Revision Date 26/09/2014
Revision 3
Supersedes date 27/12/2012

SAFETY DATA SHEET
ECO WATERGUARD

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name ECO WATERGUARD
Product No. 11761

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

Identified uses Textile Waterproofing.

1.3. Details of the supplier of the safety data sheet

Supplier

Brunngård Group AB
Vevgatan 11
504 64 Borås
Sverigen
Tel: 46 33 723 23 00
Fax: 46 33 723 23 23
info@brunngard.se

1.4. Emergency telephone number

National Emergency Telephone Number
112 or 999

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) F+;R12. R52/53, R67.

Human health
In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Irriterar huden

Environment
The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Physical and Chemical Hazards
Extremely flammable. Pressure chamber may explode in the event of fire.

2.2. Label elements

Labelling

Extremely flammable

Risk Phrases

R12	Extremely flammable.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

Safety Phrases

A1	Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
A2	Do not spray on a naked flame or any incandescent material.
S2	Keep out of the reach of children.
S9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S23	Do not breathe vapour/spray.
S51	Use only in well-ventilated areas.

2.3. Other hazards

Contains: Isobutane. This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

BUTANE **25-60%**

CAS-No.: 106-97-8 **EC No.: 203-448-7** **Registration Number: 01-2119474691-32**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Gas 1 - H220	F+;R12
Press. Gas, Compressed - H280	

NAPHTHA (PETROLEUM), HYDROTREATED LIGHT (<0,1% BENZENE) **10-18%**

CAS-No.: 64742-49-0 **EC No.: 265-151-9** **Registration Number: 02-2119835333-43**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	Xn;R65.
Skin Irrit. 2 - H315	Xi;R38.
STOT SE 3 - H336	F;R11.
Asp. Tox. 1 - H304	N;R51/53.
Aquatic Chronic 2 - H411	R67.

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY (0,1% BENZENE) **10-25%**

CAS-No.: 64742-48-9 **EC No.: 265-150-3**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 3 - H226	Xn;R65.
EUH066	R10,R66,R67.
STOT SE 3 - H336	
Asp. Tox. 1 - H304	

NAPHTHA (PETROLEUM), HYDRODESULFURIZED HEAVY **1-5%**

CAS-No.: 64742-82-1 **EC No.: 265-185-4**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 3 - H226	Xn;R65.
EUH066	N;R51/53.
STOT SE 3 - H336	R10,R66,R67.
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	

1-Butanol, titanium(4+) salt, homopolymer **1-5%**

CAS-No.: 9022-96-2 **EC No.:**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Eye Irrit. 2 - H319	Xi;R36.

PENTANE	<1,5%
CAS-No.: 109-66-0	EC No.: 203-692-4

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F+;R12
EUH066	Xn;R65
STOT SE 3 - H336	R66
Asp. Tox. 1 - H304	R67
Aquatic Chronic 2 - H411	N;R51/53

XYLENE	< 1%
CAS-No.: 1330-20-7	EC No.: 215-535-7
Registration Number: 01-2119486136-34	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 3 - H226	R10
Acute Tox. 4 - H312	Xn;R20/21
Acute Tox. 4 - H332	Xi;R38
Skin Irrit. 2 - H315	

ETHYLBENZENE	< 1%
CAS-No.: 100-41-4	EC No.: 202-849-4
Registration Number: 01-2119489370-35	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
Acute Tox. 4 - H332	Xn;R20

2-METHYLPENTANE-2,4-DIOL	< 1%
CAS-No.: 107-41-5	EC No.: 203-489-0

Classification (EC 1272/2008)	Classification (67/548/EEC)
Skin Irrit. 2 - H315	Xi;R36/38
Eye Irrit. 2 - H319	

1,2-Benzenedicarboxylic acid, diethyl ester	< 1%
CAS-No.: 84-66-2	EC No.: 201-550-6

Classification (EC 1272/2008)	Classification (67/548/EEC)
Not classified.	Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Product name ECO WATERGUARD

Composition Comments

The Naphthas contains less than 0.1% benzene, which means that they are not classified as mutagenic or carcinogenic.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Get medical attention if any discomfort continues.

Inhalation

Fresh air and rest.

Ingestion
Drink a few glasses of water or milk. DO NOT INDUCE VOMITING!

Skin contact
Wash skin with soap and water.

Eye contact
Rinse with water. Contact physician if discomfort continues.

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

General information
Solvent abuse can kill instantly.

Inhalation
Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion
May cause nausea, headache, dizziness and intoxication.

Skin contact
Skin irritation.

Eye contact
May cause temporary eye irritation.

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

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media
Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards
Extremely flammable. Aerosol cans may explode in a fire.

Specific hazards
Aerosol containers can explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters

Special Fire Fighting Procedures
Containers close to fire should be removed or cooled with water.

Protective equipment for fire-fighters
Wear full protective clothing. Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For personal protection, see section 8.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. Protect against direct sunlight. Avoid eating, drinking and smoking when using the product.

7.2. Conditions for safe storage, including any incompatibilities

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Store in a cool and well-ventilated place. Store in a dry place.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
1,2-Benzenedicarboxylic acid, diethyl ester	WEL		5 mg/m3		10 mg/m3	
2-METHYLPENTANE-2,4-DIOL	WEL	25 ppm	123 mg/m3	25 ppm	123 mg/m3	
BUTANE	WEL	600 ppm	1450 mg/m3	750 ppm	1810 mg/m3	Carc
ETHYLBENZENE	WEL	100 ppm(Sk)	441 mg/m3(Sk)	125 ppm(Sk)	552 mg/m3(Sk)	
PENTANE	WEL	600 ppm	1800 mg/m3			
XYLENE	WEL	50 ppm	220 mg/m3	100 ppm	441 mg/m3	Sk

WEL = Workplace Exposure Limit.
Carc = Capable of causing cancer and/or heritable genetic damage.
Sk = Can be absorbed through skin.

PENTANE (CAS: 109-66-0)

PNEC

Water	0, 027	mg/l

XYLENE (CAS: 1330-20-7)

DNEL

Professional	Inhalation.	Short Term	Systemic Effects	289 mg/m3
Professional	Dermal	Short Term	Local Effects	174 mg/m3
Professional	Inhalation.	Short Term	Local Effects	289 mg/m3
Professional	Inhalation.	Long Term	Systemic Effects	77 mg/m3
Professional	Inhalation.	Long Term	Local Effects	77 mg/m3

PNEC

Freshwater	0, 327	mg/l

8.2. Exposure controls

Protective equipment

Engineering measures

Well-ventilated area.

Respiratory equipment

No specific recommendation made, but chemical cartridge protection may still be required for organic dusts/vapours known to be toxic.

Hand protection

Protective gloves are recommended.

Gloves of nitrile rubber, PVA or Viton are recommended.

Eye protection

Goggles/face shield are recommended.

Other Protection

Provide eyewash station and safety shower.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet.

Environmental Exposure Controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Colourless.
Odour	Solvent.
Solubility	Organic solvents
Relative density	0, 62

Flash point (°C)

Technical impossibility to obtain the data.

9.2. Other information

Volatile Organic Compound (VOC)

No information required.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not known.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

No specific, or groups of materials are likely to react to produce a hazardous situation.

10.6. Hazardous decomposition products

Not known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

No data is available regarding the preparation it self.

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation

Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause irritation to the respiratory system.

Ingestion

May irritate and cause stomach pain, vomiting and diarrhoea.

Skin contact

Irritating to skin.

Eye contact

May cause temporary eye irritation.

Health Warnings

Solvent vapours are hazardous and may cause nausea, sickness and headaches.

Toxicological information on ingredients.

PROPANE (CAS: 74-98-6)

Acute toxicity:

Acute Toxicity (Oral LD50)

Not applicable.

Acute Toxicity (Dermal LD50)

Not applicable.

Acute Toxicity (Inhalation LC50)

> 20 mg/l (vapours)

BUTANE (CAS: 106-97-8)

Acute toxicity:

Acute Toxicity (Oral LD50)

Not applicable.

Acute Toxicity (Dermal LD50)

Not applicable.

Acute Toxicity (Inhalation LC50)

> 20 mg/l (vapours)

PENTANE (CAS: 109-66-0)

Acute toxicity:

Acute Toxicity (Oral LD50)

400 mg/kg Rat

Acute Toxicity (Dermal LD50)

3000 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

364 mg/l (vapours) Rat 4 hours

XYLENE (CAS: 1330-20-7)

Acute toxicity:

Acute Toxicity (Oral LD50)

3900 mg/kg Rat

Acute Toxicity (Inhalation LC50)

20 mg/l (vapours) Rat 4 hours

ETHYLBENZENE (CAS: 100-41-4)

Acute toxicity:

Acute Toxicity (Oral LD50)

3500 mg/kg Rat

Acute Toxicity (Dermal LD50)

17000 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

17.2 mg/l (vapours) Rat 4 hours

2-METHYLPENTANE-2,4-DIOL (CAS: 107-41-5)

NAPHTHA (PETROLEUM), HYDROTREATED LIGHT (<0,1% BENZENE) (CAS: 64742-49-0)

Acute toxicity:

Acute Toxicity (Oral LD50)

> 5000 mg/kg Rat

Acute Toxicity (Inhalation LC50)

56 mg/l (vapours) Rat 4 hours

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY (0,1% BENZENE) (CAS: 64742-48-9)

Acute toxicity:

Acute Toxicity (Oral LD50)

> 2000 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

~ 3400 ppmV (gas) Rat 4 hours

NAPHTHA (PETROLEUM), HYDRODESULFURIZED HEAVY (CAS: 64742-82-1)

Acute toxicity:

Acute Toxicity (Oral LD50)

> 5000 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 3160 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

3400 ppmV (gas) Rat 4 hours

1,2-Benzenedicarboxylic acid, diethyl ester (CAS: 84-66-2)

1-Butanol, titanium(4+) salt, homopolymer (CAS: 9022-96-2)

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

No data is available regarding the preparation itself.

Ecological information on ingredients.

PROPANE (CAS: 74-98-6)

Acute Toxicity - Aquatic Invertebrates

Highly volatile.
EC50 48 hours 27.14 mg/l

BUTANE (CAS: 106-97-8)

Acute Toxicity - Fish

Highly volatile.
LC50 96 hours 24.11 mg/l

Acute Toxicity - Aquatic Invertebrates

Highly volatile.
EC50 48 hours 14.22 mg/l Daphnia magna

PENTANE (CAS: 109-66-0)

Acute Toxicity - Fish

LC50 96 hours 4, 26 mg/l Onchorhynchus mykiss (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 2, 7-9, 1 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

IC50 72 hours 7, 51 mg/l Selenastrum capricornutum

XYLENE (CAS: 1330-20-7)

Acute Toxicity - Fish

LC50 96 hours 21 mg/l Pimephales promelas (Fat-head Minnow)
EC50 48 hours 1-5 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

IC50 72 hours 3-5 mg/l Selenastrum capricornutum

ETHYLBENZENE (CAS: 100-41-4)

Acute Toxicity - Fish

LC50 96 hours 4, 2 mg/l Onchorhynchus mykiss (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 2, 1 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

IC50 72 hours 4, 9 mg/l

NAPHTHA (PETROLEUM), HYDROTREATED LIGHT (<0,1% BENZENE) (CAS: 64742-49-0)

LC50 96 hours < 10 mg/l

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours < 10 mg/l Daphnia magna

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY (0,1% BENZENE) (CAS: 64742-48-9)

Acute Toxicity - Fish

LC50 96 hours > 100 mg/l

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours > 100 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 72 hours > 100 mg/l Freshwater algae

NAPHTHA (PETROLEUM), HYDRODESULFURIZED HEAVY (CAS: 64742-82-1)

Acute Toxicity - Fish

LC50 96 hours 9 mg/l

Acute Toxicity - Aquatic Plants

IC50 72 hours 1-10 mg/l

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

Ecological information on ingredients.

PROPANE (CAS: 74-98-6)

Degradability

The product is easily biodegradable.

BUTANE (CAS: 106-97-8)

Degradability

The product is easily biodegradable.

ETHYLBENZENE (CAS: 100-41-4)

Biodegradation

Degradation (50%) 28 days
OECD 301C

NAPHTHA (PETROLEUM), HYDRODESULFURIZED HEAVY (CAS: 64742-82-1)

Biodegradation

Degradation (55-63%) 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Ecological information on ingredients.

PROPANE (CAS: 74-98-6)

Bioaccumulative potential

The product is not bioaccumulating.

BUTANE (CAS: 106-97-8)

Bioaccumulative potential

The product is not bioaccumulating.

PENTANE (CAS: 109-66-0)

Bioaccumulation factor

BCF 171

Partition coefficient

log Pow 3, 4

XYLENE (CAS: 1330-20-7)

Bioaccumulation factor

BCF 25

Partition coefficient

log Pow 3, 11-3, 2

ETHYLBENZENE (CAS: 100-41-4)

Bioaccumulation factor

BCF 15

Partition coefficient

log Pow 3, 15

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY (0,1% BENZENE) (CAS: 64742-48-9)

Bioaccumulative potential

May accumulate in soil and water systems.

Partition coefficient

log Pow ~ 2-7

12.4. Mobility in soil

Mobility:

No information available

Ecological information on ingredients.

PROPANE (CAS: 74-98-6)

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

BUTANE (CAS: 106-97-8)

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY (0,1% BENZENE) (CAS: 64742-48-9)

Mobility:

The product contains volatile substances, which may spread in the atmosphere.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

No information required.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

The manufacturer of this product complies with the rules and regulations of the European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, by paying packaging fees for disposal and recycling of packaging waste.

13.1. Waste treatment methods

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

Waste Class

EWC 14 06 03*

SECTION 14: TRANSPORT INFORMATION

General Aerosols may be carried domestically as limited quantities (1L) as long as each package does not exceed 30 kg in cardboard boxes or 20 kg on trays with shrink- or stretch wrapping. Each package shall be marked with diamond-shaped area, the top and bottom part is black, surrounded by a line that measures at least 100 mm x 100 mm.

14.1. UN number

UN No. (ADR/RID/ADN) 1950

14.2. UN proper shipping name

Proper Shipping Name Aerosols

14.3. Transport hazard class(es)

ADR/RID/ADN Class 2.5F

ADR Label No. 2.1

IMDG Class 2.1

ICAO Class/Division 2.1

Transport Labels

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

EMS	F-D, S-U
Tunnel Restriction Code	(D)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

EU Legislation
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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.
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 with amendments.

National Regulations
COUNCIL DIRECTIVE of may 1975 on the approximation of the laws of the Member States relating to aerosol dispensers.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General information
A review of safety data sheet with staff to manage the product recommended.

Issued By	Ullbors
Revision Date	26/09/2014
Revision	3
Supersedes date	27/12/2012
Date	26/09/2014

Risk Phrases In Full

R12	Extremely flammable.
R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R20	Harmful by inhalation.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R36/38	Irritating to eyes and skin.
R36	Irritating to eyes.
R38	Irritating to skin.
R66	Repeated exposure may cause skin dryness or cracking.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

EUH066	Repeated exposure may cause skin dryness or cracking.
H220	Extremely flammable gas.
H222+H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.