: Slight pH: 8.0 - 9.0 Boiling point / boiling range: 100°C (water) Melting point / melting range: No information available. Flash point: No information available. Flammability (solid, gas): No information available. Explosive properties: No information available. Oxidising properties: No information available. Vapour pressure: No information available. Relative density (of concentrate): 1.134 Solutility (in water) (of concentrate): Complete. Solutility (in oil) (of concentrate): Impossible Partition coefficient: n-octanol/water: No information available. Viscosity (of concentrate): No information available. Miscibility: No information available. Vapor density: No information available. Evaporation rate: No information available. Auto-ignition temperature: No information available. Lower Flammability Limit: No information available. Upper Flammability Limit: No information available.

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Conditions to avoid: No dangerous reaction known under conditions of normal use. Materials to avoid: Acids. Bases. Oxidizers. Reducing agents. Hazardous decomposition products: No information available.

11. TOXICOLOGICAL INFORMATION

 chromium(iii) oxide No information available.
 water-soluble copper salts No information available.

12. ECOLOGICAL INFORMATION

Toxicity : No further relevant information available.

Aquatic toxicity:

■chromium(iii) oxide Hazardous to the aquatic environment (acute) : category 1 Hazardous to the aquatic environment (chronic) : category 1

Persistence and degradability: No further relevant information available. Behavior in environmental systems: No further relevant information available. Bioaccumulative potential: No further relevant information available. Mobility in soil: No further relevant information available. Additional ecological information: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Do not dump sewers, on the ground or into any of water. Consult an expert on the disposal of recovered material. Be sure to mention name, catalog number quantity of the material. Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

■Land transport Not classified as a dangerous good under transport regulations.

■Inland waterway transport Not classified as a dangerous good under transport regulations.

■Sea transport Not classified as a dangerous good under transport regulations.

■Air transport Not classified as a dangerous good under transport regulations.

■UN No. Not applicable It does not fall under the dangerous goods under the UN Recommendation.

15. REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or in your region be examined by your own responsibility.

■Law concerning Pollutant Release and Transfer Register / PRTR Law chromium(iii) oxide(Class1 No.87), water-soluble copper salts(class1 No.272)

16. OTHER INFORMATION

Disclaimer: JET BLACK carry CL mark.

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

	T.CHEMICAL PRODUCT AND IDENTIFICATION
Chemical product name:	TURNER Acryl Gouache Glass Primer, Metal Primer
Colors:	Lemon, Light Green, Sky Blue, Blue Compose, Vermilion, Scarlet, Orange, Green, Deep Green, Ultramarine, Violet, Rose, Pink, Viridian, Opera red, Red Purple
Name of manufacturer:	Turner Colour Works Ltd.
Address:	2–15–7 mitsuyakita yodogawa–ku,Osaka–fu,Japan
Name of section:	R&D
Phone number:	:+81- (0) 6-6308-1216
Emergency call:	:+81- (0) 6-6308-1216
Fax number:	:+81- (0) 6-6305-3018
E-MAIL:	kenkyuu@turner.co.jp
Revised Date / Issued Data:	Mar.29.2018
Form No.:	2033-03

GHS Classification

Physical Hazards:	Without the need of classification
Health Hazards:	Classification not possible, Not classified
Environment Hazards:	Classification not possible, Not classified
Hazard symbol	None
Signal word	None
Hazard statement	
	None

Precautionary statements

Security precaution:

None

Response:

None

storage:

P405 Store locked up.

Disposal:

P501 Properly dispose of to be in accordance with the laws and regulations of the contents / container .

Substance/Mixture: Mixture

eneral product description: Synthetic resin paints

Ingredients and composition (%):

Name of substance	Acrylic emulsion	
Cas No.	secret	
Glass Primer	75-80	
Metal Primer	75-80	

	4.FIRST – AID MEASURES
Eye contact:	Flush eyes well with flooding amounts of running water for at least 15minutes.
	Remove contact lenses, if worn next to easily remove them.
	Wash thoroughly to the back of the eyelids.
	Take a doctor's diagnosis as soon as possible.
Skin contact:	Wipe off deposits quickly with cloth.
	Wash thoroughly with large amounts of water and soap or skin detergent.
	Do not use solvent or thinner.
	If there is a change in appearance, if there is irritation / pain, if you feel uncomfortable get a doctor's diagnosis.
Inhalation:	If you feel bad by inhaling steam, gas, etc. move to a fresh air place and rest in a posture that is easy to breathe.
	If you feel unwell, call a doctor.
	If symptoms persist, call a doctor.
Ingestion:	In case of accidental swallowing, get medical attention immediately after taking a rest.
	Do not swallow vomit.
	Do not induce vomiting except by doctor's instructions.
	5.FIRE – FIGHTING MEASURES

5.FIRE - FIGHTING MEASURI

Specific hazards regarding with fire fighting measure:

Apply water from a safe distance to cool and project surrounding area.

Firefighters should wear proper protective equipment and self-breathing apparatus.

Suitable extinguishing media: Water/Dry chemical powder/Carbon dioxide/Foam and dry sand.

Hazardous combustion products: Carbon monoxide, smoke, fumes and oxides of carbon.

6.ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear proper protective equipment.
	In case of insufficient ventilation, wear suitable respiratory equipment.
	Shut off all sources of ignition.
	Avoid contact with skin and eyes.
	Remove ignition sources and ventilate the area.
	Evacuate personnel to safe area.evacuate non-essential personnel.
Environmental precautions:	Do not wash away into sewer,watercourse or river.
	Prevent product from discharging into the environment.
	After collecting spills, wash with plenty of water and dispersing agent.
Methods for cleaning up:	Collect the spill into a sealable container and transfer it to a safe place.
	Handle deposits, waste, etc. according to relevant laws and regulations.
	Recovers with scoops, waste etc.
	Put all wastes in a plastic bag for disposal and seal it tightly.
	In case of large amount of embankment etc. to prevent spills. Washing with water, etc., also cause emissions to rivers and the like, causing environmental pollution, so be careful.

7.HANDLING AND STORAGE

Handling: Handle in a well-ventilated place.

Keep containers tightly closed each time.

Touch the skin, mucosa, or clothing, and wear protective equipment to prevent contact with eyes.

Wash hands, face etc thoroughly after handling, do not bring pollution protective equipment such as gloves to resting place etc.

Storage: Keep out of the reach of children. Keep container in a well-ventilated place. Keep away from food,drink and animal feedingstuffs.

8.EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient(s)	Exposure Limits (ACGIH-TLV)	
N/A		

Exposure controls

Occupational exposure controls: Provide adequate local exhaust ventilation to maintainworker exposure below exposure limits.

Personal protective equipment

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection: Wear suitable gloves.

Eye protection: Wear safety glasses with side shields.

Skin protection: Wear suitable protective clothing.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

General hygiene considerations: Handle in accordance with good industrial hygiene and safety practice.

9.PHYSICAL AND CHEMICAL PROPERTIES			
Appearance:	Liquid.		
Colour:	Transparent after drying		
Odour:	Acrylic odor		
pH:	8.0 - 9.0		
Boiling point / boiling range:	100°C(Water)		
Melting point / melting range:	No information available.		
Flash point:	No information available.		
Flammability (solid, gas):	No information available.		
Explosive properties:	No information available.		
Oxidising properties:	No information available.		
Vapour pressure:	No information available.		
Relative density (of concentrate):	1.00 - 1.10		
Solutility (in water) (of concentrate):	Complete.		
Solutility (in oil) (of concentrate):	Impossible		
Partition coefficient: n-octanol/water:	No information available.		
Viscosity (of concentrate):	No information available.		
Miscibility:	No information available.		
Vapor density:	No information available.		
Evaporation rate:	No information available.		
Auto-ignition temperature:	No information available.		
Lower Flammability Limit:	No information available.		
Upper Flammability Limit:	No information available.		

10.STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Conditions to avoid: No dangerous reaction known under conditions of normal use.

Incompatible hazardous substance: Reacts with oxidizing substances.

Hazardous decomposition products: If this material does not burn, if the coating etc. burns, it may generate harmful gas such as CO, NOx, halogen gas.

11.TOXICOLOGICAL INFORMATION

Component	Acute toxicity			IARC group
	Oral(mg/kg)	Percutaneous(mg/kg)	Inhalation: steam(mg/L)	IANC group
N/A				

12.ECOLOGICAL INFORMATION

Component	HAZARDOUS TO THE AQUATIC ENVIRONMENT (ACUTE)	HAZARDOUS TO THE AQUATIC ENVIRONMENT (CHRONIC)
N/A		

13.DISPOSAL CONSIDERATIONS

Do not dump sewers, on the ground or into any of water. Consult an expert on the disposal of recovered material. Be sure to mention name, catalog number quantity of the material. Disposal must be made according to official regulations.

14.TRANSPORT INFORMATION

Land transport

Not classified as a dangerous good under transport regulations.

Inland waterway transport

Not classified as a dangerous good under transport regulations.

Sea transport Not classified as a dangerous good under transport regulations.

Air transport Not classified as a dangerous good under transport regulations.

UN No.

Not applicable

It does not fall under the dangerous goods under the UN Recommendation.

15.REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or in your region be examined by your own responsibility.

16.OTHER INFORMATION Disclaimer: The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.