

SAFETY DATA SHEET

Creation Date 26-Oct-2010 Revision Date 19-Dec-2025 Revision Number 6

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

1. Identification

Product Name Patent Blue V, sodium salt

Cat No.: AC339330000; AC339330050; AC339330250; AC339331000

CAS No 20262-76-4

Synonyms Acid Blue 3; C.I. 42051:2; m-Hydroxytetraethyldiaminotriphenylcarbinol anhydride disulfonic

acid sodium salt

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company Acros Organics
One Reagent Lane One Reagent Lane
Fair Lawn, NJ 07410 Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

Classification according to [US] OSHA (29 CFR 1910.1200, 2024)

This product is not considered hazardous by the US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200).

Label Elements

Hazard Statements

Precautionary Statements
Hazards not otherwise classified (HNOC)

None identified

Patent Blue V, sodium salt

Revision Date 19-Dec-2025

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available

3. Composition/information on Ingredients

Component	CAS No	Weight %
Ethanaminium,	20262-76-4	>95
N-[4-[[4-(diethylamino)phenyl](5-hydroxy-2,4-disulfo		
phenyl)methylene]-2,5-cy		
clohexadien-1-ylidene]-N-ethyl-, hydroxide, inner		
salt, monosodium salt		

4. First-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact If skin irritation persists, call a physician. Wash off immediately with plenty of water for at

least 15 minutes.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms

occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms and

effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point Method -No information available

No information available

Autoignition Temperature

Explosion Limits

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO2). Sulfur oxides.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health **Flammability** Instability Physical hazards N/A

Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust

formation.

Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological

Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed

containers for disposal. Up

7. Handling and Storage

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not Handling

get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and Storage.

well-ventilated place. Incompatible Materials. Strong oxidizing agents. Strong reducing

agents.

8. Exposure controls / personal protection

This product does not contain any hazardous materials with occupational exposure **Exposure Guidelines**

limitsestablished by the region specific regulatory bodies.

Engineering Measures None under normal use conditions.

Personal Protective Equipment

Eye/face Protection Tight sealing safety goggles.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

No protective equipment is needed under normal use conditions. **Respiratory Protection**

Recommended Filter type: Particle filter.

Hygiene Measures When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area

and clothing.

9. Physical and chemical properties

Appearance

Physical State Powder Solid Color Greenish-blue Odor Odorless

Odor Threshold No information available

Property Values

Melting Point/Range No data available **Softening Point** No data available **Boiling Point/Range**

No information available Flash Point No information available

Flammability (liquid) Not applicable

Flammability (solid,gas) No information available Remarks Method

Method - No information available

Solid

Revision Date 19-Dec-2025

Patent Blue V, sodium salt

Explosion Limits No data available

Autoignition Temperature No data available

Decomposition Temperature > 200°C

pH No information available

Viscosity Not applicable Solid

Water Solubility Soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow
Ethanaminium, -2.31
N-[4-[[4-(diethylamino)phenyl](5-hydrox
y-2,4-disulfophenyl)methylene]-2,5-cy
clohexadien-1-ylidene]-N-ethyl-,
hydroxide, inner salt, monosodium salt

Vapor Pressure
Density / Specific Gravity
Bulk Density
Vapor Density
No data available
No data available
No data available
Not applicable

Particle characteristics No data available

Other Information

Molecular Formula C27 H31 N2 Na O7 S2 Molecular Weight 582.67

Evaporation Rate Not applicable - Solid

10. Stability and reactivity

Solid

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents, Strong reducing agents

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Sulfur oxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Information on expected route of exposure

Inhalation May cause irritation of respiratory tract.

Ingestion Ingestion may cause irritation to mucous membranes.

Eyes Irritating to eyes. Skin Irritating to skin.

Toxicology data for the components

Toxicologically Synergistic No information available

Products

(b) skin corrosion/irritation; No data available

Revision Date 19-Dec-2025

Patent Blue V, sodium salt

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity;

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Ethanaminium,	20262-76-4	Not listed				
N-[4-[[4-(diethylamino)						
phenyl](5-hydroxy-2,4-						
disulfophenyl)methylen						
e]-2,5-cy						
clohexadien-1-ylidene]						
-N-ethyl-, hydroxide,						
inner salt,						
monosodium salt						

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; Not applicable

Solid

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects,both acute and No information available.

delayed

Other Adverse Effects The toxicological properties have not been fully investigated.

Endocrine Disrupting Properties This product does not contain any known or suspected endocrine disruptors.

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

Component	log Pow

Ethanaminium,	-2.31
N-[4-[[4-(diethylamino)phenyl](5-hydroxy-2,4-disulfophenyl)methylene]-2,	
5-cy clohexadien-1-ylidene]-N-ethyl-, hydroxide, inner salt, monosodium	
salt	

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

	14. Transport information
DOT	Not regulated
DOT TDG IATA	Not regulated
<u>IATA</u>	Not regulated
IMDG/IMO	Not regulated
	15. Regulatory Information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Ethanaminium, N-[4-[[4-(diethylamino)phenyl](5-hy droxy-2,4-disulfophenyl)methylene]-2,5-cy clohexadien-1-ylidene]-N-ethyl-, hydroxide, inner salt, monosodium		-	-	-
salt				

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Ethanaminium,	20262-76-4	Χ	-	243-654-4	-	-		-	Х	-
N-[4-[[4-(diethylamino)phenyl](5-hy										
droxy-2,4-disulfophenyl)methylene										
]-2,5-cy										
clohexadien-1-ylidene]-N-ethyl-,										
hydroxide, inner salt, monosodium										
salt										

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Ethanaminium, N-[4-[[4-(diethylamino)phenyl](5-hyd roxy-2,4-disulfophenyl)methylene]-2 ,5-cy clohexadien-1-ylidene]-N-ethyl-, hydroxide, inner salt, monosodium salt		-	-	-

Not applicable

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Ethanaminium, N-[4-[[4-(diethylamino)phenyl](5-hydroxy-2,4-disulfophenyl)m		Not applicable	Not applicable	Not applicable	Not applicable

ethylene]-2,5-cy			
clohexadien-1-ylidene]-N-ethyl			
-, hydroxide, inner salt,			
monosodium salt			

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Ethanaminium, N-[4-[[4-(diethylamino)phenyl](5-hydroxy-2,4-disulfophenyl)m ethylene]-2,5-cy clohexadien-1-ylidene]-N-ethyl -, hydroxide, inner salt, monosodium salt		Not applicable	Not applicable	Not applicable	Not applicable

16.	Other	Information

Prepared By Product stewardship (Regulatory Affairs)

Thermo Fisher Scientific

email - begel.sdsdesk@thermofisher.com

 Creation Date
 26-Oct-2010

 Revision Date
 19-Dec-2025

 Print Date
 19-Dec-2025

Revision Summary Updated to the U.S. Department of Labor's Occupational Safety and Health Administration

(OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200,

2024), May 20, 2024, effective July 19, 2024.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS