

MATERIAL SAFETY DATA SHEET

C.I. Pigment Yellow 12 (C.I. 21090)

1. Identification of the substance/preparation and company/undertaking

Identification of the substance or preparation

Product code and name :	ResunPlas™ 1201 Benzidine Yellow G
Color index name :	C.I. Pigment Yellow 12 (C.I. 21090)
CAS No :	6358-85-6
EC (EINECS) No :	228-787-8
Product use :	Colorant/Organic pigment for industrial applications.

Company/undertaking identification

Manufacturer :	Resun Colour Pigment Co., Ltd.
Emergency Contact Phone No. :	+86-22-23957262 (available in working days), +86-22-2336 7749

2. Hazards identification

NFPA Ratings (Scale 0-4):	Health=1 Fire=1 Reactivity=0
EC Classification (Calculated):	Not classified.
Major health hazards:	No significant target effects reported
Physical hazards:	Dust/air mixtures may ignite or explode.

See section 11 for more detailed information on health effects and symptoms.

3. Composition/information on ingredients

Chemical Name :	2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[3-oxo-Nphenylbutyramide]
Chemical Family:	Disazo
Percentage:	100%

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First-aid measures

First-aid measures

Inhalation :	Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Ingestion :	Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact :	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Eye contact :	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10mins. Get medical attention if irritation occurs.
Protection of first-aiders :	No action shall be taken involving any personal risk or without suitable training.
Notes to physician :	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Extinguishing media

Suitable :	Use an extinguishing agent suitable for the surrounding fire.
Not suitable :	None known.
Special exposure hazards :	No specific fire or explosion hazard. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hazardous combustion products :	Decomposition products may include the following materials: Carbon dioxide, carbon monoxide, nitrogen oxides. Other toxic combustion products are also possible.
Special protective equipment for fire-fighters :	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
6. Accidental release measures	
Personal precautions :	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see section 8).
Environmental precautions :	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Large spill :	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.
Small spill :	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
7. Handling and storage	
Personal precautions :	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
Storage :	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
Packaging materials:	Recommended use original packing / container
8. Exposure controls/personal protection	
Exposure controls occupational exposure controls	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hand protection :	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

General information

Appearance	Solid, Powder
Physical state Color	Reddish Yellow
Odor:	Odorless
Molecular Weight:	629.49
Molecular Formula:	C ₃₆ H ₃₄ Cl ₂ N ₆ O ₄
Melting Point:	317C
Vapor Pressure:	N/A
Vapor Density:	N/A
Specific Gravity (Water=1):	1.12 -1.63g/cm ³ [20°C (68°F)]
Solubility :	Almost insoluble in the following materials: cold water and hot water.
pH Value:	5.0-8.5
Volatility:	N/A
Odor Threshold:	N/A
Evaporation Rate:	N/A

10. Stability and reactivity

Stability :	The product is stable.
Conditions to avoid :	No specific data.
Materials to avoid :	No specific data.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Potential acute health effects

Inhalation :	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion :	No known significant effects or critical hazards.
Skin contact :	No known significant effects or critical hazards.
Eye contact :	No known significant effects or critical hazards.

Acute toxicity

Toxicity Data	Result	Species	Dose	Exposition
	LD50 Oral	Rat	>5000mg/kg	-
Conclusion/Summary :	Not available.			

Potential chronic health effects Chronic toxicity

Conclusion/Summary :	Not available.
Chronic effects :	No known significant effects or critical hazards.
Carcinogenicity :	No known significant effects or critical hazards.
Mutagenicity :	No known significant effects or critical hazards.
Teratogenicity :	No known significant effects or critical hazards.
Developmental effects :	No known significant effects or critical hazards.
Fertility effects :	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation :	No specific data.
Ingestion :	No specific data



Skin :	No specific data.
Eye :	No specific data.
12. Environmental information	
Environmental effects :	No known significant effects or critical hazards.

Aquatic ecotoxicity

Fish Toxicity:	45000 ug/L 48 year(s) LC50 (Mortality) Ide, silver or golden orfe (Leuciscus idus)
Other adverse effects	No known significant effects or critical hazards.
AOX:	The product does not contain organically bound halogens which could lead to an AOX value in waste water.

13. Disposal considerations

Methods of disposal :	The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
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14. Transport information

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Land transport ADR/GGVS/RID/GGVE:	Non-hazardous goods.
Inland waterway transport ADNR:	Non-hazardous goods.
Marine transport IMDG:	Non-hazardous goods.
Air transport IATA/ICAO:	Non-hazardous goods.
Dispatch by post:	Permitted.

This product is not regulated for carriage according to ADR/RID, IMDG, ICAO/IATA.

15. Legal regulations
U.S. REGULATIONS:

TSCA INVENTORY STATUS: Y
 TSCA 12(b) EXPORT NOTIFICATION: Not listed.
 CERCLA SECTION 103 (40CFR302.4): N
 SARA SECTION 302 (40CFR355.30): N
 SARA SECTION 304 (40CFR355.40): N
 SARA SECTION 313 (40CFR372.65): N
 SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):
 Acute: N Chronic: N Fire: N Reactive: N Sudden Release: N
 OSHA PROCESS SAFETY (29CFR1910.119): N

EUROPEAN REGULATIONS:

EC NUMBER (EINECS): 219-730-8

GERMAN REGULATIONS:

WATER HAZARD CLASS (WGK): 1 (Official German Classification)
 WATER HAZARD CLASS (WGK): 0 (Self Classification by Manufacturers and Distributors)

16. Other information
History

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Notice to reader

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