

Safety Data Sheet

#90034027 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Nile Blue A	3625-57-8	C40H40N6O6S	10	07 Oct 2026

SECTION 1

Identification

1.1 Product identifier

Product name	Nile Blue A
CAS number	3625-57-8
EC / EINECS number	222-832-5
Chemical formula	C40H40N6O6S
Molecular weight	732.85
SMILES	<chem>CC[N+] (=C1C=CC2=NC3=C(C=C(C4=CC=CC=C43)N)OC2=C1)CC.CC[N+] (=C1C=CC2=NC3=C(C=C(C4=CC=CC=C43)N)OC2=C1)CC.[O-]S(=O) (=O)[O-]</chem>

1.2 Relevant identified uses of the substance or mixture and uses advised against

For research purposes only; not suitable for human consumption or veterinary purposes.

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008.

2.2 Label elements

NONE

CODE	PRECAUTIONARY STATEMENT
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P280	Wear protective gloves/protective clothing/eye protection/face protection
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2.3 Other hazards

Not classified as PBT or vPvB according to current UK criteria. This product does not contain any known or suspected Endocrine disruptors.

SECTION 3

Composition / information on ingredients

3.1 Substances

Name	Nile Blue A
CAS number	3625-57-8
EC number	222-832-5
Concentration / purity	c. 100%
Classification according to Regulation (EC) No 1272/2008	This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008.
Hazard statements	None
Acute toxicity estimate (ATE)	No data available
Impurities / stabilising additives	Not applicable

SECTION 4

First-aid measures

4.1 Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest; get medical attention if discomfort continues.
Skin contact	Rinse with water; get medical attention if discomfort continues.
Eye contact	Remove contact lenses, open eyelids wide apart and rinse with water; get medical attention if discomfort continues.
Ingestion	Rinse mouth; get medical attention if discomfort continues.

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

May cause temporary irritation if inhaled, discomfort if swallowed, skin dryness on prolonged contact and slight eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically; no special treatment required.

SECTION 5

Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

Unsuitable extinguishing media None known

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon / Nitrogen / Sulfur oxides

5.3 Advice for firefighters

Wear positive-pressure SCBA and appropriate protective clothing; cool containers exposed to heat with water spray.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.

6.2 Environmental precautions

Avoid discharge into drains or watercourses or onto the ground.

6.3 Methods and material for containment and cleaning up

Collect spillage with shovel and broom, place in suitable sealed waste containers, and flush area with plenty of water.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and launder thoroughly before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature Ambient

Conditions for safe storage (incompatibilities) Store away from incompatible materials (strong oxidising agents).

7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

8.2 Exposure controls

Eye / face protection Safety glasses
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection Gloves: Nitrile Rubber, 0.11mm (480 mins).

Respiratory protection Not required
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

Other protection Wash after use and before eating, smoking and using the toilet; do not eat, drink or smoke when using.

Environmental exposure controls Not regarded as dangerous for the environment.

SECTION 9

Physical & chemical properties

9.1 Information on basic physical and chemical properties

Appearance / physical state Solid
DERIVED FROM: LITERATURE

Colour Dark green
DERIVED FROM: LITERATURE

Odour Not known
DERIVED FROM: LITERATURE

Melting / freezing point *Not applicable*

Boiling point *Not applicable*

Flammability *Not applicable*

Lower and upper explosion limit	Not applicable
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Flash point	Not applicable
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Auto-ignition temperature	Not applicable
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Decomposition temperature	Not applicable
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pH	Not applicable
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Acidity	Neutral DERIVED FROM: LITERATURE
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Kinematic viscosity	Not applicable
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Solubility	Slightly soluble in water (50 g/L @ 25°C) and methanol. DERIVED FROM: LITERATURE
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Partition coefficient n-octanol/water (log value)	log Pow: 3.39 DERIVED FROM: LITERATURE
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Vapour pressure	Not applicable
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Density (g/mL)	1 g/mL DERIVED FROM: LITERATURE
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Relative vapour density	Not applicable
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Particle characteristics	Not applicable
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9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

See the other subsections of Section 10.

10.2 Chemical stability

Not applicable

10.3 Possibility of hazardous reactions

No potentially hazardous reactions known.

10.4 Conditions to avoid

No known conditions likely to result in a hazardous situation.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

See section 5

SECTION 11

Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (LD50 / LC50) *Not applicable*

Skin corrosion / irritation *Not applicable*

Eye corrosion / irritation *Not applicable*

Respiratory / skin sensitisation *Not applicable*

Carcinogenicity *Not applicable*

Mutagenicity *Not applicable*

Reproductive toxicity *Not applicable*

STOT (single / repeated exposure) *Not applicable*

Aspiration hazard *Not applicable*

11.2 Information on other hazards

Not applicable

SECTION 12

Ecological information

12.1 Toxicity

Not applicable

12.2 Persistence and degradability

Not applicable

12.3 Bioaccumulative potential

Not applicable

12.4 Mobility in soil

Not applicable

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

SECTION 14

Transport information

14.1 UN number or ID number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Special precautions for user *Not applicable*

Transport category *Not applicable*

Tunnel code *Not applicable*

Packing instruction (ADR) *Not applicable*

Packing instruction (IMDG) *Not applicable*

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

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

Substance-specific regulations (e.g. licences)

National Regulations:

-Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances

Other regulations, limitations and legal regulations:

-Directive 94/33/EC- The protection of young people at work.

REACH code Y113

ECHA notification *Not applicable*

15.2 Chemical safety assessment

Not applicable

SECTION 16

Other information

Revision notes / other information

Replaces SDS Ver. 1, published 23/05/2023

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.