SAFETY DATA SHEET

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

1.1. Product identifier

Trade name
Protect N´ Seal

Product no.
-

REACH registration number
Not applicable

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

Relevant identified uses of the substance or mixture
Impregnating agent

Uses advised against
-
The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address
Blue & Green AB
Stenorsvägen 52
261 44 Landskrona
Sweden
Tfn: +46 418 399000
Fax: +46 418 13199
www.blueandgreen.se

E-mail
info@blueandgreen.se

SDS date
2020-11-11

SDS Version
1.0

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

Flam. Liq. 2; H225
Eye Irrit. 2; H319
STOT SE 3; H336
See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)

Signal word
Danger

Hazard statement(s)
Highly flammable liquid and vapour. (H225)
Causes serious eye irritation. (H319)
May cause drowsiness or dizziness. (H336)

Precautionary statements

General	If medical advice is needed, have product container or label at hand. (P101). Keep out of reach of children. (P102).
Prevention	Wear eye protection/gloves. (P280).
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).
Storage	Store in a well-ventilated place. Keep cool. (P403+P235).
Disposal	Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

propan-2-ol; n-butyl acetate

Additional labelling

Not applicable

Unique formula identifier (UFI)

J272-9VDU-500T-3SNS

2.3. Other hazards

This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

Additional warnings

Tactile warning.

VOC (volatile organic compound)

Not applicable

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME:	propan-2-ol
IDENTIFICATION NOS.:	CAS-no: 67-63-0 EC-no: 200-661-7 REACH-no: 01-2119457558-25 Index-no: 603-117-00-0
CONTENT:	80-95%
CLP CLASSIFICATION:	Flam. Liq. 2, STOT SE 3, Eye Irrit. 2 H225, H319, H336
NOTE:	O

NAME:	n-butyl acetate
IDENTIFICATION NOS.:	CAS-no: 123-86-4 EC-no: 204-658-1 REACH-no: 01-2119485493-29 Index-no: 607-025-00-1
CONTENT:	10 - <15%
CLP CLASSIFICATION:	Flam. Liq. 3, STOT SE 3 H226, H336, EUH066
NOTE:	O

NAME:	methanol
IDENTIFICATION NOS.:	CAS-no: 67-56-1 EC-no: 200-659-6 REACH-no: 01-2119392409-28 Index-no: 603-001-00-X
CONTENT:	1 - <2.5%
CLP CLASSIFICATION:	Flam. Liq. 2, Acute tox. 3, STOT SE 1 H225, H301, H311, H331, H370
NOTE:	O L

(*) O = Organic solvent L = European occupational exposure limit. See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

ATEmix(inhale, vapour) > 20
ATEmix(dermal) > 2000
ATEmix(oral) > 2000
Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 6.96 - 10.44

Detergent:
> 30%: ISOPROPYL ALCOHOL

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. The doctor can contact The National Poisons Information Service: Dial 0344 892 0111 (24 h service).

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

Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with soap and water.

Eye contact

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 the 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

Rinse with water until the pain stops then continue to rinse for a further 30 minutes.

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

This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: headache, dizziness, ringing in ears, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.
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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. 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 inhalation of vapours from spilled material. Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

6.2. Environmental precautions

No specific requirements.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

6.4. Reference to other sections

See section on “Disposal considerations” in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid static electricity. Protect electrical equipment in accordance with current standards. Do not use spark-forming tools.
Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms.
See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Storage temperature

Room temperature 18 to 23°C

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

OEL

methanol
Long-term exposure limit (8-hour TWA reference period): 200 ppm | 266 mg/m³
Short-term exposure limit (15-minute reference period): 250 ppm | 333 mg/m³
Comments: Sk (Sk = Can be absorbed through skin.)

n-butyl acetate
Long-term exposure limit (8-hour TWA reference period): 150 ppm | 724 mg/m³
Short-term exposure limit (15-minute reference period): 200 ppm | 966 mg/m³

propan-2-ol
Long-term exposure limit (8-hour TWA reference period): 400 ppm | 999 mg/m³
Short-term exposure limit (15-minute reference period): 500 ppm | 1250 mg/m³

DNEL / PNEC

DNEL (propan-2-ol): 319 mg/kg bw/d
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - General population

DNEL (propan-2-ol): 89 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - General population

DNEL (propan-2-ol): 26 mg/kg bw/d
Exposure: Oral
Duration of Exposure: Long term – Systemic effects - General population

DNEL (propan-2-ol): 888 mg/kg bw/d
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (propan-2-ol): 500 mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (methanol): 40mg/kg/day
Exposure: Dermal
Duration of Exposure: Short term – Systemic effects - Workers

DNEL (methanol): 260mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Systemic effects - Workers

DNEL (methanol): 40mg/kg/day
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (methanol): 260mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Local effects - Workers

DNEL (methanol): 260mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (methanol): 50mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - General population

DNEL (methanol): 260mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - Workers

DNEL (methanol): 8mg/kg/day
Exposure: Dermal
Duration of Exposure: Short term – Systemic effects - General population

DNEL (methanol): 8mg/kg/day
Exposure: Oral
Duration of Exposure: Short term – Systemic effects - General population

DNEL (methanol): 50mg/m3
Exposure: Inhalation
Duration of Exposure: Short term – Systemic effects - General population

DNEL (methanol): 8mg/kg/day
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - General population

DNEL (methanol): 8mg/kg/day
Exposure: Oral
Duration of Exposure: Long term – Systemic effects - General population

DNEL (n-butyl acetate): 48mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (n-butyl acetate): 7mg/kg/day
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (n-butyl acetate): 3,4mg/kg/day
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - General population

DNEL (n-butyl acetate): 12mg/m3
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - General population

DNEL (n-butyl acetate): 3,4mg/kg/day
Exposure: Oral
Duration of Exposure: Long term – Systemic effects - General population

PNEC (propan-2-ol): 552 mg/kg dw
Exposure: Marine water sediment

PNEC (propan-2-ol): 140.9 mg/l
Exposure: Freshwater

PNEC (propan-2-ol): 28 mg/kg dw
Exposure: Soil

PNEC (propan-2-ol): 140.9 mg/l
Exposure: Marine water

PNEC (propan-2-ol): 140.9 mg/l
Exposure: Intermittent release

PNEC (propan-2-ol): 2251 mg/l
Exposure: Sewage Treatment Plant

PNEC (propan-2-ol): 552 mg/kg dw
Exposure: Freshwater sediment

PNEC (methanol): 154mg/l
Exposure: Freshwater
Duration of Exposure: Single

PNEC (methanol): 15,4mg/l
Exposure: Marine water
Duration of Exposure: Single

PNEC (methanol): 570,4mg/kg
Exposure: Freshwater sediment
Duration of Exposure: Single

PNEC (methanol): 100mg/l
Exposure: Sewage Treatment Plant
Duration of Exposure: Single

PNEC (methanol): 23,5mg/kg
Exposure: Soil
Duration of Exposure: Single

PNEC (methanol): 1540mg/l
Exposure: Intermittent release
Duration of Exposure: Continuous

PNEC (methanol): 57,04mg/kg
Exposure: Marine water sediment

PNEC (n-butyl acetate): 0,18mg/l
Exposure: Freshwater

PNEC (n-butyl acetate): 0,018mg/l
Exposure: Marine water

PNEC (n-butyl acetate): 0,36mg/l
Exposure: Intermittent release

PNEC (n-butyl acetate): 0,981mg/kg dw
Exposure: Freshwater sediment

PNEC (n-butyl acetate): 0,0981mg/kg dw
Exposure: Marine water sediment

PNEC (n-butyl acetate): 0,0903mg/kg dw
Exposure: Soil

PNEC (n-butyl acetate): 35,6mg/l
Exposure: Sewage Treatment Plant

8.2. Exposure controls

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

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

There is no appendix to this safety data sheet.

Exposure limits

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

Appropriate technical measures

Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Recommended: A. Class 1 (low capacity). Brown

Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

Hand protection

Nitrile rubber

Breakthrough time: > 480 minutes (Class 6)

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Colourless
Odour	Alcohol odor
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm³)	0.81
Phase changes	
Melting point (°C)	-90
Boiling point (°C)	82.5
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.
Data on fire and explosion hazards	
Flash point (°C)	12
Ignition (°C)	No data available.
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	2 - 13
Explosive properties	No data available.
Solubility	
Solubility in water	Soluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	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 the section “Handling and storage”.

10.3. Possibility of hazardous reactions

Nothing special

10.4. Conditions to avoid

Avoid static electricity.

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 toxicological effects

Acute toxicity

Substance: methanol
Species: Rabbit
Test: LD50
Route of exposure: Dermal

Result: 15800mg/kg

Substance: methanol
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 5628mg/kg

Substance: methanol
Species: Human
Test: LD lo
Route of exposure: Oral
Result: 143mg/kg

Substance: methanol
Species: Rat
Test: LC50
Route of exposure: Inhalation
Result: 83,8mg/l 4h

Substance: n-butyl acetate
Species: Rabbit
Test: LD50
Route of exposure: Dermal
Result: > 17600 mg/kg

Substance: n-butyl acetate
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 10768 mg/kg

Substance: n-butyl acetate
Species: Rat
Test: LC50
Route of exposure: Inhalation
Result: 40 ppm

Substance: propan-2-ol
Species: Rabbit
Test: LD50
Route of exposure: Dermal
Result: 13900 mgkg

Substance: propan-2-ol
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 5840 mg/kg

Substance: propan-2-ol
Species: Rat
Test: LC50
Route of exposure: Inhalation
Result: >25 mg/l, 6h ånga

Skin corrosion/irritation

No data available.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Data on substance: methanol

Germ cell mutagenicity

Data on substance: methanol
Test: OECD Guideline 471
Organism: Mouse
No adverse effect observed.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Long term effects

This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: headache, dizziness, ringing in ears, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.
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.

SECTION 12: Ecological information

12.1. Toxicity

Substance: methanol
Species: Daphnia
Test: EC50
Duration: 48h
Result: >10000mg/l

Substance: methanol
Species: Fish
Test: NOEC
Duration:
Result: 8530mg/l.d

Substance: methanol
Species: Fish
Test: LC50
Duration: 96h
Result: 15400mg/l

Substance: methanol
Species: Algae
Test: IC50
Duration: 7d
Result: 8000mg/l

Substance: n-butyl acetate
Species: Daphnia
Test: NOEC
Duration: 21d
Result: 23mg/l

Substance: n-butyl acetate
Species: Daphnia
Test: EC50
Duration: 48h
Result: 44mg/l

Substance: n-butyl acetate
Species: Fish
Test: LC50
Duration: 96h
Result: 18mg/l

Substance: n-butyl acetate
Species: Algae
Test: IC50
Duration: 72h
Result: 674,7mg/l

Substance: propan-2-ol
Species: Daphnia
Test: LC50
Duration: 48h
Result: >100 mg/l

Substance: propan-2-ol
Species: Fish
Test: LC50
Duration: 96h
Result: >100 mg/l

Substance: propan-2-ol

Species: Algae
Test: EC50
Duration: 72h
Result: >100mg/l

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
methanol	Yes	Closed Bottle Test	99
n-butyl acetate	Yes	Closed Bottle Test	98%
propan-2-ol	Yes	No data available	No data available

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
methanol	No	-0.7	10
n-butyl acetate	No	1.81	15
propan-2-ol	No	0.05	No data available

12.4. Mobility in soil

methanol: Log Koc= -0.47593, Calculated from LogPow ().
n-butyl acetate: Log Koc= 1.511739, Calculated from LogPow (High mobility potential.).
propan-2-ol: Log Koc= 0.117995, Calculated from LogPow (High mobility potential.).

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. Other adverse effects

Nothing special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code

-

Specific labelling

Not applicable

Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

This product is within scope of the regulations of transport of dangerous goods.

ADR/RID

14.1. UN number	1219
14.2. UN proper shipping name	ISOPROPANOL (ISOPROPYL ALCOHOL)
14.3. Transport hazard class(es)	3
14.4. Packing group	II
Notes	-
Tunnel restriction code	D/E

IMDG

UN-no.	1219
Proper Shipping Name	ISOPROPANOL (ISOPROPYL ALCOHOL)
Class	3
PG*	II
EmS	F-E, S-D
MP**	No
Hazardous constituent	-

IATA/ICAO

UN-no.	1219
Proper Shipping Name	ISOPROPANOL (ISOPROPYL ALCOHOL)
Class	3
PG*	II

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available
(*) Packing group
(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

-

Additional information

Not applicable

Seveso

Seveso III Part 1: P5c
Seveso III Part 2: methanol

Biocidal reg. no.

Not applicable

Sources

Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.
Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.
Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.
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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).
Regulation (EC) 1907/2006 (REACH).
The Control of Major Accident Hazards (COMAH) Regulations 2015.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H225 - Highly flammable liquid and vapour.
H226 - Flammable liquid and vapour.
H301 - Toxic if swallowed.
H311 - Toxic in contact with skin.
H319 - Causes serious eye irritation.
H331 - Toxic if inhaled.
H336 - May cause drowsiness or dizziness.
H370 - Causes damage to organs¤.
EUH066 - Repeated exposure may cause skin dryness or cracking.

The full text of identified uses as mentioned in section 1

-

Additional label elements

Not applicable

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:
The classification of the mixture in regard of physical hazards has been based on experimental data.
The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)
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.
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.
A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

David Löwenstein

Date of last essential change
(First cipher in SDS version)

-

Date of last minor change
(Last cipher in SDS version)

-