

SAFETY DATA SHEET

**refin dishwasher tablets ALL IN ONE 80 tabs (FC0265)
EAN7331121504461**

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

1.1. Product identifier

Trade name

refin dishwasher tablets ALL IN ONE 80 tabs (FC0265) EAN7331121504461

Product no.

HC0084L

Unique formula identifier (UFI)

C050-S095-R000-65CD

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

Relevant identified uses of the substance or mixture

Washing-up detergent for retail sale

Uses advised against

No special

1.3. Details of the supplier of the safety data sheet

Company and address

Nopa Nordic A/S

Havrevænget 13

DK-9500 Hobro

Denmark

Tel.: +45 89 122 122

E-mail

mail@nopanordic.com

Revision

19-01-2022

SDS Version

2.0

Date of previous version

2022-01-19 (1.0)

1.4. Emergency telephone number

Contact the poison hotline: +45 82 12 12 12 (24 hour service)

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.

Eye Irrit. 2; H319, Causes serious eye irritation.

2.2. Label elements

Hazard pictogram(s)



Signal word

Warning

Hazard statement(s)

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Causes skin irritation. (H315)
Causes serious eye irritation. (H319)

Safety statement(s)

General

If medical advice is needed, have product container or label at hand. (P101)
Keep out of reach of children. (P102)

Prevention

-

▼ Response

IF ON SKIN: Wash with plenty of water / water and soap. (P302+P352)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
If eye irritation persists: Get medical advice/attention. (P337+P313)

Storage

-

Disposal

-

Hazardous substances

No special

2.3. Other hazards

Additional labelling

EUH208, Contains subtilisin. May produce an allergic reaction.

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
sodium carbonate	CAS No.: 497-19-8 EC No.: 207-838-8 REACH: 01-2119485498-19 Index No.: 011-005-00-2	25-40%	Eye Irrit. 2, H319	
disodium carbonate, compound with hydrogen peroxide (2:3)	CAS No.: 15630-89-4 EC No.: 239-707-6 REACH: 01-2119457268-30 Index No.:	15-25%	Acute Tox. 4, H302 (ATE: 1034.00 mg/kg) Eye Dam. 1, H318 (SCL: 25.00 %) Ox. Sol. 2, H272	
Silicic,acid,sodium,salt	CAS No.: 1344-09-8 EC No.: 215-687-4 REACH: 01-2119448725-31 Index No.:	5-10%	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	
C8-C14 Alcohol Alkoxylated	CAS No.: 166736-08-9 EC No.: 605-450-7	3-5%	Skin Irrit. 2, H315 Eye Irrit. 2, H319	

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

	REACH: 02-2119630747-33		
	Index No.:		
C16-18 Alcohol Ethoxylate	CAS No.: 68439-49-6	1-3%	Eye Irrit. 2, H319
	EC No.:		
	REACH:		
	Index No.:		
subtilisin	CAS No.: 9014-01-1	<1%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411 STOT SE 3, H335
	EC No.: 232-752-2		
	REACH: 01-2119480434-38		
	Index No.: 647-012-00-8		

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

No special

Labelling of contents according to Detergents Regulation (EC) No 648/2004

15% - 30%

- Oxygen-based bleaching Agents

5% - 15%

- Non-ionic surfactants

< 5%

- Polycarboxylates

- Enzymes

- Perfumes

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water / water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless

recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Not applicable

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

This product contains substances that may trigger an allergic reaction to predisposed persons.

Sensitisation: This product contains substances, which may produce an allergic reaction through inhalation. The allergic reaction typically takes place within an hour after exposure. The reaction results in an inflammatory reaction to the lungs.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Halogenated compounds.

Sulphur oxides.

Carbon oxides (CO / CO₂).

Some metal oxides.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Minor spills are collected with a cloth. Collection and disposal of the material shall be done with minimum creation of dust. Sweep and collect. Shall be contained in suitable and tightly closed disposal containers.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 on "Disposal considerations" in regard of handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Powder trickling out onto the floor or onto other containers must be prevented.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

At 5-25 °C and away from sunlight

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

—
subtilisin

Long term exposure limit (8 hours) (mg/m³): 0,00006

Annotations:

L = The limit is a ceiling value that at no time may be exceeded.

Statutory order 1426 on exposure limits for substances and mixtures (28/06/2021)

DNEL

No data available

PNEC

Product/substance	Trisodium Dicarboxymethyl Alaninate
PNEC	2,5 mg/kg
Route of exposure	Soil
Duration of Exposure	

Product/substance	Trisodium Dicarboxymethyl Alaninate
PNEC	0,2 - 2 mg/l
Route of exposure	Water
Duration of Exposure	

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above).

Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

No specific requirements

Individual protection measures, such as personal protective equipment

Generally

No specific requirements

Respiratory Equipment

No specific requirements

Skin protection

No specific requirements

Hand protection

No specific requirements

Eye protection

No specific requirements

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Tablets

Colour

Various colours

Odour / Odour threshold

Lemon like

pH

10,8

Density (g/cm³)

Testing not relevant or not possible due to nature of the product.

Kinematic viscosity

Does not apply to solids.

Particle characteristics

Testing not relevant or not possible due to nature of the product.

Phase changes

Melting point/Freezing point (°C)

Testing not relevant or not possible due to nature of the product.

Softening point/range (waxes and pastes) (°C)

Does not apply to solids.

Boiling point (°C)

Does not apply to solids.

Vapour pressure

Testing not relevant or not possible due to nature of the product.

Relative vapour density

Does not apply to solids.

Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Does not apply to solids.

Ignition (°C)

Testing not relevant or not possible due to nature of the product.

Auto flammability (°C)

Testing not relevant or not possible due to nature of the product.

Lower and upper explosion limit (% v/v)

Does not apply to solids.

Solubility

Solubility in water

Soluble

n-octanol/water coefficient

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Testing not relevant or not possible due to nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

9.2. Other information

Other physical and chemical parameters

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

No special

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	sodium carbonate
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	2000 mg/kg ·
Other information	

Product/substance	sodium carbonate
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	2800 mg/kg ·
Other information	

Product/substance	disodium carbonate, compound with hydrogen peroxide (2:3)
Test method	
Species	Rabbit
Route of exposure	Oral
Test	LD50
Result	1034 mg/kg ·
Other information	

Product/substance	disodium carbonate, compound with hydrogen peroxide (2:3)
Test method	

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	0,17 mg/L ·
Other information	

Product/substance	Silicic,acid,sodium,salt
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	3400 mg/kg ·
Other information	

Product/substance	Silicic,acid,sodium,salt
Test method	
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	>5000 mg/l ·
Other information	

Product/substance	Silicic,acid,sodium,salt
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	2,06 mg/l ·
Other information	

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

This product contains substances that may trigger an allergic reaction to predisposed persons.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

No special

Other information

No special

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	sodium carbonate
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	EC50
Result	300 mg/l ·
Other information	

Product/substance	sodium carbonate
Test method	
Species	Daphnia
Compartment	
Duration	96 hours
Test	EC50
Result	265 mg/l ·
Other information	

Product/substance	disodium carbonate, compound with hydrogen peroxide (2:3)
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	4,9 mg/l ·
Other information	

Product/substance	disodium carbonate, compound with hydrogen peroxide (2:3)
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	70,7 mg/l ·
Other information	

Product/substance	Silicic,acid,sodium,salt
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Result 1700 mg/l ·
Other information

Product/substance Silicic,acid,sodium,salt
Test method
Species Fish
Compartment
Duration 96 hours
Test LC50
Result 1108 mg/l ·
Other information

Product/substance Trisodium Dicarboxymethyl Alaninate
Test method
Species Daphnia
Compartment
Duration 48 hours
Test EC50
Result >100 mg/kg ·
Other information

Product/substance Trisodium Dicarboxymethyl Alaninate
Test method
Species Fish
Compartment
Duration 96 hours
Test LC50
Result >100 mg/l ·
Other information

Product/substance Trisodium Dicarboxymethyl Alaninate
Test method
Species Algae
Compartment
Duration 72 hours
Test EC50
Result >100 mg/kg ·
Other information

Product/substance subtilisin
Test method
Species Algae
Compartment
Duration 96 hours
Test NOEC
Result 0,041 mg/l ·
Other information

Product/substance subtilisin
Test method
Species Daphnia
Compartment

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Duration	48 hours
Test	NOEC
Result	0,17 mg/l ·
Other information	

Product/substance	subtilisin
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	8,2 mg/l ·
Other information	

12.2. Persistence and degradability

Product/substance	disodium carbonate, compound with hydrogen peroxide (2:3)
Biodegradable	Yes
Test method	
Result	

Product/substance	Silicic,acid,sodium,salt
Biodegradable	Yes
Test method	
Result	

Product/substance	subtilisin
Biodegradable	Yes
Test method	
Result	

12.3. Bioaccumulative potential

Product/substance	sodium carbonate
Test method	
Potential bioaccumulation	No
LogPow	No data available
BCF	No data available
Other information	

Product/substance	disodium carbonate, compound with hydrogen peroxide (2:3)
Test method	
Potential bioaccumulation	No
LogPow	No data available
BCF	No data available
Other information	

Product/substance	Silicic,acid,sodium,salt
Test method	
Potential bioaccumulation	No

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

LogPow No data available
BCF No data available
Other information

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

No special

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 4 - Irritant (skin irritation and eye damage)
Dispose of contents/container to an approved waste disposal plant.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

20 01 29* Detergents containing dangerous substances

Specific labelling

Not applicable

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.1. - 14.4.

Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

Not applicable

IMDG

Not applicable

MARINE POLLUTANT

No

IATA

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

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

Restrictions for application

No special

Demands for specific education

No specific requirements

SEVESO - Categories / dangerous substances

Not applicable

Additional information

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Sources

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H272, May intensify fire; oxidiser.

H302, Harmful if swallowed.

H315, Causes skin irritation.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H334, May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335, May cause respiratory irritation.

H400, Very toxic to aquatic life.

H411, Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol

of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit.
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVCB = Complex hydrocarbon substance
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

▼ The [safety data sheet](#) is validated by
peb@nopanordic.com

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: DK-en