according to Regulation (EC) No 1907/2006



Buz® Laundry Enz 3

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

1.1. Product identifier

Buz® Laundry Enz 3

UFI: CN70-707W-Y00A-Q3Y4

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

Use of the substance/mixture

EuPCS: PC-DET-1.3 Laundry detergents – professional or industrial use, PC-DET-1.2 Laundry detergents –

household use

Process categories [PROC]: 1, 2, 8, 9

1.3. Details of the supplier of the safety data sheet

Company name: BUZIL-WERK Wagner GmbH & Co. KG

Street: Fraunhofer Str. 17
Place: D-87700 Memmingen

Telephone: +49 (0) 8331 930-6 Telefax: +49 (0) 8331 930-880

e-mail: info@buzil.de
Contact person: info@buzil.de
Internet: www.buzil.com

1.4. Emergency telephone +49 (0) 8331 930-6 (08:00 - 16:00 h)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

Special labelling of certain mixtures

EUH208 Contains 1,2-Benzisothiazol-3(2H)-one and 2-Octyl-2H-isothiazol-3-one. May produce an

allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

according to Regulation (EC) No 1907/2006



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3.2. Mixtures

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (Regulation	(EC) No 1272/2008)	·		
78330-21-9	Alcohols, C11-14-iso, C1	3-rich, ethoxylated		10 - < 15 %	
	616-609-5				
	Acute Tox. 4, Eye Dam. 1	, Aquatic Chronic 3; H302 H318 H	112		
97489-15-1	Sulfonic acids, C14-17-se	ec-alkane, sodium salts		1 - < 5 %	
	307-055-2		01-2119489924-20		
	Acute Tox. 4, Skin Irrit. 2,	Eye Dam. 1, Aquatic Chronic 3; H	302 H315 H318 H412		
112-34-5	2-(2-Butoxyethoxy)ethand	1 - < 5 %			
	203-961-6	603-096-00-8	01-2119475104-44		
	Eye Irrit. 2; H319				
64-17-5	Ethanol	1 - < 5 %			
	200-578-6	603-002-00-5	01-2119457610-43		
	Flam. Liq. 2, Eye Irrit. 2; I				
2634-33-5	1,2-Benzisothiazol-3(2H)-	< 0,0100 %			
	220-120-9	613-088-00-6			
	Acute Tox. 4, Skin Irrit. 2, H400	Eye Dam. 1, Skin Sens. 1, Aquatio	Acute 1; H302 H315 H318 H317		
26530-20-1	2-Octyl-2H-isothiazol-3-o	ne		< 0,0015 %	
	247-761-7	613-112-00-5			
	Acute Tox. 2, Acute Tox. 1, Aquatic Chronic 1; H33				

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity			
	Specific Conc.					
78330-21-9	616-609-5	Alcohols, C11-14-iso, C13-rich, ethoxylated	10 - < 15 %			
	dermal: LD50	= > 2000 mg/kg; oral: LD50 = 500 - 2000 mg/kg				
97489-15-1	307-055-2	Sulfonic acids, C14-17-sec-alkane, sodium salts	1 - < 5 %			
	1	= > 2000 mg/kg; oral: LD50 = > 500 - 2000 mg/kg Skin Irrit. 2; H315: >= 10 - 100 I318: >= 15 - 100 Eye Irrit. 2; H319: >= 10 - < 15				
112-34-5	203-961-6	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether	1 - < 5 %			
	dermal: LD50	dermal: LD50 = 2764 mg/kg; oral: LD50 = 3305 mg/kg				
64-17-5	200-578-6	Ethanol	1 - < 5 %			
	inhalation: LC 100	50 = 116,9 mg/l (vapours); oral: LD50 = 10470 mg/kg				
2634-33-5	220-120-9	1,2-Benzisothiazol-3(2H)-one	< 0,0100 %			
	dermal: LD50	= > 2000 mg/kg; oral: LD50 = 500 mg/kg				
26530-20-1	247-761-7	2-Octyl-2H-isothiazol-3-one	< 0,0015 %			
	Skin Sens. 1A Aquatic Acute	E 0,27 mg/l (dusts or mists); dermal: ATE 311 mg/kg; oral: ATE 125 mg/kg; H317: >= 0,0015 - 100 1; H400: M=100 ic 1; H410: M=100				

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



according to Regulation (EC) No 1907/2006

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5 % - < 15 % non-ionic surfactants, < 5 % anionic surfactants, < 5 % soap, < 5 % phosphonates, perfumes, optical brighteners, enzymes, preservation agents (Benzisothiazolinone, Octylisothiazolinone, Methylchloroisothiazolinone/methylisothiazolinone).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately.

After inhalation

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet

alcohol resistant foam

Carbon dioxide

Extinguishing powder

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products:

Carbon dioxide

Carbon monoxide

5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

For non-emergency personnel

Ventilate affected area.

according to Regulation (EC) No 1907/2006



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For emergency responders

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Treat the recovered material as prescribed in the section on waste disposal.

Other information

Collect in closed and suitable containers for disposal.

Ventilate affected area.

6.4. Reference to other sections

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes and clothes.

Do not mix with other chemicals.

Use personal protection equipment.

When using do not eat, drink or smoke.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Take off contaminated clothing.

Wash hands before breaks and after work.

When using do not eat, drink or smoke.

Further information on handling

No further relevant information available.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

Further information on storage conditions

No further relevant information available.

7.3. Specific end use(s)

Laundry detergents

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



according to Regulation (EC) No 1907/2006

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Occupational exposure limit values

CAS No	Name of agent	ppm	mg/m³	fib/cm³	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	
		15	101.2		STEL (15 min)	

Additional advice on limit values

No information available.

8.2. Exposure controls





Appropriate engineering controls

No information available.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. (EN 166)

Hand protection

Wear suitable gloves. (EN 374, Category III)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Suitable material: NBR (Nitrile rubber) / Thickness of the glove material > 0,1 mm

Diluted ready-to-use solutions <=1%:

Protective gloves may be waived, if equivalent measures allowing for an increased skin stress because of wet work are implemented (e. g. application of suitable skin protecting creams).

Skin protection

Wear suitable work clothing.

Respiratory protection

Usually no personal respirative protection necessary.

Thermal hazards

No further relevant information available.

Environmental exposure controls

Section 6: Accidental Release Measures

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: light yellow - yellow
Odour: Perfumes, fragrances

Test method

Melting point/freezing point: approx. 0 °C Boiling point or initial boiling point and approx. 100 °C

boiling range:

Flammability: not applicable
Lower explosion limits: not determined
Upper explosion limits: not determined
Flash point: > 60 °C

according to Regulation (EC) No 1907/2006



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Auto-ignition temperature: not determined Decomposition temperature: not applicable pH-Value (at 20 °C): 8,0 - 8,5 Viscosity / kinematic: not determined

(at 40 °C)

Water solubility: completely miscible

(at 20 °C)

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

Density (at 20 °C):

Relative density:

Relative vapour density:

Particle characteristics:

not applicable

not determined

1,05 g/cm³

not determined

not determined

not determined

9.2. Other information

Other safety characteristics

Viscosity / dynamic: < 10 mPa·s (50 1/s)

(at 25 °C)

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

The product is stable under storage at normal ambient temperatures.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

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

Acute toxicity

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



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CAS No	Chemical name							
	Exposure route	Dose	Species	Source	Method			
78330-21-9	Alcohols, C11-14-iso, C1	Alcohols, C11-14-iso, C13-rich, ethoxylated						
	oral	LD50 500 - 2000 mg/kg	Rat					
	dermal	LD50 > 200 mg/kg	0 Rat		OECD 402			
97489-15-1	Sulfonic acids, C14-17-s	ec-alkane, sodium s	alts					
	oral	LD50 > 500 2000 mg/kg	- Rat		OECD 401			
	dermal	LD50 > 200 mg/kg	0 Mouse					
112-34-5	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether							
	oral	LD50 3305 mg/kg	Rat					
	dermal	LD50 2764 mg/kg	Rabbit					
64-17-5	Ethanol							
	oral	LD50 10470 mg/kg) Rat		OECD 401			
	inhalation (4 h) vapour	LC50 116,9 mg/l	Rat		OECD 403			
2634-33-5	1,2-Benzisothiazol-3(2H)-one							
	oral	LD50 500 mg/kg	Rat					
	dermal	LD50 > 200 mg/kg	0 Rat					
26530-20-1	2-Octyl-2H-isothiazol-3-one							
	oral	ATE 125 mg/kg						
	dermal	ATE 311 mg/kg						
	inhalation dust/mist	ATE 0,27 mg/l						

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Contains 1,2-Benzisothiazol-3(2H)-one and 2-Octyl-2H-isothiazol-3-one. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

Other information

No information available.

SECTION 12: Ecological information

according to Regulation (EC) No 1907/2006



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12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
78330-21-9	Alcohols, C11-14-iso, C13-rich, ethoxylated						
	Acute fish toxicity	LC50 mg/l	> 1 - 10	96 h	Danio rerio (zebrafish)		OECD 203
	Acute algae toxicity	ErC50 mg/l	> 10	72 h	Desmodesmus subspicatus		OECD 201
	Acute crustacea toxicity	EC50 mg/l	7,07	48 h	Daphnia magna (Big water flea)		OECD 202
97489-15-1	Sulfonic acids, C14-17-se	c-alkane, sc	odium salts				
	Acute fish toxicity	LC50 mg/l	1-10	96 h	Danio rerio (zebrafish)		OECD 203
	Acute algae toxicity	ErC50 mg/l	> 61	72 h	Desmodesmus subspicatus		OECD 201
	Acute crustacea toxicity	EC50 mg/l	9,81	48 h	Daphnia magna (Big water flea)		OECD 202
	Fish toxicity	NOEC mg/l	0,85	28 d	Oncorhynchus mykiss (Rainbow trout)		OECD 204
	Crustacea toxicity	NOEC mg/l	0,36	22 d	Daphnia magna (Big water flea)		OECD 202
112-34-5	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether						
	Acute fish toxicity	LC50 mg/l	1300	96 h	Lepomis macrochirus (Bluegill)		OECD 203
	Acute algae toxicity	ErC50 mg/l	> 100	96 h	Scenedesmus subspicatus		OECD 201
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna (Big water flea)		OECD 202
64-17-5	Ethanol						
	Acute fish toxicity	LC50 mg/l	11200	96 h	Oncorhynchus mykiss (Rainbow trout)		ASTN E729-80
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris		
	Acute crustacea toxicity	EC50 mg/l	5012	48 h	Ceriodaphnia spec		

12.2. Persistence and degradability

The surfactants contained in this mixture comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.



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CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
78330-21-9	Alcohols, C11-14-iso, C13-rich, ethoxylated				
	OECD 301 D	> 60 %	28		
	Readily biodegradable (according to OECD criteria).				
97489-15-1	5-1 Sulfonic acids, C14-17-sec-alkane, sodium salts				
	OECD 301 B	> 60 %	28		
	Readily biodegradable (according to OECD criteria).				
112-34-5	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether				
	OECD 301 C	> 70 %	28		
	Readily biodegradable (according to OECD criteria).				
64-17-5	Ethanol				
	OECD 301 B	> 60%	28		
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-34-5	2-(2-Butoxyethoxy)ethanol, Diethylene glycol monobutyl ether	1
64-17-5	Ethanol	-0,31

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

Delivery to an approved waste disposal company.

List of Wastes Code - residues/unused products

070601 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease,

soaps, detergents, disinfectants and cosmetics; aqueous washing liquids and mother liquors;

hazardous waste

List of Wastes Code - contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately

collected municipal packaging waste); plastic packaging

Contaminated packaging

Non-contaminated packages may be recycled.

SECTION 14: Transport information

according to Regulation (EC) No 1907/2006



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Land transport (ADR/RID)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No special measures are necessary.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII): Entry 3, Entry 40, Entry 55, Entry 75

2010/75/EU (VOC): 7,3 %

Additional information

Regulation (EC) No. 648/2004 [Detergents regulation]

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,9,14.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association





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GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Process categories according to ECHA guidance on information requirements and chemical safety assessment, chapter R.12:

PROC 1: Use in closed processes.

PROC 2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC 4: Chemical production where opportunity for exposure arises

PROC 7: Industrial spraving

PROC 8 (Transfer): Dilution of concentrated products, application of drain cleaners, dosage of textile washing agents.

PROC 9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC 10 (Roller application or brushing): Processing without large-scale spraying.

PROC 11 (Spraying outside industrial settings): Processing with large-scale spraying (e. g. high pressure cleaning, foam gun).

PROC 13: Treatment of articles by dipping and pouring

PROC 19 (Hand-mixing with intimate contact): Hand cleaning and disinfection

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-Benzisothiazol-3(2H)-one and 2-Octyl-2H-isothiazol-3-one. May produce an allergic reaction.

Further Information

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]: 9 (1)

In devation from REGULATION (EC) No 1272/2008, annex I part 2 and 3, the assessment of skin and eye corrosion and irritation was performed by in-vitro-testing of the product and/or the principles of annex I, part 1.1.0.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.



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(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)