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

1.1. Product identifier
   Trade name
   PV Fast Yellow HR 02-BR
   Material number: 241673

1.2. Relevant identified uses of the substance or mixture and uses advised against
   Relevant identified uses of the substance or mixture
   Industry sector: Industrial Performance Chemicals
   Paints, lacquers and varnishes industry
   Polymers industry
   Printing Inks Industry
   Type of use: Pigment preparation

1.3. Details of the supplier of the safety data sheet
   Identification of the company
   Clariant Produkte (Deutschland) GmbH
   Brueningstr. 50
   65929 Frankfurt am Main
   Telephone no.: +49 6196 757 60
   Information about the substance/mixture
   Division Pigments & Additives
   +49 6196 757 6152/6120
   e-mail: PA.PSAZO@clariant.com

1.4. Emergency telephone number
   00800-5121 5121 (24 h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
   Classification according EC Directive (67/548/EEC or 1999/45/EC, as amended)

<table>
<thead>
<tr>
<th>Category of danger/CATEGORY</th>
<th>Hazard symbol</th>
<th>R - phrases</th>
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<tbody>
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2.2. Label elements
   Labelling in accordance with EC-Directives (67/548/EEC or 1999/45/EC, as amended)
   hazard warning labelling not compulsory
2.3. Other hazards

Dust explosion hazard.

According to the present state of knowledge provided this product is handled correctly, there is no danger to humans or the environment.

Organic substances in powder form may have the potential to cause dust explosions.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization
C.I. Pigment Yellow 83

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Seek medical assistance if discomfort continues

After inhalation
Remove the casualty into fresh air and keep him calm.

After contact with skin
In case of contact with skin, clean with soap and water.

After contact with eyes
Rinse the affected eye with plenty of water, at the same time keep the unaffected eye well protected.

After ingestion
If swallowed do not induce vomiting, seek medical advice and show safety datasheet or label

4.2. Most important symptoms and effects, both acute and delayed

Symptoms
No symptoms known currently.

Hazards
No special measures needed.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
- water spray jet
- foam

Extinguishing media that must not be used for safety reasons
- Full water jet
- carbon dioxide
- dry powder

5.2. Special hazards arising from the substance or mixture
In the event of fire the following can be released:
- Nitrous gases (NOx)
- Carbon monoxide (CO)
- Carbon dioxide (CO2)
- Hydrogen chloride (HCl)

5.3. Advice for firefighters
Special protective equipment for firefighting
Use self-contained breathing apparatus

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear suitable personal protective equipment.
Avoid dust formation.
Keep away sources of ignition.

6.2. Environmental precautions
Do not allow entry to drains, water courses or soil

6.3. Methods and material for containment and cleaning up
Avoid dust formation and electrical charging (sparking) because dust explosion might occur.
Damp spilled material with water and pick up mechanically. Transfer warning labels from original containers to containers where the material is collected.
When picked up, treat material as prescribed under heading "Disposal".

6.4. Reference to other sections
Additional information
Keep away sources of ignition, stop running engines, no smoking.
Moisten spilled material with water, cover with wet sand or wetted binder, then take up.
Information regarding Waste Disposal, see chapter 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Avoid the formation and deposition of dust.
Provide exhaust ventilation if dust is formed.
Take precautionary measures against electrostatic loading.
Use antistatic tools.

Advice on protection against fire and explosion
Take precautionary measures against electrostatic charges - earthing necessary during loading operations.
Keep away from sources of ignition
Dust can form an explosive mixture with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers
Keep in original packaging, tightly closed

Advice on storage compatibility
When used and handled as intended, none.
Do not store or transport together with foodstuffs

Further information on storage conditions
Keep container dry

Storage stability
If correctly stored: storage life > 12 months

7.3. Specific end use(s)
No further recommendations.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values
Exposure limit values are not available.

DNEL/DMEL values
DNEL/DMEL values are not available.

PNEC values
PNEC values are not available.

8.2. Exposure controls

General protective measures
Observe the usual precautions for handling chemicals.

Hygiene measures
Wash hands before breaks and after work.
Use barrier skin cream.
Remove soiled or soaked clothing immediately and clean thoroughly before using again.

Respiratory protection: Wear dust mask when handling large quantities
Hand protection: Nitrile rubber gloves.
Minimum breakthrough time (glove): not determined
Minimum thickness (glove): not determined
Observe the information of the glove manufacturers on
permeability and breakthrough times and other workplace
requirements

Eye protection: safety glasses

Body protection: working clothes

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: solid
Particle size: 3,8 µm
Method: Laser diffraction with dispersion in dry air.

Colour: yellow
Odour: not specified
Odour threshold: not available

pH value: 5 - 8 (20 °C)

Melting point (decomposition): not determined

Boiling point (decomposition): not determined

Flash point: Not applicable
Evaporation rate: Not applicable

Flammability
Lower explosion limit: not tested.
Upper explosive limit: not tested.
Combustion number: BZ5 Complete combustion with flames

Minimum ignition energy: 56 - 110 mJ
with inductive electrical resistance

Minimum ignition energy: 56 - 110 mJ
without inductive electrical resistance

Burning rate: 1,14 mm/s

Vapour pressure: not available

Vapour density relative to air: not available

Relative Density: not available
Solubility in water: < 0,02 mg/l (23 °C)  
The data refer to the colourant

Octanol/water partition coefficient (log Pow): Not applicable

Ignition temperature: not tested.

Self-ignition temperature: from 330 °C

Thermal decomposition: > 320 °C (Heating rate: 3 K/min)  
Method: DTA  
Closed cup

Viscosity (dynamic): Not applicable

Viscosity (kinematic): Not applicable

Explosive properties: Explosive according to EU supply regulations: no data

Oxidizing properties: not tested.

9.2. Other information

Density: 1,49 g/cm³ (20 °C)

Bulk density: 250 kg/m³ (20 °C)

Further information

No incompatible substance known.

SECTION 10: Stability and reactivity

10.1. Reactivity

See section 10.3. "Possibility of hazardous reactions"

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Risk of dust explosions.

10.4. Conditions to avoid

Ignition

Avoid excessive heat, flame, and spark.

10.5. Incompatible materials

Not known

10.6. Hazardous decomposition products

This product contains a diaryl pigment. This product should not be used in polymers if the processing temperature exceeds 200 °C because of possible thermal decomposition, which
can form e.g. traces of aromatic amines. 3,3’-Dichloro-benzidine may be formed at temperatures above 200 °C.

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

- **Acute oral toxicity:** LD50 > 2.000 mg/kg (rat)
  
  The product has not been tested. The information is derived from the properties of the individual components.

- **Acute dermal toxicity:** not available

- **Acute inhalation toxicity:** not available

- **Irritant effect on skin:** non-irritant
  
  The product has not been tested. The information is derived from the properties of the individual components.

- **Irritant effect on eyes:** non-irritant (rabbit eye)
  
  The product has not been tested. The information is derived from the properties of the individual components.

- **Sensitization:** non-sensitizing
  Method: OECD 429

- **Repeated dose toxicity:** not available

- **Assessment of mutagenicity:** not available

- **Assessment of carcinogenicity:** not available

- **Assessment of toxicity to reproduction:** not available

- **Assessment of teratogenicity:** not available

**SECTION 12: Ecological information**

12.1. Toxicity

- **Fish toxicity:** not available

- **Daphnia toxicity:** not available

- **Algae toxicity:** not available

- **Bacteria toxicity:** not available

- **Toxicity to soil-dwelling organisms:** not available

- **Toxicity to terrestrial organisms:** not available
Toxicity to other environmentally relevant organisms: not available

Sediment toxicity: not available

12.2. Persistence and degradability

Physico-chemical eliminability: not available

Photodegradation: not available

Biodegradability: This property is substance-specific and therefore cannot be given for the preparation.

Dissolved Organic carbon (DOC): Not applicable

Chemical oxygen demand (COD): Not applicable

Biochemical oxygen demand (BOD5): Not applicable

12.3. Bioaccumulative potential

Bioaccumulation: Not applicable

12.4. Mobility in soil

Transport and distribution between environmental compartments: No information is available on the mixture "as is". If relevant information is available on the substances listed in Chapter 3, it is reported here.

Behaviour in environmental compartments: not available

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

Additional ecotoxicological remarks
Do not allow to enter soil, waterways or waste water
The product has not been tested. The information is derived from the properties of the individual components.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
SECTION 14: Transport information

Section 14.1. to 14.5.

ADR  not restricted
ADNR not restricted
RID not restricted
IATA not restricted
IMDG not restricted

14.6. Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

Other regulations
Apart from the data/regulations specified in this chapter, no further information is available concerning safety, health and environmental protection.

15.2. Chemical safety assessment

No Chemical Safety Assessment (CSA) is yet available for the substance, or for the component substances, contained in this product.

SECTION 16: Other information

This product contains a diaryl pigment. This product should not be used in polymers if the processing temperature exceeds 200 °C because of possible thermal decomposition, which can form e.g. traces of aromatic amines. 3,3'-Dichloro-benzidine may be formed at temperatures above 200 °C.

Decimal notation: "thousands" places are identified with a dot (for example, "2.000 mg/kg" means "two thousand mg/kg"). Decimal places are identified with a comma (for example,
"1,35 g/cm³" means "one point three five g/cm³").

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