SAFETY DATA SHEET

NORFLAM® W314

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	02.04.2025

1.1. Product identifier

Product name	NORFLAM® W314

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

Use of the substance / mixture	Flame-retardant wood stain for interior and exterior use.
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: 112 Description: Emergency telephone number Open 24 hours a day. 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.
Identification, comments	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 Chronic 3; H412

2.2. Label elements

Hazard statements	H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P501 Dispose of contents / container to in accordance with national regulations.
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). 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 terbutryn (CAS: 886-50-0) that is undergoing an endocrine disruptor assessment.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Ethanol	CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5 REACH Reg. No.: 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	< 3 %	2
Butanone	CAS No.: 78-93-3 EC No.: 201-159-0 Index No.: 606-002-00-3 REACH Reg. No.: 01-2119457290-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH 066	< 0,1 %	2
Terbutryn	CAS No.: 886-50-0 EC No.: 212-950-5	Acute Tox. 4; H302 Aquatic Acute 1; H400; M-factor 100 Aquatic Chronic 1; H410; M-factor 100	< 0,1 %	
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one	CAS No.: 55965-84-9 Index No.:	Acute Tox. 2; H310 Acute Tox. 2; H330	< 0,0015 %	

and 2-methyl-2H-isothiazol-3-one (3:1)	613-167-00-5 REACH Reg. No.: 01-2120764691-48	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: B

[2]Substance with a workplace exposure limit

Remarks, substance	Specific concentration limits and acute toxicity estimates (ATE): 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 % ATE (oral) = 100 mg/kg bw ATE (dermal) = 50 mg/kg bw ATE (inhalation, vapours) = 0,5 mg/l
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 plenty of soap and water. 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	Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic skin reaction.
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.

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. Dry chemical.
Improper extinguishing media	Do not use water jet as an extinguisher, as this may spread the fire.

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. Combustion of the product may form smoke, carbon monoxide, carbon dioxide and other products of incomplete combustion. Nitrogen oxides (NOx). Sulphur oxides (SOx). Halogenated compounds.

5.3. Advice for firefighters

Personal protective equipment	Wear appropriate protective equipment and self-contained breathing apparatus.
Fire fighting procedures	Use water spray to cool product containers and tanks near the fire.
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	Ensure adequate ventilation. Keep unnecessary and unprotected people from entering.
Personal protection measures	Avoid breathing vapours and contact with skin or eyes. Wear appropriate personal protective equipment. For personal protection, see section 8.

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.

6.3. Methods and material for containment and cleaning up

Containment	Stop leak if safe to do so.
Clean up	Absorb spill with inert material (e.g. sand, diatomaceous earth, commercial absorbent) and collect in clearly labeled containers for disposal.

6.4. Reference to other sections

Other instructions	Safe handling: see point 7. Personal protective equipment: see point 8.

Waste disposal: see point 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

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. Take off contaminated clothing immediately and wash before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in a dry, well-ventilated area. Keep cool. Keep containers tightly closed and upright to prevent leakage. Store away from food, drink and animal feedstuffs. Do not store in unlabelled containers.
Conditions to avoid	Keep away from direct sunlight and heat. Protect from freezing. For incompatible materials see point 10.5.

7.3. Specific end use(s)

Specific use(s)	The use stated in section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Ethanol	CAS No.: 64-17-5	Country of origin: United Kingdom Limit value (8 h) : 1000 ppm Limit value (8 h) : 1920 mg/m³ Country of origin: USA Limit value (8 h) : 1000 ppm Limit value (8 h) : 1900 mg/m³ Comments: NIOSH, OSHA	
Butanone	CAS No.: 78-93-3	Country of origin: United Kingdom Limit value (8 h) : 200 ppm Limit value (8 h) : 600 mg/m³ **Limit value (short term)** Value: 300 ppm **Limit value (short term)**	

	Value: 899 mg/m³ Country of origin: USA Limit value (8 h) : 200 ppm Limit value (8 h) : 590 mg/m³ **Limit value (short term)** Value: 300 ppm **Limit value (short term)** Value: 885 mg/m³ Comments: NIOSH Country of origin: USA Limit value (8 h) : 200 ppm Limit value (8 h) : 590 mg/m³ Comments: OSHA

DNEL / PNEC

Substance	Ethanol
DNEL	**Group:** Consumer **Route of exposure:** Long-term dermal (systemic) **Value:** 206 mg/kg bw/d **Group:** Professional **Route of exposure:** Acute inhalation (local) **Value:** 1900 mg/m³ **Group:** Professional **Route of exposure:** Long-term inhalation (systemic) **Value:** 950 mg/m³ **Group:** Consumer **Route of exposure:** Acute inhalation (local) **Value:** 950 mg/m³ **Group:** Consumer **Route of exposure:** Long-term inhalation (systemic) **Value:** 114 mg/m³ **Group:** Professional **Route of exposure:** Long-term dermal (systemic) **Value:** 343 mg/kg bw/d **Group:** Consumer **Route of exposure:** Long-term oral (systemic) **Value:** 87 mg/kg bw/d
PNEC	**Route of exposure:** Freshwater **Value:** 0,96 mg/l **Route of exposure:** Saltwater **Value:** 0,79 mg/l **Route of exposure:** Sediment **Value:** 3,6 mg/kg dw

	Route of exposure: Soil **Value:** 0,63 mg/kg dw
Substance	Butanone
DNEL	**Group:** Professional **Route of exposure:** Long-term inhalation (systemic) **Value:** 600 mg/m³ **Group:** Professional **Route of exposure:** Long-term dermal (systemic) **Value:** 1161 mg/kg bw/day **Group:** Consumer **Route of exposure:** Long-term inhalation (systemic) **Value:** 106 mg/m³ **Group:** Consumer **Route of exposure:** Long-term dermal (systemic) **Value:** 412 mg/kg bw/day **Group:** Consumer **Route of exposure:** Long-term oral (systemic) **Value:** 31 mg/kg bw/day
PNEC	**Route of exposure:** Freshwater **Value:** 55.8 mg/l **Route of exposure:** Saltwater **Value:** 55.8 mg/l **Route of exposure:** Sewage treatment plant STP **Value:** 709 mg/l **Route of exposure:** Freshwater sediments **Value:** 284.74 mg/kg dw **Route of exposure:** Saltwater sediments **Value:** 284.7 mg/kg dw

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.

Eye / face protection

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

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. Follow the manufacturer's instructions in the use of protective gloves. Break-through time must be found out by manufacturer of the protective gloves and must be observed.

Skin protection

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

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.

Thermal hazards

Thermal hazards	No thermal hazards known.

Appropriate environmental exposure control

Environmental exposure controls	Prevent entry into drains, sewers, waterways or soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless.
Odour	Mild.
Odour limit	Comments: Not relevant.
pH	Value: 7.4 - 8.6
Melting point / melting range	Comments: Not determined.
Freezing point	Comments: Not determined.
Boiling point / boiling range	Comments: Not determined.
Flash point	Comments: Not determined.
Evaporation rate	Comments: Not determined.
Flammability	Not determined.
Explosion limit	Comments: Not determined.
Vapour pressure	Comments: Not determined.
Vapour density	Comments: Not determined.
Particle characteristics	Comments: Not relevant.
Density	Value: 1.20 - 1.22 g/cm³

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

Other physical and chemical properties

Physical and chemical properties	None reported.

9.2.2. Other safety characteristics

Comments	None reported.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Not reactive under normal use and storage conditions.

10.2. Chemical stability

Stability	Chemically stable under normal storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No dangerous reactions under normal use and storage conditions.

10.4. Conditions to avoid

Conditions to avoid	Avoid freezing conditions. Store protected from direct sunlight and heat.

10.5. Incompatible materials

Materials to avoid	Strong oxidizing agents. Strong alkalis. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products	During fire, toxic gases and vapours may be evolved. Combustion of the product may form smoke, carbon monoxide, carbon dioxide and other products of incomplete combustion. Nitrogen oxides (NOx). Sulphur oxides (SOx). Halogenated compounds.

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. Data lacking.

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. However, the product contains small amount of component that may produce an allergic reaction. Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1).
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 ingestion	No symptoms known.
In case of skin contact	Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
In case of inhalation	Not expected to cause respiratory irritation
In case of eye contact	Not expected to cause eye irritation.

11.2 Other information

Endocrine disruption	The product contains terbutryn (CAS: 886-50-0) that is undergoing an endocrine disruptor assessment.
Other information	None reported.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	There is no environmental data available about the product as such. Harmful 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.

12.3. Bioaccumulative potential

Bioaccumulation, evaluation	No data available.

12.4. Mobility in soil

Mobility	No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain substances considered to be either PBT or vPvB at a concentration ≥ 0.1%.

12.6. Endocrine disrupting properties

Endocrine disrupting properties	The product contains terbutryn (CAS: 886-50-0) that is undergoing an endocrine disruptor assessment.

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.
Appropriate methods of disposal for the contaminated packaging	Empty containers may contain product residues. Packaging that cannot be cleaned should be disposed of like the product.
Other information	Dispose of in compliance with local and national regulations.

SECTION 14: Transport information

Dangerous goods	No

14.1. UN number

Comments	Not classified as hazardous for transport (ADR, RID, ADN, ICAO/IATA, IMDG)

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

IMDG Marine pollutant	No.
Comments	The product is not classified as hazardous to the environment.

14.6. Special precautions for user

Special safety precautions for user	No special safety precautions.

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk (yes/no)	No

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)	EUH 066 Repeated exposure may cause skin dryness or cracking. EUH 071 Corrosive to the respiratory tract. H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H302 Harmful if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H330 Fatal if inhaled. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.
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 EH40/2005 Workplace exposure limits (4th ed, 2020) GESTIS International Limit Values database
Abbreviations and acronyms used	ATE: Acute toxicity estimate DNEL: Derived No-Effect Level HTP: Concentrations known to be Hazardous. 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.