



EU SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010
(REACH)

Revision date: 2020-7-01
Version: 1
Language: en-GB,IE
Date of print: 2020-7-01

C.I. Pigment Yellow 13

1 of 8

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: C.I. Pigment Yellow 13 SYY1301

1.2 Relevant identified uses of the substance or mixture and uses advised against

General use: Colour former, pigment

Identified uses:

- Industrial:
 - Colouring agent for plastic, paints and inks
- Professional:
 - Colouring agent for plastic, paints and inks
- Consumer:
 - Colouring agent in products for consumer use

1.3 Details of the supplier of the safety data sheet

Company name: SY CHEMICAL CO., LTD.
Street/POB-No.: Jincheng Road, PC code:311201
Postal Code, city: Xiaoshan, Hangzhou, Zhejiang, China
China
Telephone: +86-571-22860158
Telefax: +86-571-22860159
Email: sy@sypigment.com

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

This substance is classified as not hazardous.

Classification according to directive 67/548/EEC

This substance is classified as not hazardous.

2.2 Label elements

Labelling (CLP)

Hazard statements: not applicable

Safety precautions: not applicable

Labelling (67/548/EEC or 1999/45/EC)

R phrase(s): not applicable

S phrase(s): not applicable

2.3 Other hazards

At temperatures >200 °C: release of 3,3'-Dichlorobenzidine (in traces).
Information about 3,3'-Dichlorobenzidine: May cause cancer. May cause an allergic skin reaction. Very toxic to aquatic life.

SECTION 3: Composition / information on ingredients

3.1 Substances

Chemical characterization: C₃₆ H₃₄ Cl₂ N₆ O₄
2,2'-[(3,3'-Dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(2,4-dimethylphenyl)-3-oxobutyramide] Pigment Yellow 13, PY 13

CAS-Number: 5102-83-0
EC-number: 225-822-9

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Seek medical treatment in case of troubles.

In case of inhalation: Remove casualty to fresh air and keep warm and at rest.

In case of skin contact: Remove residues with soap and water. Change contaminated clothing. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. In case of eye irritation consult an ophthalmologist.

After swallowing: Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
When seeking medical attention bring along safety data sheet.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:
Water fog, alcohol resistant foam

Extinguishing media which must not be used for safety reasons:
Full water jet, carbon dioxide (CO₂), extinguishing powder

5.2 Special hazards arising from the substance or mixture

Combustible. Dust forms explosive mixtures with air.
In case of fire may be liberated: hydrochloric (HCl), nitrogen oxides (NO_x), carbon monoxide and carbon dioxide (CO₂).

5.3 Advice for firefighters

Special protective equipment for firefighters:
Wear self-contained breathing apparatus. Wear suitable protective clothing.

Additional information: Hazchem-Code: -
Do not allow fire water to penetrate into surface or ground water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid generation of dust. Do not breathe dust. Provide adequate ventilation.
Use only explosion-proof equipment.
Use only non-sparking tools.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Avoid generation of dust.

6.4 Reference to other sections

Refer additionally to chapter 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Avoid generation of dust. In case of dust: Provide adequate ventilation, and local exhaust as needed.

Precautions against fire and explosion:

Take precautionary measures against static discharge.
Keep away from sources of ignition.
Dust forms explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place.
Keep container dry.

Storage class: 11 = Combustible solids

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

Type	Limit value
Great Britain: WEL-TWA	10 mg/m ³ Dust limit value inhalable fraction
Great Britain: WEL-TWA	4 mg/m ³ Dust limit value respirable fraction
Ireland: 8 hours	10 mg/m ³ Dust limit value inhalable fraction
Ireland: 8 hours	4 mg/m ³ Dust limit value respirable fraction

DNEL/DMEL:

Systemic effects:

DNEL Long-term, workers, dermal: 45 mg/kg bw/d
DNEL Long-term, consumers, oral: 28 mg/kg bw/d
DNEL Long-term, consumers, dermal: 28 mg/kg bw/d

Local effects:

DNEL Long-term, workers, inhalative: 3 mg/m³

8.2 Exposure controls

In the case of the formation of dust: Dust should be exhausted directly at the point of origin.
Take precautionary measures against static discharge.
Keep away from sources of ignition.

Occupational exposure controls

Respiratory protection: In case of dust: Particulates filter P1 according to EN 143.
Hand protection: Protective gloves according to EN 374.
Glove material: Nitrile rubber
Breakthrough time: > 480 min
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Eye protection: Tightly sealed goggles according to EN 166.
Body protection: Wear suitable protective clothing.
General protection and hygiene measures:
Do not breathe dust. Avoid contact with skin and eyes. Change contaminated clothing.
Wash hands before breaks and after work. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Physical state: solid (Powder)
Colour: yellow
Odour: odourless
Odour threshold: no data available
pH value: no data available
Melting point/melting range: Decomposes before melting.
Boiling temperature/boiling range: no data available
Flash point/flash point range: no data available
Vapourisation rate: no data available
Flammability: This product is non-flammable.
Explosive properties: Not explosive. Dust forms explosive mixtures with air.
Explosion limits: no data available
no data available
Vapour pressure: no data available
Vapour density: no data available
Density: 1.3625 g/cm³
Water solubility: 0.35 µg/L
Fat solubility: 22.3 µg/L (ETAD)
Partition coefficient n-octanol/water: 1.8 log P(o/w)
Appreciable bio-accumulation is not to be expected (log P(o/w) 1-3).
Autoflammability: 280 °C
Thermal decomposition: 330 °C
Viscosity, dynamic: no data available
Explosive properties: not explosive
Oxidizing characteristics: no data available

9.2 Other information

Additional information: Granulometry: 3 µm
Stable in dimethylsulfoxide (DMSO): > 72 h



EU SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010
(REACH)

Revision date: 2020-7-01
Version: 1
Language: en-GB,IE
Date of print: 2020-7-01

C.I. Pigment Yellow 13

Page: 5 of 8

SECTION 10: Stability and reactivity

10.1 Reactivity

Refer to 10.3

10.2 Chemical stability

At temperatures >200 °C: release of 3,3'-Dichlorobenzidine (in traces).

10.3 Possibility of hazardous reactions

Dust forms explosive mixtures with air.

10.4 Conditions to avoid

Avoid dust formation. Take precautionary measures against static discharge.
Keep away from sources of ignition.

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

In case of fire may be liberated: hydrochloric (HCl), nitrogen oxides (NO_x), carbon monoxide and carbon dioxide (CO₂).

Thermal decomposition: 330 °C

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD50 Rat, oral: > 15000 mg/kg (OECD 401)

LD50 Rat, inhalative: > 4.25 mg/L/4h (OECD 403)

LD50 Rat, dermal: > 3000 mg/kg (OECD 402)

C.I. Pigment Yellow 13

Toxicological effects:	<p>Acute toxicity (oral): Based on available data, the classification criteria are not met.</p> <p>Acute toxicity (dermal): Based on available data, the classification criteria are not met.</p> <p>Acute toxicity (inhalative): Based on available data, the classification criteria are not met.</p> <p>Skin corrosion/irritation: Based on available data, the classification criteria are not met.</p> <p>Rabbit, skin: Not an irritant (OECD 404).</p> <p>Eye damage/irritation: Based on available data, the classification criteria are not met.</p> <p>Rabbit, eye: Not an irritant (OECD 405).</p> <p>Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.</p> <p>Skin sensitisation: Based on available data, the classification criteria are not met.</p> <p>Guinea pig: not sensitising (Bühler test).</p> <p>Patch test, human: not sensitising.</p> <p>Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.</p> <p>In vitro mutagenicity:</p> <p>Ames test: negative (OECD 471).</p> <p>Gene-mutations mammalian cells: negative (OECD 476)</p> <p>Chromosomal aberrations mammalian cells: negative (OECD 473).</p> <p>In vivo mutagenicity:</p> <p>In micronucleus test (Mouse): negative (OECD 474).</p> <p>Sister chromatid exchange in-vivo (Mouse): negative.</p> <p>Carcinogenicity: Based on available data, the classification criteria are not met.</p> <p>NOAEL Mouse, oral: 1957,1 mg/kg bw/d male; 2030,6 mg/kg bw/d female (OECD 451).</p> <p>Reproductive toxicity: Based on available data, the classification criteria are not met. Developmental toxicity/teratogenicity</p> <p>NOAEL Rat, oral: 1000 mg/kg bw/d (OECD 422).</p> <p>Effects on or via lactation: Based on available data, the classification criteria are not met.</p> <p>Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.</p> <p>Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.</p> <p>NOAEC Rat, inhalative: 52 mg/m³/d (OECD 422).</p> <p>Aspiration hazard: Based on available data, the classification criteria are not met.</p>
Other information:	<p>Toxicokinetics (absorption, metabolism, distribution and elimination):</p> <p>Rat, oral (gavage), repeated exposure: release of 3,3'-Dichlorobenzidine (urine, in traces). Information about 3,3'-Dichlorobenzidine: May cause cancer. May cause an allergic skin reaction. Very toxic to aquatic life.</p>

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:	<p>Fish toxicity:</p> <p>LC50 Brachydanio rerio (zebra-fish): > 100 mg/L/96h (OECD 203, read across).</p> <p>Daphnia toxicity:</p> <p>EC50 Daphnia magna (Big water flea): > 396 mg/L/48h (OECD 202).</p> <p>NOEC Daphnia magna (Big water flea): 1 mg/L/21d (OECD 211).</p> <p>Algae toxicity:</p> <p>EC50 Desmodesmus subspicatus (green algae): > 100 mg/L/72h (OECD 201, read across).</p>
-------------------	---



EU SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010 (REACH)

Revision date: 2020-7-01
Version: 1
Language: en-GB,IE
Date of print: 2020-7-01

C.I. Pigment Yellow 13

Page: 7 of 8

12.2. Persistence and degradability

Further details: Biodegradability:
Bacteria in activated sludge: 0%/2 weeks (OECD 301 C)
Product is not readily biodegradable.

Effects in sewage plants: Respiratory inhibition test, applied on activated sludge: IC50: > 100 mg/L/3h (OECD 209).

12.3 Bioaccumulative potential

Bioconcentration factor (BCF):
Bioconcentration factor (BCF): ≤ 6,2 (Cyprinus carpio (Common Carp)), (OECD 305).
Accumulation in organisms is not to be expected.

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Other adverse effects

General information: Do not allow to penetrate into soil, waterbodies or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 07 07 99 = wastes from the MFSU of fine chemicals and chemical products not otherwise specified
MFSU = manufacture, formulation, supply and

Recommendation: use Dispose of waste according to applicable legislation.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number

not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA: Not restricted

14.3 Transport hazard class(es)

not applicable

14.4 Packing group

not applicable

14.5 Environmental hazards

Marine pollutant No

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

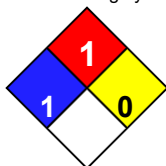
National regulations - Great Britain

Hazchem-Code: -

National regulations - USA

TSCA Inventory: listed
TSCA HPVC: not listed

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 1 (Slight)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 1 (Slight)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
	X

National regulations - Canada

DSL: not listed
NDSL: listed

15.2 Chemical Safety Assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Further information

Date of first version: 2020-7-01

Department issuing data sheet

Contact person: see section 1: details of the supplier of the safety data sheet.

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.