

ABS-MSDS

Part I: Supplier Information

Product: ABS Resin Item# Tairilac AG1000,AG100H,AG12AO,AG12A1,etc.
 Supplier: Taiwan chemical fiber co., LTD
 Address: Address: no.1 zhongyang industrial zone, xingang township, jiayi county
 Phone: +886-5-3772111-645
 Emergent Contact: +886-5-3772111-645

Part II: Composition Data

Product: ABS Resin (Acrylonitrile-Butadiene styrene copolymer)

Component	content (%)	CAS.NO.
ABS Resin	>98%	9003-56-9
Others	≤2%	

Part III Hazard Data

Hazardous Category: NO, not in GHS 27 hazard classification.
 Other hazardous:
 Eyes: fine powder or smoke from processing may cause irritation to eyes.
 Skin: high temperature melting state during the processing, if contact with the skin may cause skin burns.
 Inhalation: fine powder or smoke from processing, if enter the respiratory tract may cause irritation.
 Ingestion: a small amount of accidental ingestion, basically no harm; Large amount of accidental ingestion, suggest medical treatment to remove.

Part IV: First Aid

Inhalation: The shape suggests that it is not necessarily colloidal particles that are being inhaled. The gases produced by fused resin are inhaled, moved to fresh air.

Seek medical advice immediately if have a cough or difficulty breathing

Eye Contact: When the granule enters the eye, do not knead the eye, rinse immediately with clear water. Remove the penetrant immediately. Seek medical advice immediately if there is any abnormality. Cannot knead, will stimulate or injure cornea.

Inhalation: Although it may not occur, it is not highly toxic even when ingested.

If ingesting large amounts, seek medical advice immediately

Skin contact: Rinse with water. Wash your skin with soap immediately after contact with gases from hot substances.

Most important symptom and harm effect: no harm without processing.

During processing, scald damage.

Protection for first responders: wear dust mask and safety glasses.

Note to physicians: No special antidote is required.

Supportive therapy should be given depending on the patient's symptoms.

Part V: Fire Suppression

Suitable fire extinguishing agent: water spray, multi-purpose fire extinguisher.

Fire hazards: high temperature may cause decomposition of polymers, which may produce smoke or fragments of polymers, which may contain irritants and/or toxic substances. Lack of oxygen will release smoke; mechanical treatment will produce dust. So during operation, dust accumulation should be prevented from causing explosion.

Fire extinguishing equipment: fire fighters should wear full fireproof clothing. If there is not enough fresh air in the surrounding environment, they should wear positive pressure air breathing apparatus (SCBA). If there is not enough safety protective equipment, fire fighters should use fire extinguishing equipment at a safe place away from the safe distance to extinguish the fire.

Part VI: Disposal of Leakage

Emergency treatment: clean up when leaking, and recycle after separating impurities.

Notice for individual: Spill on the floor or stairs, will occur slip or fall risk, should be removed immediately

Notice for environment: accidental leakage will pollute the environment and must be collected and treated immediately.

Part VII: Safe Disposal and Deposit

Notice of Operation: Process gases can irritate the respiratory organs and skin, causing vomiting and headaches when inhaled in large amounts.

Dust will be generated during granulation, which will cause static electricity and dust explosion. Therefore, the workplace must be kept clean and dust collection should be done well.

Notice of Deposit: Should be placed in a dry and cool place, avoid the sun and close to the source of heat. Stack storage, should be anti - dumping.

Part VIII: Protection under Exposure

Concentration Control: good adequate air circulation is generally required. For some special or normal operations, air extraction equipment may be required.

Permissible parameters: inhalable dust concentration of $5\text{mg}/\text{m}^3$ (maximum concentration of $10\text{mg}/\text{m}^3$ throughout the day).

Personal protective equipment:

Respiratory protection: low concentration protective mask

Hand protection: latex gloves

Eye protection: protective safety goggles

Skin and body protection: long sleeve work clothes.

Hygiene measures: if fine powder remains after contact with colloidal particles, cleaning is recommended.

Part IX: Physical Property

Substance State: solid

Color: White

Shape: granular (3mm)

Smell: light plastic

PH: NO

Melting Point:> 130°C

Spontaneous ignition point: 466°C(ASTM-D1929-77)

Density : 1.03~1.07/25°C

Part X: Stability and Reaction

Stability: Stable

Avoiding state: High temperature and direct sunlight

Prohibited substances: Substances to avoid: strong oxidant.

Decomposed substance: high temperatures during manufacturing operations can lead to soot, including polymer fragments that can cause irritation.

Part XI: Toxicity Date

Urgent toxicity: ND

Sensitivity: ND
Slow or long toxicity: ND
Irritation: ND

Part XII: Environment Data

Possible effects on environmental / environmental circulation: the land-based environment will remain in the soil without decomposition by biochemical processes; In the aquatic environment, the subsidence remains in the sediments. Disintegrating: water is insoluble, remaining in a stable state in the surrounding environment, and will be exfoliated after long-term exposure to sunlight. It is not expected to decompose through biochemical processes at present.

Ecology toxic: ND

Part XIII: Abandoning Disposal

Waste disposal: waste shall not be arbitrarily dumped, especially in the ground, sewage and water sources. It shall be handled in accordance with the relevant laws and regulations of the locality.

Recycling: unused and uncontaminated products may be recycled and reused by licensed recyclers.

Part XIV: Transfer Data

International shipping regulations:

1. Avoid dampness or rough handling, and the packing should not be damaged
2. If the package is damaged, the rubber particles will fall, and it is easy to slip or fall, please clean up as soon as possible

Transportation mode: this product is suitable for sea and air transportation in

inland transportation.

Part XV: Law Data

Applicable regulations:
Occupational safety and health act
Road traffic safety regulations
Waste disposal method
Resource recovery and reuse method
And local laws and regulations.

Part XVI: Others

Reference: ND
Establishing person: Technical group of plastic department, Taiwan chemical fiber
co., LTD
Phone: +886 5 3772111 - 6 36
Establishing Date:2018-11-23

Other mixed colors-MSDS

1. Product Identification

Product Name: other mixed colors

SUPPLIER: RAINBOW PLASTIC COLOURS LTD.

FU MIN INDUSTRIAL ZONE ,FENG GANG TOWN,DONG GUAN CITY.

EMERGENCY CONTACTS: (0769) 87777113 87779115

2. Composition/Information on Ingredients

Product Name: other mixed colors

Component	content (%)	CAS.NO.
SOLVENT YELLOW 114	>30%	75216-45-4
Solvent Red 146	>30%	70956-30-8
C.I. SOLVENT BLUE 35	>30	17354-14-2
Others	≤10%	

3. Physical & Chemical Properties

Appearance: Powder

Odor: No Obvious Odor

4. Hazards Identification

4.1 Classification according to GHS

This substance is classified as not hazardous.

4.2 Labelling (GHS)

Hazard statements: not applicable

Safety precautions: not applicable

4.3 Other hazards

No risks worthy of mention.

5. First Aid Measures

Eyes: In case contact with eyes, rinse immediately with plenty of water, seek medical advice.

Skin: Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of soap and water.

Ingestion: Do not induce vomiting. Wash mouth with water. Seek medical advice.

Inhalation: If discomfort is felt after inhalation of dust, remove affected person to fresh air
summon medical aid.

6. Fire Fighting Measures

Extinguishing Media: Water, Dry Power, Carbon Dioxide or Foam.

Explosion Hazard: In case of fire, do not breathe the fumes evolved.

Protective Equipment: Self-contained breathing apparatus should be worn.

7. Accidental Release Measures

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves
Sweep up, place in a bag and hold for waste disposal, avoid raising dust
Ventilate area and wash spill site after material pickup is complete.

8. Handling & Storage

Handling: Wear suitable protective clothing, glove, eye/face protection and respiratory

protective equipment. Avoid contact with skin and eyes. Possibly install local

exhaust ventilation. Do not eat, smoke or drink whilst handling this product.

Storage: Keep container tightly closed and stored in a cool, well ventilated place. Do

not

allow to come into contact with oxidizing agent.

9. Exposure Controls/Personal Protection

Chemical safety goggles: Compatible chemical-resistant gloves

Niosh/msha-approved respirator: Safety shower and eye bath

Mechanical exhaust required: Do not breathe dust

Avoid contact with eyes, skin and clothing: Wash thoroughly after handling

Irritant: Keep tightly closed store in a cool dry place.

10. Stability and Reactivity

Stability: Stable

Incompatibility: Alkali Materials

Decomposition Product: Toxic Fumes of Carbon Monoxide. Carbon Dioxide.

Nitrogen

Oxides, Hydrogen Chloride Gas and Water.

11. Toxicological Information

Acute effects may be harmful by inhalation, ingestion, or skin absorption.
Cause eye and skin irritation
Material irritating to mucous membranes and upper respiratory tract
To the best of our knowledge, the chemical, physical, and toxicological properties
have not
been thoroughly investigated.

12. Ecological Information

Data not yet available.

13. Disposal Consideration

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an after burner and scrubber.
Observe all federal, state and local environmental regulations.

14. Transport Information

Non-hazardous for air, sea and road freight.

15. Regulatory Information

Hazard Information: Not classified as hazardous to users.
Safety information: Avoid contact with skin and eyes. Do not breathe dust.
Wear suitable protective clothing, gloves and eye/face protection.
Other regulatory: The information contained herein does not information constitute

the user,s
own assessment of work place risk as required by other health & safety
legislation.

16. Other Information

The above information is believed to be correct but does not purport to be all
inclusive and shall be used
only as a guide.
2019 Updated Edition(GHS Compliance).

SOLVENT YELLOW 114-MSDS

1. Product Identification

Product Name: SOLVENT YELLOW 114
SUPPLIER: RAINBOW PLASTIC COLOURS LTD.
FU MIN INDUSTRIAL ZONE ,FENG GANG TOWN,DONG GUAN CITY.
EMERGENCY CONTACTS: (0769) 87777113 87779115

2. Composition/Information on Ingredients

Product Name: SOLVENT YELLOW 114
(CAS No.): SOLVENT YELLOW 114 (C.I.)

Component	content (%)	CAS.NO.
SOLVENT YELLOW 114	>98%	75216-45-4
Others	≤2%	

3. Physical & Chemical Properties

Appearance: Red Powder
Odor: No Obvious Odor

4. Hazards Identification

4.1 Classification according to GHS
This substance is classified as not hazardous.

4.2 Labelling (GHS)
Hazard statements: not applicable
Safety precautions: not applicable

4.3 Other hazards

No risks worthy of mention.

5. First Aid Measures

Eyes: In case contact with eyes, rinse immediately with plenty of water, seek medical advice.

Skin: Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of soap and water.

Ingestion: Do not induce vomiting. Wash mouth with water. Seek medical advice.

Inhalation: If discomfort is felt after inhalation of dust, remove affected person to fresh air
summon medical aid.

6. Fire Fighting Measures

Extinguishing Media: Water, Dry Power, Carbon Dioxide or Foam.

Explosion Hazard: In case of fire, do not breathe the fumes evolved.

Protective Equipment: Self-contained breathing apparatus should be worn.

7. Accidental Release Measures

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves

Sweep up, place in a bag and hold for waste disposal, avoid raising dust

Ventilate area and wash spill site after material pickup is complete.

8. Handling & Storage

Handing: Wear suitable protective clothing, glove, eye/face protection and respiratory protective equipment. Avoid contact with skin and eyes. Possibly install local exhaust ventilation. Do not eat, smoke or drink whilst handling this product.
Storage: Keep container tightly closed and stored in a cool, well ventilated place. Do not allow to come into contact with oxidizing agent.

9. Exposure Controls/Personal Protection

Chemical safety goggles: Compatible chemical-resistant gloves
Niosh/msha-approved respirator: Safety shower and eye bath
Mechanical exhaust required: Do not breathe dust
Avoid contact with eyes, skin and clothing: Wash thoroughly after handling
Irritant: Keep tightly closed store in a cool dry place.

10. Stability and Reactivity

Stability: Stable
Incompatibility: Alkali Materials
Decomposition Product: Toxic Fumes of Carbon Monoxide. Carbon Dioxide.
Nitrogen
Oxides, Hydrogen Chloride Gas and Water.

11. Toxicological Information

Acute effects may be harmful by inhalation, ingestion, or skin absorption.

Cause eye and skin irritation

Material irritating to mucous membranes and upper respiratory tract

To the best of our knowledge, the chemical, physical, and toxicological properties

have not

been thoroughly investigated.

12. Ecological Information

Data not yet available.

13. Disposal Consideration

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator

equipped with an after burner and scrubber.

Observe all federal: state and local environmental regulations.

14. Transport Information

Non-hazardous for air, sea and road freight.

15. Regulatory Information

Hazard Information: Not classified as hazardous to users.

Safety information: Avoid contact with skin and eyes. Do not breathe dust. Wear suitable protective clothing, gloves and eye/face protection.

Other regulatory: The information contained herein does not information constitute the user,s

own assessment of work place risk as required by other health & safety legislation.

16. Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.
2019 Updated Edition(GHS Compliance).

Product name SOLVENT BLUE 35
2019.01.05

1. Identification of the substance/preparation and company

Chemical description PERINONE

SUPPLIER: RAINBOW PLASTIC COLOURS LTD.

FU MIN INDUSTRIAL ZONE ,FENG GANG TOWN,DONG GUAN CITY.

EMERGENCY CONTACTS: (0769) 87777113 87779115

2. Composition/information on ingredients

Information on ingredients	%	Cas-No.	Symbol	R-phrases
C.I.SOLVENT BLUE 35	100		17354-14-2	

3. Hazards identification

ACCORDING TO THE PRESENT KNOWLEDGE OF THIS PRODUCT THERE IS NO KNOWN DANGER TO HUMANS IF THIS PRODUCT IS HANDLED IN THE CORRECT MANNER

4. First-aid measures

If inhaled REMOVE TO FRESH AIR

If skin contact IMMEDIATELY WASH SKIN WITH SOAP & PLENTY OF WATER. SEEK MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.

If eye contact FLUSH EYES IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ASSISTANCE.

If eaten FLUSH MOUTH WITH WATER. SEEK MEDICAL
ADVICE.

Advice to doctors TREAT SYMPTOMATICALLY

5. Fire-fighting measures

Fire extinguishing agents CARBON DIOXIDE, FOAM, WATER
SPRAY

Fire/explosion hazards NONE

Main combustion gas CARBON, AND NITROGEN OXIDES

Personal protection SELF CONTAINED BREATHING
APPARATUS

6. Accidental release measures

Personal protection GLOVES, RESPIRATORY PROTECTION

Environmental precautions DO NOT ALLOW TO CONTAMINATE
WATER COURSES

Spillage procedure VACUUM OR SWEEP UP INTO
CONTAINERS MARKED FOR
DISPOSAL AS CHEMICAL WASTE

Additional information DYESTUFFS CAN STAIN HEAVILY

7. Handling and storage

Occupational hygiene	AVOID INGESTION, INHALATION, SKIN, SKIN AND EYE CONTACT. HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE PRACTICE AND ANY LEGAL REQUIREMENTS
Storage facilities	STORE IN A COOL DRY AREA WITH ADEQUATE VENTILATION
Segregation	NO SPECIAL PRECAUTIONS
Storage conditions	IN COMMON WITH MANY ORGANIC COMPOUNDS IN POWDER FROM IT CAN PRODUCE FLAMMABLE DUST CLOUDS IN AIR. WHILE THIS PRODUCT HAS BEEN TREATED TO MINIMISE SUCH RISK, TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGES. KEEP CONTAINERS CLOSED.

8. Exposure controls/personal protection

Components with THE FOLLOWING EXPOSURE LIMITS
ARE TAKEN FROM THE HEALTH AND
SAFETY EXECUTIVES GUIDANCE

NOTE EH40 OCCUPATIONAL
EXPOSURE LIMITS 1993: TOTAL
INHALABLE DUST:10MGM-3(8HR TWA
REF PERIOD)

Personal protection GLOVES,RESPIRATORY
PROTECTION,GOGGLES

9. Physical and chemical properties

Appearance	Form	Powder		
	Colour	RED		
	Odour	NONE		
Melting point			°C	
Boiling point	NONE		°C	
Flash point	NOT AVAILABLE		°C	
Thermal decomposition	NONE		°C	
Ignition temperature	NONE		°C	
Auto-ignition	NONE		°C	
Oxidisation properties	NONE			
Explosive limits		Lower		Upper
Vapour pressure			mbar at	°C

Density	1.74	g/ml
Solubility in water	INSOLUBLE	g/l at 90°C
		g/l at °C

PH 6-8

10. Stability and reactivity

Conditions to avoid HEAT OR OPEN FLAMS

Materials to avoid STRONG OXIDIZING AGENTS. PROTECT FROM MOISTURE. CO, CO₂, OXIDES OF NITROGEN & CHLORINE

Additional information SEE SECTION 7. STORAGE CONDITIONS

11. Toxicological information

THE TOXICOLOGICAL PROPERTIES OF THIS MATERIAL HAVE NOT BEEN INVESTIGATED. EXERCISE PRECAUTIONS TO MINIMIZE DIRECT CONTACT WITH SKIN OR EYES AND PREVENT INHALATION.

12. Ecological information

Summary DYES OF THIS TYPE ARE NOT READIL Y BIODEGRADABLE

Release to the environment DO NOT ALLOW TO CONTAMINATE WATER COURSES OR SOILS

Environmental fate THIS PRODUCT IS NOT SOLUBLE

IN WATERECOTOXICOLOGICAL
DATA

Bacterial toxicity (IC50) >300mg/1 SLUDGE
ORGANISMS

Fish toxicity (LC0) <100mg/1 SPECIES TROUT
(LC50) >100mg/1 TEST TIME 48H

Summary HARMFUL TO AQUATIC ORGANISMS IF RUN
DIRECTLY INTO SURFACE
WATER

Behaviour in treatment NO INHIBITORY EFFECTS ANTICIPATED

Plants

ECOLOGY DATA

Tested material ANALOGOUS PRODUCT

13. Disposal considerations

Product INCINERATION, LANDFILL, OBSERVE LOCAL
REGULATIONS

Contaminated packaging CONTAMINATED, EMPTY CONTAINERS MUST BE
DISPOSED OF AS CHEMICAL WASTE

14. Transport information

Other information Not classified as dangerous for

carriage (Regulations 1999)

15. Regulatory information

Symbol and classification Not classified as hazardous product

(Chip Regulations)

16. Other information

INTENDED USE: TEXTILE DYESTUFF

ONLY TRAINED AND COMPETENT OPERATIVES SHOULD BE ALLOWED
TO DISPENSE AND USE DYESTUFFS AND CHEMICAL SUBSTANCES

This product should be stored, handled and used in accordance with good industrial practices and in conformity with legal regulations.

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.

MATERIAL SAFETY DATA SHEET

1. Product Identification

Product Name: Solvent Red 146

CAS No.: 70956-30-8

SUPPLIER: RAINBOW PLASTIC COLOURS LTD.

FU MIN INDUSTRIAL ZONE ,FENG GANG TOWN,DONG GUAN CITY.

EMERGENCY CONTACTS: (0769) 87777113 87779115

2. Composition/Information on Ingredients

Molecular formula: $C_{20}H_{13}NO_4$

Molecular Weight: 331.32

Melting Point: 184°C

3. Physical & Chemical Properties

Appearance: Red Powder

Odor: No Obvious Odor

4. Hazards Identification

4.1 Classification according to GHS

This substance is classified as not hazardous.

4.2 Labelling (GHS)

Hazard statements: not applicable

Safety precautions: not applicable

4.3 Other hazards

No risks worthy of mention.

5. First Aid Measures

Eyes: In case contact with eyes, rinse immediately with plenty of water, seek medical advice.

Skin: Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of soap and water.

Ingestion: Do not induce vomiting. Wash mouth with water. Seek medical advice.

Inhalation: If discomfort is felt after inhalation of dust, remove affected person to fresh air

summon medical aid.

6. Fire Fighting Measures

Extinguishing Media: Water, Dry Power, Carbon Dioxide or Foam.

Explosion Hazard: In case of fire, do not breathe the fumes evolved.

Protective Equipment: Self-contained breathing apparatus should be worn.

7. Accidental Release Measures

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves

Sweep up, place in a bag and hold for waste disposal, avoid raising dust

Ventilate area and wash spill site after material pickup is complete

8. Handling & Storage

Handling: Wear suitable protective clothing, glove, eye/face protection and respiratory protective equipment. Avoid contact with skin and eyes. Possibly install local exhaust ventilation. Do not eat, smoke or drink whilst handling this product.

Storage: Keep container tightly closed and stored in a cool, well ventilated place. Do not allow to come into contact with oxidizing agent.

9. Exposure Controls/Personal Protection

Chemical safety goggles: Compatible chemical-resistant gloves

Niosh/msha-approved respirator: Safety shower and eye bath

Mechanical exhaust required: Do not breathe dust

Avoid contact with eyes, skin and clothing: Wash thoroughly after handling

Irritant: Keep tightly closed store in a cool dry place

10. Stability and Reactivity

Stability: Stable

Incompatibility: Alkali Materials

Decomposition Product: Toxic Fumes of Carbon Monoxide. Carbon Dioxide.

Nitrogen

Oxides, Hydrogen Chloride Gas and Water

11. Toxicological Information

Acute effects may be harmful by inhalation, ingestion, or skin absorption.

Cause eye and skin irritation

Material irritating to mucous membranes and upper respiratory tract

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological Information

Data not yet available

13. Disposal Consideration

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator

equipped with an after burner and scrubber.

Observe all federal: state and local environmental regulations.

14. Transport Information

Non-hazardous for air, sea and road freight.

15. Regulatory Information

Hazard Information: Not classified as hazardous to users.

Safety information: Avoid contact with skin and eyes. Do not breathe dust.
Wear suitable protective clothing, gloves and eye/face protection.
Other regulatory: The information contained herein does not information constitute
the user,s
own assessment of work place risk as required by other health & safety
legislation.

16. Other Information

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