SAFETY DATA SHEET

Dishwasher detergent Novadan Bistro Powder 743

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

1.1. Product identifier

▼Trade name

Dishwasher detergent Novadan Bistro Powder 743

Unique formula identifier (UFI)

47E1-20QN-400Q-H481

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

Relevant identified uses of the substance or mixture

Alkaline dishwashing liquid

Use descriptors (UK REACH)

Sectors of use	**Description**
LCS "IS"	Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Product category	**Description**
PC35	Washing and Cleaning Products (including solvent based products)
Process category	**Description**
PROC2	Use in closed, continuous process with occasional controlled exposure
Environmental release category	**Description**
ERC8a	Wide dispersive indoor use of processing aids in open systems

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Abena A/S
Egelund 35
6200 Aabenraa
Denmark

E-mail

info@abena.dk

Revision

07/03/2023

SDS Version

3.0

Date of previous version

07/03/2023 (2.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h 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 Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

Hazard pictogram(s)



Signal word
Danger
Hazard statement(s)
Causes skin irritation. (H315)
Causes serious eye damage. (H318)
Safety statement(s)
General
-
Prevention
Wear face protection/protective gloves. (P280)
Response
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . (P303+P361+P353)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Immediately call a POISON CENTER/doctor. (P310)
Storage
-
Disposal
-
Hazardous substances
Disodium metasilicate, pentahydrate
Sodium silicate
Additional labelling
UFI: 47E1-20QN-400Q-H481

2.3. Other hazards

Additional warnings
This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Sodium carbonate	CAS No.: 497-19-8 EC No.: 207-838-8 UK-REACH: Index No.: 011-005-00-2	30 - 60 %	Eye Irrit. 2, H319	
Sodium percarbonate	CAS No.: 15630-89-4 EC No.: 239-707-6 UK-REACH: Index No.:	5 - 15%	Ox. Sol. 2, H272 Acute Tox. 4, H302 Eye Dam. 1, H318	
Disodium metasilicate, pentahydrate	CAS No.: 10213-79-3 EC No.: 229-912-9 UK-REACH: Index No.:	1 - 5 %	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335	
Sodium silicate	CAS No.: 1344-09-8 EC No.: 215-687-4 UK-REACH: Index No.:	1 - 5 %	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	
Oxirane, methyl-, polymer with oxirane, monoisotridecyl ether, block	CAS No.: 196823-11-7 EC No.: 677-779-4 UK-REACH: Index No.:	1 - 5 %	Eye Irrit. 2, H319	

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

Other information

-

Labelling of contents according to Detergents Regulation (EC) No 648/2004 as retained and amended in UK law

5% - 15%
· Oxygen-based bleaching Agents
· Polycarboxylates
< 5%
· Non-ionic surfactants
· Enzymes

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 with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
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 person 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

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

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.

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
Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.
Collect spills carefully. Moist the material with water in order to prevent the formation and propagation of dust.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections
See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid direct contact with the product.
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
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
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
-5 - 35 °C

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
Protease (Subtilisin) (aep
Long term exposure limit (8 hours) (mg/m³): 0,00004
Annotations:
Sen = Capable of causing occupational asthma.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL
Protease (Subtilisin) (aep

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	15 ng/m³
Long term – Local effects - Workers	Inhalation	60 ng/m³
Long term – Systemic effects - General population	Oral	1.8 mg/kg bw/day
Short term – Systemic effects - General population	Oral	3.6 mg/kg bw/day

Sodium carbonate

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	5 mg/m³
Long term – Local effects - Workers	Inhalation	10 mg/m³

Sodium percarbonate

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Dermal	6.4 mg/cm²
Long term – Local effects - Workers	Dermal	12.8 mg/cm²
Short term – Local effects - General population	Dermal	6.4 mg/cm²
Short term – Local effects - Workers	Dermal	12.8 mg/cm²

Long term – Local effects - Workers	Inhalation	5 mg/m³

PNEC

Protease (Subtilisin) (aep

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1.7 µg/L
Intermittent release (freshwater)		900 ng/L
Marine water		170 ng/L
Sewage treatment plant		65 mg/L
Soil		568 µg/kg

Sodium percarbonate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		35 µg/L
Intermittent release (freshwater)		35 µg/L
Marine water		35 µg/L
Sewage treatment plant		16.24 mg/L

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

Use only UKCA marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
In case of inadequate ventilation use suitable respirator - P2			EN143/EN149



Skin protection

Recommended	Type/Category	Standards
Dedicated work clothing should be worn.	-	-



Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Butyl rubber. Neoprene. Nitrile rubber.			EN374



Eye protection

Type	Standards	
In the likelihood of direct or incidental exposure, use face protection.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Powder

Colour
White

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

pH
10,5

pH in solution
(0,1 %)

Density (g/cm³)
~ 1,00

Kinematic viscosity
Does not apply to solids.

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

Phase changes

Melting point/Freezing point (°C)
Testing not relevant or not possible due to the 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 the nature of the product.

Relative vapour density
Does not apply to solids.

Decomposition temperature (°C)
Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)
Does not apply to solids.

Flammability (°C)
Testing not relevant or not possible due to the nature of the product.

Auto-ignition temperature (°C)
Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)
Does not apply to solids.

Solubility

Solubility in water
Completely soluble

n-octanol/water coefficient
Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)
Testing not relevant or not possible due to the nature of the product.

9.2. Other information

VOC (g/l)
0

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
None known.

10.4. Conditions to avoid
None known.

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 as retained and amended in UK law

Acute toxicity

Product/substance	Sodium carbonate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	2800 mg/kg

Product/substance	Sodium carbonate
Species:	Guinea pig
Route of exposure:	Inhalation
Test:	LC50
Result:	0,8 mg/l

Product/substance	Sodium carbonate
Species:	Mouse
Route of exposure:	Inhalation
Test:	LC50
Result:	1,2 mg/l

Product/substance	Sodium carbonate
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	2,3 mg/l

Product/substance	Sodium carbonate
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	> 2000 mg/kg

Product/substance	Sodium percarbonate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1034 mg/kg

Product/substance	Sodium percarbonate
Species:	Mouse
Route of exposure:	Inhalation
Test:	LC50
Result:	1,2 mg/l

Product/substance	Sodium percarbonate
Species:	Rabbit
Route of exposure:	Dermal

Test:	LD50
Result:	> 2000 mg/kg

Product/substance	Disodium metasilicate, pentahydrate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1152 -1349 mg/kg

Product/substance	Disodium metasilicate, pentahydrate
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	> 2,06 g/m3

Product/substance	Disodium metasilicate, pentahydrate
Species:	
Route of exposure:	Dermal
Test:	LD50
Result:	> 5000 mg/kg

Product/substance	Sodium silicate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	> 1300 mg/kg

Product/substance	Protease (Subtilisin) (aep
Test method:	OECD 401
Species:	
Route of exposure:	
Test:	LD50
Result:	1800 mg/kg bw

Skin corrosion/irritation

Product/substance	Protease (Subtilisin) (aep
Test method:	OECD 404
Species:	
Duration:	No data available.
Result:	Adverse effect observed (Irritating)

Causes skin irritation.

Serious eye damage/irritation

Product/substance	Protease (Subtilisin) (aep
Test method:	OECD 405
Species:	
Duration:	No data available.
Result:	Adverse effect observed (Irritating)

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

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

Germ cell mutagenicity

Product/substance	Protease (Subtilisin) (aep
Test method:	OECD 471
Species:	
Conclusion:	No adverse effect observed

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

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

Endocrine disrupting properties

No evidence for endocrine disrupting properties.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	Sodium carbonate
Test method:	LC50
Species:	Fish, Lepomis macrochirus
Duration:	No data available.
Test:	
Result:	300 mg/l

Product/substance	Sodium carbonate
Test method:	EC50
Species:	Crustacean, Ceriodaphnia dubia
Duration:	No data available.
Test:	
Result:	200 - 227 mg/l

Product/substance	Disodium metasilicate, pentahydrate
Species:	Fish, Brachydanio rerio
Duration:	No data available.
Test:	
Result:	210 mg/l

Product/substance	Disodium metasilicate, pentahydrate
Test method:	EC50
Species:	Crustacean, Daphnia magna
Duration:	No data available.
Test:	
Result:	1700 mg/l

Product/substance	Sodium silicate
Test method:	LC50
Species:	Fish, Brachydanio rerio
Duration:	No data available.
Test:	
Result:	3185 mg/l

Product/substance	Sodium silicate
Test method:	EC50
Species:	Crustacean, Daphnia magna
Duration:	No data available.
Test:	
Result:	4857 mg/l

Product/substance	Oxirane, methyl-, polymer with oxirane, monoisotridecyl ether, block
Test method:	LC50
Species:	Fish, Brachydanio rerio
Duration:	No data available.
Test:	
Result:	1 - 10 mg/l

Product/substance	Oxirane, methyl-, polymer with oxirane, monoisotridecyl ether, block
Test method:	EC50
Species:	Algae
Duration:	No data available.
Test:	

Result:	10 - 100 mg/l

Product/substance	Oxirane, methyl-, polymer with oxirane, monoisotridecyl ether, block
Test method:	EC50
Species:	Crustacean, Daphnia magna
Duration:	No data available.
Test:	
Result:	1 - 10 mg/l

Product/substance	Protease (Subtilisin) (aep
Test method:	OECD 203
Species:	Fish
Duration:	96 hours
Test:	
Result:	8,2 mg aep/l

Product/substance	Protease (Subtilisin) (aep
Test method:	OECD 201
Species:	Algae
Duration:	72 hours
Test:	
Result:	830 µg aep/l

Product/substance	Protease (Subtilisin) (aep
Test method:	OECD 202
Species:	Crustacean
Duration:	No data available.
Test:	
Result:	586 µg aep/l

12.2. Persistence and degradability

The product is easily biodegradable.

Product/substance	Oxirane, methyl-, polymer with oxirane, monoisotridecyl ether, block
Biodegradable:	Yes
Test method:	OECD 301 E
Result:	≥ 90 %

12.3. Bioaccumulative potential

The product is not bioaccumulating

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 evidence for endocrine disrupting properties.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 4 - Irritant (skin irritation and eye damage)
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

07 06 01* Aqueous washing liquids and mother liquors

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 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group
** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

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

Restricted to professional users.

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 as retained and amended in UK law. 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

The Management of Health and Safety at Work Regulations 1999.
Regulation (EC) No 648/2004 on detergents as retained and amended in UK law.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

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.
H290, May be corrosive to metals.
H302, Harmful if swallowed.
H314, Causes severe skin burns and eye damage.
H315, Causes skin irritation.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H335, May cause respiratory irritation.

The full text of identified uses as mentioned in section 1

LCS "IS" = Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PROC2 = Use in closed, continuous process with occasional controlled exposure
PC35 = Washing and Cleaning Products (including solvent based products)
ERC8a = Wide dispersive indoor use of processing aids in open systems

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
UVBC = Unknown or variable composition, complex reaction products or of biological materials
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) as retained and amended in UK law.

▼The safety data sheet is validated by

JUBO

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: GB-en