

# SAFETY DATA SHEET



Revision:1.0

Date: 09/03/2026

ACCORDING TO EC-REGULATIONS 1907/2006  
(REACH), 1272/2008 (CLP) & 2020/878

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IN-SPEC® PATENT BLUE 254

## 1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

<b>1.1 Product Identifier</b>		
Product Name	IN-SPEC® PATENT BLUE 254	
Product Code	8493	
Nanoform	The product does not contain nanoparticles.	
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>		
Identified use(s)	Professional, scientific and technical activities	
Uses advised against	Anything other than the above.	
<b>1.3 Details of the supplier of the safety data sheet</b>		
Company Identification	ABB Limited Oldends Lane Stonehouse Gloucestershire GL10 3TA United Kingdom	
Telephone	+44 (0) 1453 826661	
Fax	+44 (0) 1453 821277	
E-mail (competent person)	sds@gb.abb.com	
<b>1.4 Emergency Telephone Number</b>		
Emergency Phone No.	+44 (0) 1453 826661	08:00 – 17:30 GMT Monday to Thursday 09:00 – 16:30 GMT Friday
Language(s) spoken:	English	

## 2. SECTION 2: HAZARDS IDENTIFICATION

<b>2.1 Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP)</b>	STOT SE 2; H371 Resp. Sens. 1; H334	
<b>2.2 Label elements</b>	According to Regulation (EC) No. 1272/2008 (CLP)	
Product name	IN-SPEC® PATENT BLUE 254	
Contains:	Methyl alcohol; Hydrogen [4-[4-(diethylamino)-2',4'-disulfonatobenzhydrylidene]cyclohexa-2,5-dien-1-ylidene]diethylammonium, sodium salt	
Hazard Pictogram(s)		
Signal Word(s)	DANGER	
Hazard Statement(s)	H371: May cause damage to organs. H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Precautionary Statement(s)	P260: Do not breathe vapour. P264: Wash hands thoroughly after handling. P270: Do not eat, drink or smoke when using this product.	

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P308+P311: IF exposed or concerned: Call a POISON CENTER/doctor.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P501: Dispose of contents in accordance with local, state or national legislation.

Supplemental information

Not assigned

### 2.3 Other hazards

Not classified as PBT or vPvB. Does not cause endocrine disruption.

## 3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3. Substances - Not applicable

1

### 3. Mixtures

2

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Statement(s)
Methyl alcohol	1 - < 3	67-56-1	200-659-6	Not yet assigned in the supply chain	Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3; H331 STOT SE 1; H370
Hydrogen [4-[4-(diethylamino)-2',4'-d isulfonatobenzhydrylidene ]cyclohexa-2,5-dien-1-ylid ene]diethylammonium, sodium salt	< 0.1	129-17-9	204-934-1	Not yet assigned in the supply chain	Acute Tox. 4 ; H312 Resp. Sens. 1; H334 Aquatic Chronic 3; H412

### Specific concentration limit (SCL) & M-factor

Chemical identity of the substance	CAS No.	EC No.	Specific concentration limit (SCL)	M-factor
Methyl alcohol	67-56-1	200-659-6	STOT SE 1; H370: C >= 10% STOT SE 2; H371: 3% =< C < 10%	-

Note: For full text of H phrases see section 16.

## 4. SECTION 4: FIRST AID MEASURES



### 4.1 Description of first aid measures Self-protection of the first aider

Inhalation

No action should be taken involving personal risk. Use personal protective equipment as required. Ensure adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapour. Wash hands thoroughly after handling. IF exposed or concerned: Call a POISON CENTER/doctor.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF exposed or concerned: Call a POISON CENTER/doctor.

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4.1	Skin contact	IF ON SKIN: Gently wash with plenty of soap and water. If irritation develops and persists, get medical attention.
4.1	Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
4.1	Ingestion	IF SWALLOWED: Rinse mouth. Give plenty of water to drink. Get medical advice/attention if you feel unwell.
4.2	<b>Most important symptoms and effects, both acute and delayed</b>	May cause damage to organs. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
4.3	<b>Indication of any immediate medical attention and special treatment needed</b>	Treat symptomatically.

## 5. SECTION 5: FIREFIGHTING MEASURES

5.1	<b>Extinguishing media</b> Suitable extinguishing media	Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions. Water, Water fog, dry chemical, sand or carbon dioxide. Do not use water jet. Direct water jet may spread the fire.
	Unsuitable extinguishing media	
5.2	<b>Special hazards arising from the substance or mixture</b>	May form combustible or explosive dust concentrations in air. Combustion products: Carbon monoxide, Carbon dioxide.
5.3	<b>Advice for firefighters</b>	Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

## 6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	<b>Personal precautions, protective equipment and emergency procedures</b>	No action should be taken involving personal risk. Wear suitable protective clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Do not breathe vapour.
6.2	<b>Environmental precautions</b>	Avoid release to environment. Do not allow to enter drains, sewers or water courses.
6.3	<b>Methods and material for containment and cleaning up</b>	Provided it is safe to do so, isolate the source of the leak. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Wash the spillage area with water.
6.4	<b>Reference to other sections</b>	See Section: 8, 13.

## 7. SECTION 7: HANDLING AND STORAGE

7.1	<b>Precautions for safe handling</b>	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Ensure adequate ventilation. Do not breathe vapour.
7.2	<b>Conditions for safe storage, including any incompatibilities</b> Storage temperature	Keep container tightly closed. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Keep cool. Protect from sunlight. Keep away from heat and sparks. Store locked up.
	Incompatible materials	Strong oxidising agents.
7.3	<b>Specific end use(s)</b>	See Section: 1.2

## 8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters
- 8.1.1 Occupational exposure limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
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Methanol	67-56-1	200	266	250	333	OELV
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Source: OELV: Health and Safety Authority, Code of Practice, 2020

<b>8.1.2</b>	<b>Biological limit value</b>	Not established.
<b>8.1.3</b>	<b>PNECs and DNELs</b>	Not established.
<b>8.2</b>	<b>Exposure controls</b>	
<b>8.2.1</b>	<b>Appropriate engineering controls</b>	Ensure adequate ventilation Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources.
<b>8.2.2</b>	<b>Individual protection measures, such as personal protective equipment</b>	Keep good industrial hygiene. Wear appropriate personal protective equipment, avoid direct contact. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke at the work place.
	Eye/ face protection	Use eye protection according to EN 166, designed to protect against liquid splashes.
		
	Skin protection	Wear suitable chemical resistant protective gloves for frequent or prolonged operations tested to EN374 with an acceptable permeation test. Contaminated gloves should be carefully rinsed with water before reuse.
		
	Respiratory protection	In case of inadequate ventilation wear respiratory protection.
		
	Thermal hazards	Not applicable
<b>8.2.3</b>	<b>Environmental exposure controls</b>	Avoid release to the environment.

## 9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>9.1</b>	<b>Information on basic physical and chemical properties</b>	
	Physical state	Liquid
	Colour	Blue
	Odour	Not established
	Melting point/freezing point	32 °F (0 °C) estimated
	Boiling point or initial boiling point and boiling range	212 °F (100 °C) estimated
	Flammability	Not established
	Lower and upper explosion limit	Not established
	Flash point	> 176.0 °F (> 80.0 °C)
	Auto-ignition temperature	Not established
	Decomposition temperature	Not established
	pH	Not established
	Kinematic viscosity	Not established
	Solubility	Not established
	Partition coefficient: n-octanol/water (log value)	Not established
	Vapour pressure	Not established
	Density and/or relative density	1.00 g/cm <sup>3</sup> estimated
	Relative vapour density	Not established
	Particle characteristics	Not established

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9.2 Other information None

### 10. SECTION 10: STABILITY AND REACTIVITY

10.1 **Reactivity** Stable under normal conditions.  
10.2 **Chemical stability** Stable under normal conditions.  
10.3 **Possibility of hazardous reactions** Hazardous polymerisation will not occur.  
10.4 **Conditions to avoid** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid: extreme temperatures  
10.5 **Incompatible materials** Keep away from: Strong oxidising agents  
10.6 **Hazardous decomposition products** Combustion products: Carbon monoxide, Carbon dioxide.

### 11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 **Information on hazard classes as defined in Regulation (EC) No 1272/2008**  
**Acute toxicity - Ingestion** Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: LD50 >2000 mg/kg bw  
**Acute toxicity - Inhalation** Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: LC50 >5 mg/l  
**Acute toxicity - Skin contact** Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: LD50 >2000 mg/kg bw  
**Skin corrosion/irritation** Mixture: Based upon the available data, the classification criteria are not met.  
**Serious eye damage/irritation** Mixture: Based upon the available data, the classification criteria are not met.  
**Respiratory or skin sensitisation** Mixture: Resp. Sens. 1; H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
Hydrogen Resp. Sens. 1; H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
[4-[4-(diethylamino)-2',4'-disulfonatobenzhydrylidene]cy clohexa-2,5-dien-1-ylidene]diethylammonium, sodium salt EU classification and labelling inventory  
**Germ cell mutagenicity** Mixture: Based upon the available data, the classification criteria are not met.  
**Carcinogenicity** Mixture: Based upon the available data, the classification criteria are not met.  
**Reproductive toxicity** Mixture: Based upon the available data, the classification criteria are not met.  
**STOT - Single Exposure** Mixture: STOT SE 2; H371: May cause damage to organs.  
Methyl alcohol STOT SE 2; H371: May cause damage to organs.  
Harmonised Classification  
**STOT - Repeated Exposure** Mixture: Based upon the available data, the classification criteria are not met.  
**Aspiration hazard** Mixture: Based upon the available data, the classification criteria are not met.

11.2 **Information on other hazards**  
11.2.1 **Endocrine disrupting properties** This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.  
11.2.2 **Other information** None

### 12. SECTION 12: ECOLOGICAL INFORMATION

12.1 **Toxicity** Mixture: Based upon the available data, the classification criteria are not met. Estimated LC50 (Mixture): >100 mg/l.  
12.2 **Persistence and degradability** No data for the mixture as a whole.  
Methyl alcohol Readily biodegradable.  
Hydrogen No data available.  
[4-[4-(diethylamino)-2',4'-disulfonatobenzhydrylidene]cy clohexa-2,5-dien-1-ylidene]diethylammonium, sodium salt  
12.3 **Bioaccumulative potential** No data for the mixture as a whole.  
Methyl alcohol No indication of bioaccumulation potential. BCF < 10

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	Hydrogen	No data available.
	[4-[4-(diethylamino)-2',4'-disulfonatobenzhydrylidene]cyclohexa-2,5-dien-1-ylidene]diethylammonium, sodium salt	
12.4	<b>Mobility in soil</b>	No data for the mixture as a whole.
	Methyl alcohol	Adsorption to solid soil phase is not expected.
		Koc:1
	Hydrogen	No data available.
	[4-[4-(diethylamino)-2',4'-disulfonatobenzhydrylidene]cyclohexa-2,5-dien-1-ylidene]diethylammonium, sodium salt	
12.5	<b>Results of PBT and vPvB assessment</b>	Not classified as PBT or vPvB.
12.6	<b>Endocrine disrupting properties</b>	This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.
12.7	<b>Other adverse effects</b>	None Known.

## 13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	<b>Waste treatment methods</b>	Disposal should be in accordance with local, state or national legislation. Avoid release to the environment.
	Waste classification according to Directive 2008/98/EC (Waste Framework Directive)	HP5; Specific Target Organ Toxicity (STOT)/Aspiration Toxicity HP13; Sensitising

## 14. SECTION 14: TRANSPORT INFORMATION

Not classified according to the United Nations 'Recommendations on the Transport of Dangerous Goods'.

	ADR/RID	ADN	IMDG	IATA/ICAO	
14.1	<b>UN number or ID number</b>	None assigned	None assigned	None assigned	None assigned
14.2	<b>UN proper shipping name</b>	None assigned	None assigned	None assigned	None assigned
14.3	<b>Transport hazard class(es)</b>	None assigned	None assigned	None assigned	None assigned
14.4	<b>Packing group</b>	None assigned	None assigned	None assigned	None assigned
14.5	<b>Environmental hazards</b>	Not classified	Not classified as a Marine Pollutant.	Not classified	Not classified
14.6	<b>Special precautions for user</b>	See Section: 2			
14.7	<b>Maritime transport in bulk according to IMO instruments</b>	No information available.	No information available.	No information available.	No information available.
14.8	<b>Additional information</b>	None			None

## 15. SECTION 15: REGULATORY INFORMATION

15.1	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
15.1.	<b>EU regulations</b>	
1	Authorisations and/or restrictions on use	Not restricted.
15.1.	<b>National regulations</b>	
2	Germany	Water hazard class (WGK): slightly hazardous to water (WGK 1)
15.2	<b>Chemical Safety Assessment</b>	A REACH chemical safety assessment has not been carried out.

## 16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Not applicable – V1.0

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**References:** Existing Safety Data Sheet (SDS), Harmonised Classification(s) for Methyl alcohol (CAS No.: 67-56-1), EU classification and labelling inventory for Hydrogen [4-[4-(diethylamino)-2',4'-disulfonatobenzhydrylidene]cyclohexa-2,5-dien-1-ylidene]diethylammonium, sodium salt (CAS No.: 129-17-9)

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification procedure
STOT SE 2; H371	Threshold Calculation
Resp. Sens. 1; H334	Threshold Calculation

### Legend

ADR	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	ADN: European Agreement on the International Transport of Dangerous Goods by Inland Waterways
BCF	Bioconcentration Factor
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL	Derived no effect level
IATA	IATA: International Air Transport Association
ICAO	ICAO: International Civil Aviation Organization
IMDG	IMDG: International Maritime Dangerous Goods
LTEL	Long term exposure limit
PBT	PBT: Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	RID: Regulations concerning the international railway transport of dangerous goods
STEL	Short term exposure limit
vPvB	vPvB: very Persistent and very Bioaccumulative

### Hazard classification / Classification code:

Flam. Liq. 2; Flammable liquid, Category 2  
Acute Tox. 3; Acute Toxicity, Category 3  
Acute Tox. 3; Acute Toxicity, Category 3  
Acute Tox. 4; Acute Toxicity, Category 4  
Acute Tox. 3; Acute Toxicity, Category 3  
Resp. Sens. 1; Respiratory Sensitization, Category 1

STOT SE 1; Specific target organ toxicity — single exposure, Category 1

STOT SE 2; Specific target organ toxicity — single exposure, Category 2

Aquatic Chronic 3; Hazardous to the aquatic environment, Chronic , Category 3

### Hazard Statement(s)

H225: Highly flammable liquid and vapour.  
H301: Toxic if swallowed.  
H311: Toxic in contact with skin.  
H312: Harmful in contact with skin.  
H331: Toxic if inhaled.  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H370: Causes damage to organs.  
H371: May cause damage to organs.  
H412: Harmful to aquatic life with long lasting effects.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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