



SAFETY DATA SHEET

NORFLAM® W313

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 18.03.2024

1.1. Product identifier

Product name NORFLAM® W313

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

CLP classification, notes

In accordance with CLP/GHS regulation (EC) No 1272/2008, the product has not been classified as hazardous.

2.2. Label elements

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) and 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

2.3. Other hazards

PBT / vPvB

Not classified as PBT/vPvB by current EU criteria.

Other hazards

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

SECTION 3: Composition / information on ingredients

3.2. Mixtures

| Substance | Identification | Classification | Contents | Notes |
|--|---|--|------------|-------|
| 3-iodo-2-propynyl butylcarbamate | CAS No.: 55406-53-6 EC No.: 259-627-5 Index No.: 616-212-00-7 REACH Reg. No.: 01-2120762115-60 | Acute Tox. 3; H331 Acute Tox. 4; H302 STOT RE 1; H372 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400; M-factor 10 Aquatic Chronic 1; H410; M-factor 1 | < 0,1 % | |
| 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; M-factor 1 | < 0,01 % | |
| 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 REACH Reg. No.: 01- 2120764691-48 | Acute Tox. 2; H310 Acute Tox. 2; H330 Acute Tox. 3; H301 Skin Corr. 1C; H314 Eye Dam. 1; H318 | < 0,0015 % | |

| | |
|----------------------------|---|
| | <p>Skin Sens. 1A; H317 Aquatic Acute 1; H400; M-factor 100 Aquatic Chronic 1; H410; M-factor 100 EUH 071 CLP classification, notes: B</p> |
| Description of the mixture | Aqueous solution. |
| Remarks, substance | <p>Specific concentration limits: 1,2-benzisothiazol-3(2H)-one (CAS: 2634-33-5) Skin Sens. 1; H317: C ≥ 0,05 % 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 %</p> |
| 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. If skin irritation or rash occurs: Get medical advice/ attention. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids open. Remove contact lenses, if present and easy to do, and continue rinsing. If eye irritation persists: Get medical advice/attention. |
| 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) and 1,2-benzisothiazol-3(2H)-one. 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 powder. |
| 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

| | |
|-------------------------------|---|
| 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. |
|-------------------------------|---|

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 | 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. |
|--------------------------------------|--|

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 mist / vapours / dust. 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 and exposed skin areas before breaks and after handling the product. Take off contaminated clothing 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 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.

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

Control parameters comments

No applicable exposure limit values.
DNEL/PNEC: Chemical safety assessment has not been performed for the product, no information available about ingredients.

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

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|-------------------------------|---------------------------|
| Physical state | Liquid. |
| Colour | Not determined. |
| Odour | Odourless or mild odor. |
| Odour limit | Comments: Not determined. |
| pH | Value: 7,4 - 7,9 |
| Melting point / melting range | 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: 1.13 - 1.15 |
| 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 None known.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid Strong oxidizing agents. Acids. Alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition
products Combustion of the product may form smoke, carbon monoxide, carbon dioxide
and other products of incomplete combustion.

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.

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 amounts of components 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) and 1,2-benzisothiazol-3(2H)-one. |
| 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) and 1,2-benzisothiazol-3(2H)-one. 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 3-iodo-2-propynyl butylcarbamate (CAS: 55406-53-6), which 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. The product is not classified as hazardous to the environment. 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 Not Classified as PBT/vPvB by current EU criteria.

12.6. Endocrine disrupting properties

Endocrine disrupting properties The product contains 3-iodo-2-propynyl butylcarbamate (CAS: 55406-53-6), which 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.

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

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 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.
 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.

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 DNEL: Derived No-Effect Level
 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.