

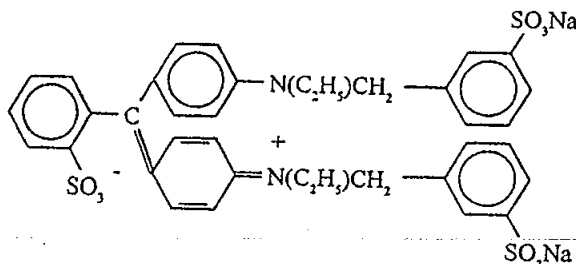
Food color

HILTON DAVIS

TECHNICAL DATA

PRODUCT NAME: FD&C BLUE NO. 1
PRODUCT CODE: 10-21-DA-2204

Color Index Name:	Food Blue 2	Color Index No.:	42090
Common Name:	Brilliant Blue FCF		
CAS No.:	3844-45-9	Molecular Weight:	789.9



Chemical Name: Disodium salt of ethyl [4-[p-[ethyl (m-sulfobenzyl) amino]- α -(o-sulfophenyl) benzylidene]-2,5-cyclohexadien-1-ylidene] (m-sulfobenzyl) ammonium hydroxide inner salt plus p-sulfobenzyl and o-sulfobenzyl salts.

Pure Color Assay: FDA Requirement 85% minimum
HD Specification 89% minimum

Volatile plus Chlorides and Sulfates as Sodium Salts: 15% maximum

Water Insolubles: 0.2% maximum

Uncombined Intermediates: Meets FDA requirements

Subsidiary Colors: Meets FDA requirements

Heavy Metals: Chromium 50 ppm maximum
Lead 10 ppm maximum
Arsenic 3 ppm maximum
Manganese \geq 100 ppm

(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 BLUE NO. 1
PRODUCT CODE: 10-21-DA-2204

Stability to:

Light	Fair
Oxidation	Poor
Heat	Good

Variations in pH:

pH 3	Slight fade after 1 week
pH 8	Very slight fade after 1 week

Solubility at 25° C:

Distilled Water	>25 oz. per gallon
Glycerine	>36 oz. per gallon
Propylene Glycol	>52 oz. per gallon
Ethanol (95%)	>2 oz. per gallon

Particle Size:

On 100 Mesh Screen	≤15% typical
On 200 Mesh Screen	≤30% typical
Thru 200 Mesh Screen	≥55% typical

Remarks

FD&C Blue No. 1 gives a brilliant, greenish blue color in solution. It has very good resistance to fruit acids, benzoic acid and sorbic acid. It has fair resistance to light and good resistance to heat. In combination with FD&C Yellow No. 5, it gives a wide range of bright greens.

The major uses of FD&C Blue No. 1 are in beverages, bakery goods, dessert powders, candy and confections.

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

HILTON DAVIS MATERIAL SAFETY DATA SHEET

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

Hilton Davis Code No.: 10-21-DA-2204
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Emergency Phone Number:
(513)841-4889 [(513)841-4000 24 Hour Number]

Date Prepared: 10/31/95

IDENTIFICATION

COMMON NAME: (used on Label)	FD&C Blue No. 1
CAS NO.:	3844-45-9
CHEMICAL NAME/TRADE NAME:	CI 42090, Brilliant Blue FCF
PRODUCT CLASS:	FD&C Color
MOLECULAR FORMULA:	$C_{37}H_{34}N_2Na_2O_9S_3$

HAZARDOUS INGREDIENTS

(CAS REG. NO.) None

PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

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

PHYSICAL HAZARDS

STABILITY: Stable

CONDITIONS TO AVOID: None

INCOMPATIBILITY:
(Materials to Avoid) None

HAZARDOUS DECOMPOSITION PRODUCTS: Burning may yield carbon monoxide.

HAZARDOUS POLYMERIZATION: Will not occur.

HEALTH HAZARDS

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/m³ - Total dust
5 mg/m³ - 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.

SPECIAL PROTECTION INFORMATION

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.

SPECIAL PRECAUTIONS & SPILL/LEAK PROCEDURES

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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