

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 01/06/2015 Revision date: 26/08/2021 Supersedes version of: 13/07/2021 Version: 5.1

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

1.1. Product identifier

Product form : Mixture

Product name : Bonasystems Degreaser+ UFI : 4YS2-K0VF-T00F-GDE4

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only Use of the substance/mixture : Cleaning product

1.2.2. Uses advised against

Restrictions on use : Anything other than intended use as listed on the label.

1.3. Details of the supplier of the safety data sheet

Bonasystems Europe Ltd

Unit B

Fourth Dimension

Fourth Avenue

Letchworth Garden City

SG6 2TD

Tel: 01442 927100 Fax: 01442 927111

E-mail: info@bonasystems.com

1.4. Emergency telephone number

Emergency number : 01442 927100

Office hours only.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1, Sub-Category 1B H314
Serious eye damage/eye irritation, Category 1 H318

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage. Causes serious eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05

Signal word (CLP) : Danger

Contains : Alcohols c9-11, ethoxylated; 2-aminoethanol; ethanolamine; sodium hydroxide; caustic soda

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

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Precautionary statements (CLP)

: P280 - Wear eye protection, face protection, protective clothing, protective gloves. P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

 ${\tt P305+P351+P338-IF\ IN\ EYES: Rinse\ cautiously\ with\ water\ for\ several\ minutes.\ Remove}$

contact lenses, if present and easy to do. Continue rinsing.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 - Immediately call a POISON CENTER or doctor.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-aminoethanol; ethanolamine	(CAS-No.) 141-43-5 (EC-No.) 205-483-3 (EC Index-No.) 603-030-00-8 (REACH-no) 01-2119486455-28	≥ 1 – < 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 STOT SE 3, H335 Aquatic Chronic 3, H412
Alcohols c9-11, ethoxylated	(CAS-No.) 68439-46-3 (EC-No.) 614-482-0 (REACH-no) Exempt	≥ 1 – < 10	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
sodium hydroxide; caustic soda	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27	≥ 1 – < 10	Skin Corr. 1A, H314
2-butoxyethanol substance with a Community workplace exposure limit	(CAS-No.) 111-76-2 (EC-No.) 203-905-0 (EC Index-No.) 603-014-00-0	< 1	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
2-aminoethanol; ethanolamine	(CAS-No.) 141-43-5 (EC-No.) 205-483-3 (EC Index-No.) 603-030-00-8 (REACH-no) 01-2119486455-28	(5 ≤C ≤ 100) STOT SE 3, H335
sodium hydroxide; caustic soda	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27	(0.5 ≤C < 2) Skin Irrit. 2, H315 (0.5 ≤C < 2) Eye Irrit. 2, H319 (2 ≤C < 5) Skin Corr. 1B, H314 (5 ≤C ≤ 100) Skin Corr. 1A, H314

Full text of H-statements: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a

physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

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. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe

dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not

breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible products : Oxidizing agent. Strong bases. Strong acids.

Special rules on packaging : Store in a closed container. Keep only in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sodium hydroxide; caustic soda (1310-73-2)		
Ireland - Occupational Exposure Limits		
Local name	Sodium hydroxide	
OEL (15 min ref) (mg/m3)	2 mg/m³	
Regulatory reference	Chemical Agents Code of Practice 2020	
United Kingdom - Occupational Exposure Limits		
Local name	Sodium hydroxide	
WEL STEL (mg/m³)	2 mg/m³	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

2-butoxyethanol (111-76-2)		
EU - Occupational Exposure Limits		
Local name	2-Butoxyethanol	
IOELV TWA (mg/m³)	98 mg/m³	
IOELV TWA (ppm)	20 ppm	
IOELV STEL (mg/m³)	246 mg/m³	
IOELV STEL (ppm)	50 ppm	
Notes	Skin	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
Ireland - Occupational Exposure Limits		
Local name	2-Butoxyethanol (EGBE) [Ethylene glycol monobutyl ether]	
OEL (8 hours ref) (mg/m³)	98 mg/m³	
OEL (8 hours ref) (ppm)	20 ppm	
OEL (15 min ref) (mg/m3)	246 mg/m³	
OEL (15 min ref) (ppm)	50 ppm	

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2-butoxyethanol (111-76-2)		
Notes (IE)	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)	
Regulatory reference	Chemical Agents Code of Practice 2020	
United Kingdom - Occupational Exposure Limits		
Local name	2-Butoxyethanol	
WEL TWA (mg/m³)	123 mg/m³	
WEL TWA (ppm)	25 ppm	
WEL STEL (mg/m³)	246 mg/m³	
WEL STEL (OEL STEL) [ppm]	50 ppm	
Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
United Kingdom - Biological limit values		
Local name	2-Butoxyethanol	
United Kingdom (BEI)	240 mmol/mol Creatinine Parameter: butoxyacetic acid - Medium: urine - Sampling time: Post shift	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Chemical resistant gloves (according to European standard EN 374 or equivalent)

Eye protection:

Safety glasses. Use eye protection according to EN 166.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):





Environmental exposure controls:

Avoid release to the environment.

Other information:

A risk assessment should be carried out prior to use to determine the exposure risk to the chemical. Specific work environments and material handling practices may vary; therefore, safety procedures should be developed and PPE selected for each intended application. Consultation with PPE supplier/manufacturer will help determine suitability as protection time cannot be accurately estimated for mixtures (such as glove breakthrough time). PPE should be worn to prevent any contact with the chemical. Any contaminated clothing should be washed prior to re-use.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : clear.
Odour : Apple.

Odour threshold : No data available

pH : 3-7

Relative evaporation rate (butylacetate=1) : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available Flash point : No data available : No data available Auto-ignition temperature : No data available Decomposition temperature Flammability (solid, gas) : Not applicable : No data available Vapour pressure Relative vapour density at 20 °C : No data available : No data available Relative density Density : 1.015 - 1.03 Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available Explosive properties : No data available

9.2. Other information

Oxidising properties

Explosive limits

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: No data available

: No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified

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Acute toxicity (inhalation) : Not classified

Alcohols c9-11, ethoxylated (68439-46-3)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 1.6 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

2-aminoethanol; ethanolamine (141-43-5)	
LD50 oral rat	1720 mg/kg
LD50 dermal rabbit	1025 mg/kg

2-butoxyethanol (111-76-2)	
LD50 oral rat	1746 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1322 - 2301
LD50 oral	1414 mg/kg bodyweight Animal: guinea pig, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1020 - 1961
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Causes severe skin burns.

pH: 3 - 7

Serious eye damage/irritation : Causes serious eye damage.

pH: 3 - 7

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Alcohols c9-11, ethoxylated (68439-46-3)	
, , ,	≥ 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity in Rodents)

2-butoxyethanol (111-76-2)	
	> 150 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

Not rapidly degradable

: Before neutralisation, the product may represent a danger to aquatic organisms.

: Not classified

: Not classified

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2-aminoethanol; ethanolamine (141-43-5)	
LC50 fish 1	349 mg/l Cyprinus carpio (Common carp)
LC50 fish 2	170 mg/l Carassius auratus (Goldfish)
LC50 other aquatic organisms 1	227 mg/l Pimephales promelas (Fat-head Minnow)
LC50 other aquatic organisms 2	3684 mg/l Brachydanio rerio (Zebra Fish)
EC50 Daphnia 1	65 mg/l
EC50 72h algae (1)	2.5 mg/l Selenastrum capricornutum
EC50 72h algae (2)	22 mg/l Scenedesmus subspicatus
EC50 96h algae (1)	2.8 mg/l Pseudokirchneriella subcapitata

sodium hydroxide; caustic soda (1310-73-2)	
EC50 Daphnia 1	40.4 mg/l Test organisms (species): Ceriodaphnia sp.

2-butoxyethanol (111-76-2)		
LC50 fish 1	1474 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 Daphnia 1	≈ 1800 mg/l Test organisms (species): Daphnia magna	
EC50 72h algae (1)	911 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 72h algae (2)	1840 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC chronic fish	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '21 d'	

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

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ADR	IMDG	IATA	ADN	RID	
ADIX	IIIIDO	IATA	ADIN	IXID	
14.1. UN number					
UN 1824	UN 1824	UN 1824	UN 1824	UN 1824	
14.2. UN proper shippin	g name				
SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	Sodium hydroxide solution	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	
Transport document descr	iption				
UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II, (E)	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II	UN 1824 Sodium hydroxide solution, 8, II	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II	
14.3. Transport hazard class(es)					
8	8	8	8	8	
8	8	8	8	8	
14.4. Packing group					
II	II	II	II	II	
14.5. Environmental haz	ards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No	
No supplementary information	n available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : C5
Limited quantities (ADR) : 11
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001, IBC02

Mixed packing provisions (ADR) : MP15
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions : TP2

(ADR)

Tank code (ADR) : L4BN
Tank special provisions (ADR) : TU42
Vehicle for tank carriage : AT
Transport category (ADR) : 2

Hazard identification number (Kemler No.) : 80
Orange plates :

80 1824

Tunnel restriction code (ADR) : E EAC code : 2R

Transport by sea

Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP2
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Stowage category (IMDG) : A

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Segregation (IMDG) : SG35

Properties and observations (IMDG) : Colourless liquid. Reacts with ammonium salts, evolving ammonia

gas. Causes burns to skin, eyes and mucous membranes. Reacts violently with acids.

Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y840 PCA limited quantity max net quantity (IATA) : 0.5L PCA packing instructions (IATA) : 851 PCA max net quantity (IATA) : 1L CAO packing instructions (IATA) 855 CAO max net quantity (IATA) : 30L Special provisions (IATA) : A3, A803 ERG code (IATA) : 8L

Inland waterway transport

Classification code (ADN) : C5
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : C5
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2
Packing instructions (RID) : P001, IBC02

Mixed packing provisions (RID) : MP15
Portable tank and bulk container instructions (RID) : T7
Portable tank and bulk container special provisions : TP2

(RID)

Tank codes for RID tanks (RID) : L4BN
Special provisions for RID tanks (RID) : TU42
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE6
Hazard identification number (RID) : 80

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

Full text of H- and EUH-statements:			
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4		
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A		
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation		
H302	Harmful if swallowed.		
H312	Harmful in contact with skin.		
H314	Causes severe skin burns and eye damage.		
H315	Causes skin irritation.		
H318	Causes serious eye damage.		
H319	Causes serious eye irritation.		
H332	Harmful if inhaled.		
H335	May cause respiratory irritation.		
H412	Harmful to aquatic life with long lasting effects.		

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.