



Neogen® MonitorMark™ Time Temperature Indicator

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Issue date: 09-09-2025 Revision date: 09-30-2025 Supersedes: 09-09-2025 Version: 2.0

SECTION 1 Identification

1.1. GHS Product identifier

Product form	: Mixture
Trade name	: Neogen® MonitorMark™ Time Temperature Indicator
Type of product	: Food Safety -- [Food Safety]
Product code	: 9860C

1.2. Other means of identification

Part Number(s)	: 700002001 9861A 700002089 9860D 700002091 700002000 9860C 700002090 9860A 700002084 9860B 700002085 9860H
----------------	---

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture	: Laboratory chemicals, Scientific research and development
------------------------------	---

1.4. Supplier's details

Manufacturer

Neogen Corporation
620 Leshar Place
Lansing, Michigan 48912
United States of America
T 800.234.5333
sds@neogen.com - <https://www.neogen.com/>

1.5. Emergency phone number

Emergency number	: 24 hours: Medical: 1-800-498-5743 (U.S. and Canada) or 1-651-523-0318 (international) Spill/CHEMTREC: 1-800-424-9300 (U.S. and Canada) or 1-703-527-3887 (international)
------------------	--

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Hazardous to the aquatic environment, Acute Hazard, Category 3	H402	Harmful to aquatic life.
Full text of H statements : see section 16		

2.2. GHS label elements, including precautionary statements

GHS CA labeling

Hazard statements (GHS CA)	: H402 - Harmful to aquatic life
Precautionary statements (GHS CA)	: P273 - Avoid release to the environment. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Other hazards which do not result in classification

No additional information available

Neogen® MonitorMark™ Time Temperature Indicator

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Decyl decanoate	Decyl decanoate	CAS-No.: 1654-86-0	≥ 1 – < 5	Aquatic Chronic 4, H413
9,10-Anthracenedione, 1,4-bis[(1-methylethyl)amino]-	1,4-Bis[(1-methylethyl)amino]-9,10-anthracenedione ; 1,4-Bis(isopropylamino) anthraquinone	CAS-No.: 14233-37-5	≥ 1 – < 5	Aquatic Acute 1, H400 Aquatic Chronic 4, H413

Full text of hazard classes and H-statements : see section 16

SECTION 4 First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.
First-aid measures general	: If you feel unwell, seek medical advice.
Personal protection for first-aid responders.	: First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
-----------------------------------	--------------------------

SECTION 5 Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

Neogen® MonitorMark™ Time Temperature Indicator

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

5.3. Special protective actions for fire-fighters

- Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.
- Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

- For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.
- For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Keep in a cool, well-ventilated place away from heat.
- Storage conditions : Keep cool. Protect from sunlight.
- Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Protective gloves

Neogen® MonitorMark™ Time Temperature Indicator

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Color	: Blue
Odor	: Odorless
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).

Neogen® MonitorMark™ Time Temperature Indicator

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Incompatible materials	: No additional information available
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hardening time:	: No additional information available

SECTION 11 Toxicological information

11.1. Likely routes of exposure

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Neogen® MonitorMark™ Time Temperature Indicator

Unknown acute toxicity (GHS CA)	100% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 100% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 100% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
---------------------------------	--

9,10-Anthracenedione, 1,4-bis[(1-methylethyl)amino]- (14233-37-5)

LD50 oral rat	> 17000 mg/kg Source: Dupont
---------------	------------------------------

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: None under normal conditions.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal conditions.

SECTION 12 Ecological information

12.1. Toxicity

Ecology - general	: Harmful to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	: Harmful to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified.

9,10-Anthracenedione, 1,4-bis[(1-methylethyl)amino]- (14233-37-5)

EC50 - Crustacea [1]	> 0.79 µg/l Test organisms (species): Daphnia magna
----------------------	---

12.2. Persistence and degradability

Neogen® MonitorMark™ Time Temperature Indicator

Persistence and degradability	Not rapidly degradable
-------------------------------	------------------------

Decyl decanoate (1654-86-0)

Persistence and degradability	Not rapidly degradable
-------------------------------	------------------------

Neogen® MonitorMark™ Time Temperature Indicator

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

9,10-Anthracenedione, 1,4-bis[(1-methylethyl)amino]- (14233-37-5)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Decyl decanoate (1654-86-0)	
Partition coefficient n-octanol/water (Log Pow)	8.72 Source: National Library of Medicine

9,10-Anthracenedione, 1,4-bis[(1-methylethyl)amino]- (14233-37-5)	
Partition coefficient n-octanol/water (Log Pow)	6.07 Source: EPISUITE

12.4. Mobility in soil

Decyl decanoate (1654-86-0)	
Mobility in soil	481700 Source: Quantitative Structure Activity Relation

9,10-Anthracenedione, 1,4-bis[(1-methylethyl)amino]- (14233-37-5)	
Mobility in soil	12910 Source: EPISUITE

12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

SECTION 14 Transport information

In accordance with TDG / DOT / IMDG / IATA

TDG	DOT	IMDG	IATA
14.1. UN Number			
Not regulated for transport			
14.2. UN Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group, if applicable			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

Neogen® MonitorMark™ Time Temperature Indicator

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

14.6. Special precautions for user

TDG

Not regulated

DOT

Not regulated

IMDG

Not regulated

IATA

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78⁹ and the IBC Code¹⁰

Not applicable

SECTION 15 Regulatory information

Decyl decanoate (1654-86-0)

Listed on the Canadian NDSL (Non-Domestic Substances List)

9,10-Anthracenedione, 1,4-bis[(1-methylethyl)amino]- (14233-37-5)

Listed on the Canadian DSL (Domestic Substances List)

Decyl decanoate (1654-86-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

9,10-Anthracenedione, 1,4-bis[(1-methylethyl)amino]- (14233-37-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on INSQ (Mexican National Inventory of Chemical Substances)

SECTION 16 Other Information

Issue date : 09-09-2025
Revision date : 09-30-2025
Supersedes : 09-09-2025

Full text of hazard classes and H-statements:

H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H413	May cause long lasting harmful effects to aquatic life

Safety Data Sheet (SDS), Canada

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.