

Food Color



### TECHNICAL DATA

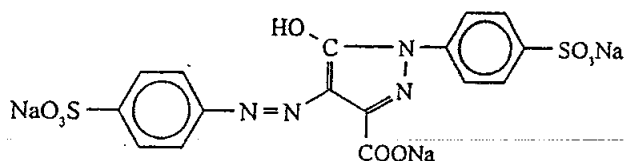
**PRODUCT NAME: FD&C YELLOW NO. 5**

**PRODUCT CODE: 10-21-DA-4400**

Color Index Name: Food Yellow 4 or Acid Yellow 23      Color Index No.: 19140  
Common Name: Tartrazine

CAS No.: 1934-21-0      Molecular Weight: 534.4

Structure:



Chemical Name: Trisodium salt of 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[4-sulfophenylazo]-1H-pyrazole-3-carboxylic acid.

Pure Color Assay: FDA Requirement 87% minimum  
HD Specification 90% minimum

Volatile plus Chlorides and Sulfates as Sodium Salts: 13% maximum

Water Insolubles: 0.2% maximum

Uncombined Intermediates: Meets FDA requirements

Subsidiary Colors: Meets FDA requirements

Heavy Metals: Lead 10 ppm maximum  
Arsenic 3 ppm maximum  
Mercury 1 ppm maximum

(CONTINUED ON OTHER SIDE)

The information provided on this and any following pages regarding our product(s) has been developed as a guide for your consideration and verification and does not constitute a legal representation or warranty. Due to differences in product formulation and operational conditions, we cannot be responsible for results in the user's plant or product.

PRODUCT NAME: FD&C YELLOW NO. 5  
PRODUCT CODE: 10-21-DA-4400

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Stability to:

Light	Good
Oxidation	Fair
Heat	Good

Variations in pH:

pH 3	Stable
pH 8	Stable

Solubility at 25° C:

Distilled Water	17 oz. per gallon
Glycerine	28 oz. per gallon
Propylene Glycol	12 oz. per gallon
Ethanol (95%)	Tint

Particle Size:

On 100 Mesh Screen	≤ 5% typical
On 200 Mesh Screen	≤ 30% typical
Thru 200 Mesh Screen	≥ 65% typical

Remarks

FD&C Yellow No. 5 gives a greenish yellow color in solution. It has good resistance to acids, alkalies, heat and light. Resistance to oxidizing and reducing agents is fair.

The major uses of FD&C Yellow No. 5 are in beverages, bakery goods, pet foods, dessert powders, candy confections and cereals.

HMIS H: 0  
F: 0  
R: 0  
O: None

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HILTON DAVIS MATERIAL SAFETY DATA SHEET

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Hilton Davis Company  
2235 Langdon Farm Rd.  
Cincinnati, Ohio 45237

Hilton Davis Code No.: 10-21-DA-4400  
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Emergency Phone Number:  
(513)841-4889 [(513)841-4000 24 Hour Number]

Date Prepared: 10/31/95

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IDENTIFICATION

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COMMON NAME: (used on Label)	FD&C Yellow No. 5
CAS NO.:	1934-21-0
CHEMICAL NAME/TRADE NAME:	CI 19140, Tartrazine
PRODUCT CLASS:	FD&C Color
MOLECULAR FORMULA:	$C_{16}H_9N_4Na_3O_9S_2$

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HAZARDOUS INGREDIENTS

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(CAS REG. NO.)                  None

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PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

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SPECIFIC GRAVITY (H <sub>2</sub> O=1):	UI
VAPOR DENSITY (Air=1):	NA
SOLUBILITY IN WATER:	Soluble in water
REACTIVITY IN WATER:	None known
APPEARANCE & ODOR:	Yellow orange free flowing powder.
FLASH POINT:	NA
EXTINGUISHING MEDIA:	Waterfog, carbon dioxide, dry chemical
SPECIAL FIRE FIGHTING PROCEDURES:	None
UNUSUAL FIRE & EXPLOSION HAZARDS:	None

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**PHYSICAL HAZARDS**

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STABILITY: Stable

CONDITIONS TO AVOID: None

INCOMPATIBILITY:  
(Materials to Avoid) None

HAZARDOUS DECOMPOSITION PRODUCTS: Burning may yield carbon monoxide.

HAZARDOUS POLYMERIZATION: Will not occur.

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**HEALTH HAZARDS**

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SIGNS & SYMPTOMS OF EXPOSURE:  
Exposure to unprotected skin areas may cause temporary staining.

ACUTE OVEREXPOSURE:  
None known

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None known

OSHA PERMISSIBLE EXPOSURE LIMIT: 10 mg/m<sup>3</sup> - Total dust  
5 mg/m<sup>3</sup> - Respirable Dust

ACGIH THRESHOLD LIMIT VALUE: Same as OSHA limits

**EMERGENCY & FIRST AID PROCEDURES:**

1. Inhalation: Remove patient to fresh air treatment.
2. Eyes: Flush eyes with plenty of low pressure water. Obtain medical attention if irritation exists.
3. Skin: Wash exposed skin areas with soap and water. If irritation exists, obtain medical attention.
4. Ingestion: Obtain medical attention if large amount of product is ingested.

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**SPECIAL PROTECTION INFORMATION**

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**RESPIRATORY PROTECTION:**

An approved dust respirator should be worn..

**VENTILATION:**

Sufficient to prevent inhalation of vapors.

**PROTECTIVE GLOVES:**

Recommended

**EYE PROTECTION:**

Safety goggles

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:**

Coveralls to protect work clothes.

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**SPECIAL PRECAUTIONS & SPILL/LEAK PROCEDURES**

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**PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE:**

Provide adequate ventilation during handling. Store in dry place.

**OTHER PRECAUTIONS:**

Protect containers from physical damage.

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Scoop up spilled material and discard into proper waste container. Provide proper ventilation during clean up.

**WASTE DISPOSAL METHODS:**

Dispose of according to federal, state and local regulations.

NA - Not Applicable

UI - Unavailable Information

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