



SAFETY DATA SHEET

NT Thermo Black

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

SECTION 1: Identification of the substance / mixture and of the company / undertaking

Date issued 17.02.2023

1.1. Product identifier

Product name NT Thermo Black

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

Use of the substance / mixture Flame retardant.

Main intended use PC-CON-5 Construction chemicals

Industrial use Yes

Professional use Yes

Consumer use No

1.3. Details of the supplier of the safety data sheet

Company name Nordtreat Oy

Postal address Mestarintie 11

Postcode FI-01730

City Vantaa

Country Finland

Telephone number +358 20 730 9330

Email info@nordtreat.com

Enterprise No. FI-2927144-5

1.4. Emergency telephone number

Emergency telephone Telephone number: +358 800 147 111 or +358 9 471 977
Description: Poison Information Centre (in Finland), P.O. Box 790 (Tukholmankatu 17), 00029 HUS
Open 24 hours a day.
Telephone number: 112

Identification, comments

Description: Emergency telephone number
Open 24 hours a day.

Please contact the Emergency Centre in your own country, e.g. 112 in European Union countries.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to
Regulation (EC) No 1272/2008
[CLP / GHS]

Aquatic Acute 1; H400

Aquatic Chronic 3; H412

2.2. Label elements

Hazard pictograms (CLP)



Signal word

Warning

Hazard statements

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P391 Collect spillage.
P501 Dispose of contents / container to in accordance with local / regional / national/ international regulation.

Supplemental label information

EUH 208 Contains Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 1,2-benzisothiazol-3(2H)-one, 3-iodo-2-propynyl butylcarbamate. May produce an allergic reaction.

2.3. Other hazards

PBT / vPvB

For results of PBT and vPvB assessment, see point 12.5.

Other hazards

Endocrine disrupting properties: The product contains a substance undergoing an endocrine disruptor assessment. 3-iodo-2-propynyl butylcarbamate (CAS: 55406-53-6)

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
N-(1,1-dimethylethyl) bis(2-benzothiazolesulfen) amide	CAS No.: 3741-80-8	Aquatic Acute 1;	< 2 %	
	EC No.: 407-430-1	H400; M-factor 100		
	Index No.: 613-180-00-6	Aquatic Chronic 1;		
	REACH Reg. No.: 01-2120804754-55-xxxx	H410; M-factor 1		
3-iodo-2-propynyl butylcarbamate	CAS No.: 55406-53-6	Acute Tox. 3; H331	< 0,25 %	
	EC No.: 259-627-5	Acute Tox. 4; H302		
	Index No.: 616-212-00-7	STOT RE 1; H372		
	REACH Reg. No.:	Eye Dam. 1; H318		

	01-2120762115-60	Skin Sens. 1; H317 Aquatic Acute 1; H400; M-factor 10 Aquatic Chronic 1; H410; M-factor 1	
1,2-benzisothiazol-3(2H)-one	CAS No.: 2634-33-5 EC No.: 220-120-9 Index No.: 613-088-00-6 REACH Reg. No.: 01-2120761540-60	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400; M-factor 1 Aquatic Chronic 2; H411	< 0,05 %
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS No.: 55965-84-9 Index No.: 613-167-00-5	Acute Tox. 2; H310 Acute Tox. 2; H330 Acute Tox. 3; H301 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400; M-factor 100 Aquatic Chronic 1; H410; M-factor 100 EUH 071 CLP classification, notes: Huomautus: B	< 0,0015 %

Description of the mixture

Aqueous solution.

Remarks, substance

Specific concentration limits:

Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (CAS: 55965-84-9)

Eye Dam. 1; H318: C ≥ 0,6 %

Eye Irrit. 2; H319: 0,06 % ≤ C < 0,6 %

Skin Corr. 1C; H314: C ≥ 0,6 %

Skin Irrit. 2; H315: 0,06 % ≤ C < 0,6 %

Skin Sens. 1A; H317: C ≥ 0,0015 %

1,2-benzisothiazol-3(2H)-one (CAS: 2634-33-5)

Skin Sens. 1; H317: C ≥ 0,05 %

Substance comments

The full text for all hazard statements is displayed in point 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General

If the situation is unclear or symptoms persist, seek medical attention. Show this safety data sheet, product container or label to the doctor in attendance.

Inhalation

If inhaled, move exposed person to fresh air and keep at rest. Get medical attention if symptoms occur.

Skin contact

Wash contaminated skin thoroughly with water and soap.
Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Eye contact

Flush eyes with plenty of water for several minutes. Remove contact lenses, if

	present and easy to do, and continue rinsing. Contact a doctor.
Ingestion	Rinse the mouth and give 1-2 glasses of water to drink. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Acute symptoms and effects	May produce an allergic skin reaction. Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 1,2-benzisothiazol-3(2H)-one, 3-iodo-2-propynyl butylcarbamate.
Delayed symptoms and effects	None known.

4.3. Indication of any immediate medical attention and special treatment needed

Other information	No specific instructions. Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire. Water spray (fog). Alcohol-resistant foam. Carbon dioxide.
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5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The product is not flammable.
Hazardous combustion products	During fire, toxic gases and vapours may be evolved.

5.3. Advice for firefighters

Personal protective equipment	Wear appropriate protective equipment and self-contained breathing apparatus.
Fire fighting procedures	Fight fire with normal precautions from a reasonable distance. Avoid breathing fire vapours.
Other information	Take care of fire waste and contaminated extinguishing water in accordance with local regulations. Discharge of extinguishing waters into drains, sewers or waterways must be prevented.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Stop leak if safe to do so. Ventilate area. Keep unnecessary and unprotected people from entering.
Personal protection measures	Wear appropriate personal protective equipment. Avoid breathing vapours and contact with skin or eyes.

6.2. Environmental precautions

Environmental precautionary measures	Do not discharge the product or extinguishing waters into drains, sewers or any waterways. Contact local authorities in case of spillage to drain/aquatic environment.
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6.3. Methods and material for containment and cleaning up

Containment	Stop leak if safe to do so.
Clean up	Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

6.4. Reference to other sections

Other instructions	Safe handling: see point 7. Personal protective equipment: see point 8. Waste disposal: see point 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Ensure adequate ventilation. Avoid contact with skin or eyes. Use appropriate personal protective equipment while handling the product (see point 8).
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Protective safety measures

Advice on general occupational hygiene	Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink or smoke when using this product. Wash hands before breaks and at the end of workday. Wash contaminated clothes before reuse.
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7.2. Conditions for safe storage, including any incompatibilities

Storage	Store away from food, drink and animal feedstuffs. Keep containers tightly closed and upright to prevent leakage.
Conditions to avoid	For incompatible materials see point 10.5.

Conditions for safe storage

Technical measures and storage conditions	Store in a well-ventilated area. Store protected from direct sunlight. Protect from freezing.
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7.3. Specific end use(s)

Specific use(s)	None reported.
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SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Control parameters comments	No applicable exposure limit values. DNEL/PNEC: Chemical safety assessment has not been performed for the product.
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DNEL / PNEC

Substance	N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide
DNEL	Group: Professional Route of exposure: Long-term dermal (local)

Value: 1.06 mg/cm²

Group: Professional

Route of exposure: Long-term dermal (systemic)

Value: 10.9 mg/kg bw/day

Group: Professional

Route of exposure: Long-term inhalation (systemic)

Value: 38.5 mg/m³

Group: Consumer

Route of exposure: Long-term oral (systemic)

Value: 5.46 mg/kg bw/day

Group: Consumer

Route of exposure: Long-term dermal (local)

Value: 0.53 mg/cm²

Group: Consumer

Route of exposure: Long-term dermal (systemic)

Value: 5.47 mg/kg bw/day

Group: Consumer

Route of exposure: Long-term inhalation (systemic)

Value: 9.5 mg/m³

PNEC

Route of exposure: Freshwater

Value: 0.0041 mg/l

Route of exposure: Saltwater

Value: 0.00041 mg/l

Route of exposure: Water

Value: 0.0041 mg/l

Comments: Intermittent release

Route of exposure: Sewage treatment plant STP

Value: 0.19 mg/l

Route of exposure: Freshwater sediments

Value: 16.66 mg/kg

Comments: dwt

Route of exposure: Saltwater sediments

Value: 1.67 mg/kg

Comments: dwt

Route of exposure: Soil

Value: 3.32 mg/kg

Comments: dwt

Route of exposure: Food products

Value: 243 mg/kg

8.2. Exposure controls

Safety signs



Precautionary measures to prevent exposure

Appropriate engineering controls	Provide adequate ventilation. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
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Eye / face protection

Suitable eye protection	Use tight-fitting safety goggles (EN 166).
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Hand protection

Suitable gloves type	Wear appropriate chemical resistant safety gloves (EN 374).
Hand protection, comments	Contact glove manufacturer for specific advice on glove selection.

Skin protection

Suitable protective clothing	Wear appropriate chemical-resistant, impervious protective clothing.
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Respiratory protection

Respiratory protection necessary at	In case of inadequate ventilation wear respiratory protection.
Respiratory protection, comments	Contact the protective equipment manufacturer to select a suitable respirator.

Appropriate environmental exposure control

Environmental exposure controls	Prevent entry into drains, sewers, waterways or soil.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Black.
Odour	Odourless or mild odor.
Odour limit	Comments: Not relevant.
pH	Value: 7,5 - 8,5
Melting point / melting range	Comments: Not determined.
Boiling point / boiling range	Comments: Not determined.
Flash point	Comments: Not determined.
Evaporation rate	Comments: Not determined.
Explosion limit	Comments: Not determined.

Vapour pressure	Comments: Not determined.
Vapour density	Comments: Not determined.
Particle characteristics	Comments: Not relevant.
Density	Value: 1,12 kg/l
Solubility	Comments: Not determined.
Partition coefficient: n-octanol/ water	Comments: Not determined.
Auto-ignition temperature	Comments: Not determined.
Decomposition temperature	Comments: Not determined.
Viscosity	Comments: Not determined.

9.2. Other information

9.2.2. Other safety characteristics

Comments	None reported.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Not reactive under normal use and storage conditions.
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10.2. Chemical stability

Stability	Chemically stable under normal storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None known.
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10.4. Conditions to avoid

Conditions to avoid	None known.
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10.5. Incompatible materials

Materials to avoid	No known incompatible materials.
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10.6. Hazardous decomposition products

Hazardous decomposition products	No hazardous decomposition products known.
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SECTION 11: Toxicological information

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

Acute toxicity	Comments: There is no toxicological data available about the product as such. The product is not classified as acutely toxic.
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Substance N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide

Acute toxicity

Effect tested: LD50
Route of exposure: Oral
Value: > 5000 mg/kg
Animal test species: Rat

Effect tested: LD50
Route of exposure: Dermal
Value: > 2000 mg/kg
Animal test species: Rabbit

Other information regarding health hazards

Assessment of skin corrosion / irritation, classification

The product is not classified as irritant or corrosive to skin. Data lacking.

Assessment of eye damage or irritation, classification

The product is not classified as damaging or irritating to eyes. Data lacking.

Sensitisation

The product is not classified as a respiratory or skin sensitiser. Data lacking. However, the product contains small amounts of components that may produce an allergic reaction.

Mutagenicity

The product is not classified as a mutagen. Data lacking.

Assessment of carcinogenicity, classification

The product is not classified as a carcinogen. Data lacking.

Reproductive toxicity

The product is not classified as toxic to reproduction. Data lacking.

Assessment of specific target organ toxicity - single exposure, classification

The product is not classified as toxic to specific target organs at a single exposure. Data lacking.

Assessment of specific target organ toxicity - repeated exposure, classification

The product is not classified as toxic to specific target organs at repeated exposure. Data lacking.

Assessment of aspiration hazard, classification

The product is not classified as an aspiration hazard. Data lacking.

Symptoms of exposure

In case of skin contact

May cause an allergic skin reaction. (Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 1, 2-benzisothiazol-3(2H)-one, 3-iodo-2-propynyl butylcarbamate)

11.2 Other information

Endocrine disruption

The product contains a substance undergoing an endocrine disruptor assessment. 3-iodo-2-propynyl butylcarbamate (CAS: 55406-53-6)

SECTION 12: Ecological information

12.1. Toxicity

Substance

N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide

Aquatic toxicity, fish

Toxicity type: Acute
Value: > 2,7 mg/l

	Effect dose concentration: LC50 Test duration: 96 hour(s) Species: Pimephales promelas
	Toxicity type: Chronic Value: 0.041 mg/l Effect dose concentration: NOEC Test duration: 89 day(s)
Substance	N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide
Aquatic toxicity, algae	Toxicity type: Acute Value: > 0,87 mg/l Effect dose concentration: EC50 Test duration: 96 hour(s) Species: Pseudokirchneriella subcapitata
Substance	N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide
Aquatic toxicity, crustacean	Toxicity type: Acute Value: 5 µg/l Effect dose concentration: EC50 Test duration: 48 hour(s) Species: Daphnia magna
	Toxicity type: Chronic Value: > 0.16 mg/l Effect dose concentration: NOEC Test duration: 21 day(s) Species: Daphnia magna
Ecotoxicity	Very toxic to aquatic life with long lasting effects. Prevent entry into drains, sewers, waterways or soil.

12.2. Persistence and degradability

Persistence and degradability description/evaluation	No data available.
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12.3. Bioaccumulative potential

Bioaccumulation, evaluation	No data available.
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12.4. Mobility in soil

Mobility	No data available.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Not Classified as PBT/vPvB by current EU criteria.
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12.6. Endocrine disrupting properties

Endocrine disrupting properties	The product contains a substance undergoing an endocrine disruptor assessment. 3-iodo-2-propynyl butylcarbamate (CAS: 55406-53-6)
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12.7. Other adverse effects

Additional ecological information None reported.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical Prevent entry into drains, sewers, waterways or soil.

Other information Dispose of in compliance with local and national regulations. Avoid release to the environment.

SECTION 14: Transport information

Dangerous goods Yes

14.1. UN number

ADR/RID/ADN 3082

IMDG 3082

ICAO/IATA 3082

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

ADR/RID/ADN ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical name/danger releasing substance ADR/RID/ADN N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical name/danger releasing substance IMDG N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide

ICAO/IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Technical name/danger releasing substance ICAO/IATA N-(1,1-dimethylethyl)bis(2-benzothiazolesulfen)amide

14.3. Transport hazard class(es)

ADR/RID/ADN 9

Classification code ADR/RID/ADN M6

14.4. Packing group

ADR/RID/ADN III

IMDG III

ICAO/IATA III

14.5. Environmental hazards

IMDG Marine pollutant	Yes.
Comments	The product is very toxic to aquatic life with long-lasting effects.

14.6. Special precautions for user

Special safety precautions for user Not determined.

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk (yes/no) No

Additional information

Hazard label ADR/RID/ADN	9
Hazard label IMDG	9
Hazard label ICAO/IATA	9

ADR/RID Other information

Tunnel restriction code	-
Transport category	3
Hazard No.	90

IMDG Other information

EmS F-A, S-F

SECTION 15: Regulatory information

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

Legislation and regulations No specific regulations.

15.2. Chemical safety assessment

Chemical safety assessment performed No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	<p>EUH 071 Corrosive to the respiratory tract. H301 Toxic if swallowed. H302 Harmful if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H331 Toxic if inhaled.</p>
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	<p>H372 Causes damage to organs through prolonged or repeated exposure H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.</p>
CLP classification, notes	The classification is based on the calculation method in accordance with Regulation (EC) No 1272/2008 [CLP / GHS].
Training advice	Read safety data sheet.
Key literature references and sources for data	Product specifications by manufacturer SDSs for product components
Abbreviations and acronyms used	DNEL: Derived No-Effect Level EC50: Effective concentration: concentration which kills or immobilises 50 % of exposed organisms LC50: Lethal concentration 50 % (median lethal concentration): concentration which kills 50 % of exposed organisms LD50: Lethal dose 50 % (median lethal dose): dose which kills 50 % of exposed organisms NOEC: No Observed Effect Concentration: concentration at which no effects are observed PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No-Effect Concentration vPvB: very Persistent and very Bioaccumulative substance
Version	1
Prepared by	Sweco Finland Oy
Comments	The information of this safety data sheet is based on existing public information sources, such as current legislation, available at the time of publication of the completed safety data sheet, and information on the Customer's products that has been provided by the Customer to Sweco. The Customer is responsible that the information provided to Sweco is accurate and up to date.