



according to UK REACH Regulation

BA15 Plus

Revision date: 13.01.2020

Product code: 091613-RM

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

1.1. Product identifier

BA15 Plus

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

Use of the substance/mixture

Electronics cleaner for spray and immersion plants

1.3. Details of the supplier of the safety data sheet

Company name:	kolb Cleaning Technology GmbH	
Street:	Karl-Arnold-Str. 12	
Place:	D-47877 Willich	
Telephone:	+49-2154-947938	Telefax: +49-2154-947947
e-mail:	info@kolb-ct.com	
Contact person:	Christian Linker	Telephone: +49-2324-97980
e-mail:	christian.linker@kolb-ct.com	
Internet:	www.kolb-ct.com	
Responsible Department:	Labor/ QS	
1.4. Emergency telephone	+49/ (0) 23 24/ 979817 (EU)	
number:	+61 4 19 809 805 (Australia)	
	+1 970 443 9233 (USA)	
	Schweiz: 145	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Irrit. 2; H315 Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

Warning

2.2. Label elements

GB CLP Regulation

Signal word:

Pictograms:



Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statements

·····	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
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.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.



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2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation))		
5131-66-8	3-butoxypropan-2-ol; propylene glycol monobutyl ether			
	225-878-4	603-052-00-8		
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
141-43-5	2-Aminoethanol (vgl.Ethanolamin)			>0,1%
	205-483-3		01-2119486455-28	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, STOT SE 3, Aquatic Chronic 3; H332 H312 H302 H314 H335 H412			

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. Limits, M-factors and ATE					
5131-66-8	225-878-4	25-878-4 3-butoxypropan-2-ol; propylene glycol monobutyl ether			
inhalation: LC50 = 651 mg/l (vapours); dermal: LD50 = 3100 mg/kg; oral: LD50 = 5010 mg/kg					
141-43-5	205-483-3	2-Aminoethanol (vgl.Ethanolamin)	>0,1% %		
inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg; oral: ATE = 500 mg/kg					

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

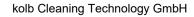
Rinse mouth immediately and drink plenty of water.

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.





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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. 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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7 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

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

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.

7.3. Specific end use(s)

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
141-43-5	2-Aminoethanol	1	2.5		TWA (8 h)	WEL
		3	7.6		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	-	-	-
DNEL type		Exposure route	Effect	Value
5131-66-8	3-butoxypropan-2-ol; propylene glycol monobutyl ether			
Worker DNEL,	acute	dermal	local	50 %
Worker DNEL,	long-term	dermal	systemic	16 mg/kg bw/day
Worker DNEL,	long-term	inhalation	systemic	33,8 mg/m ³
Worker DNEL,	long-term	dermal	local	50 %
Consumer DNE	EL, acute	dermal	local	50 %
Consumer DNEL, long-term		dermal	systemic	44 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	270,5 mg/m³
Consumer DNE	EL, long-term	dermal	local	50 %

PNEC values

CAS No	Substance				
Environmental compartment Value					
5131-66-8 3-butoxypropan-2-ol; propylene glycol monobutyl ether					
Freshwater		0,525 mg/l			
Marine water 0,0525 mg/l					
Freshwater sediment 2,36 mg/kg					
Marine sedime	0,236 mg/kg				
Soil	Soil 0,16 mg/kg				

8.2. Exposure controls

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	orange
Odour:	specific
Melting point/freezing point:	not determined
Boiling point or initial boiling point and	not determined
boiling range:	
Flammability:	not applicable
	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	62,5 °C
Decomposition temperature:	not determined
pH-Value:	not determined
Viscosity / kinematic: (at 20 °C)	3,85 mm²/s
Water solubility:	The study does not need to be conducted
	because the substance is known to be
	insoluble in water.
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	
	not determined
Vapour pressure:	not determined
Vapour pressure: Density (at 20 °C):	not determined 0,8780 g/cm³
Vapour pressure:	not determined
Vapour pressure: Density (at 20 °C):	not determined 0,8780 g/cm³
Vapour pressure: Density (at 20 °C): Relative vapour density:	not determined 0,8780 g/cm³ not determined
Vapour pressure: Density (at 20 °C): Relative vapour density: <u>9.2. Other information</u> Information with regard to physical ha Self-ignition temperature	not determined 0,8780 g/cm³ not determined
Vapour pressure: Density (at 20 °C): Relative vapour density: <u>9.2. Other information</u> Information with regard to physical ha Self-ignition temperature Solid:	not determined 0,8780 g/cm³ not determined azard classes not applicable
Vapour pressure: Density (at 20 °C): Relative vapour density: <u>9.2. Other information</u> Information with regard to physical ha Self-ignition temperature Solid: Gas:	not determined 0,8780 g/cm ³ not determined
Vapour pressure: Density (at 20 °C): Relative vapour density: <u>9.2. Other information</u> Information with regard to physical ha Self-ignition temperature Solid:	not determined 0,8780 g/cm³ not determined azard classes not applicable

not determined not determined 2,8 mPa·s

SECTION 10: Stability and reactivity

Other safety characteristics

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

Evaporation rate:

Viscosity / dynamic:

Solid content:

(at 25 °C)

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none





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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 GB CLP Regulation

Acute toxicity

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

CAS No	Chemical name								
	Exposure route	Dose		Species	Source	Method			
5131-66-8	3-butoxypropan-2-ol; propylene glycol monobutyl ether								
	oral	LD50 mg/kg	5010	Ratte					
	dermal	LD50 mg/kg	3100	Rabbit					
	inhalation (4 h) vapour	LC50	651 mg/l	Ratte					
141-43-5	2-Aminoethanol (vgl.Etha	anolamin)							
	oral	ATE mg/kg	500						
	dermal	ATE mg/kg	1100						
	inhalation vapour	ATE	11 mg/l						
	inhalation dust/mist	ATE	1,5 mg/l						

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

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

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.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.



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CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
5131-66-8	3-butoxypropan-2-ol; propylene glycol monobutyl ether							
	Acute fish toxicity	LC50	780 mg/l		Guppy (Poecilia reticulata)			
	Acute algae toxicity	ErC50 mg/l	1000		Grünalge Pseudokirchneriella subcapitata			
	Acute crustacea toxicity	EC50 mg/l	1000		Daphnia magna (Großer Wasserfloh)			
	Algae toxicity	NOEC	560 mg/l		Grünalge Pseudokirchneriella subcapitata			
	Acute bacteria toxicity	(EC50 mg/l)	1000	3 h				

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name						
	Method Value d Source						
	Evaluation						
5131-66-8	3-butoxypropan-2-ol; propylene glycol monobutyl ether						
	OECD Test 301E	90%	28				
	leichte Bioabbaubarkeit						

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
5131-66-8	3-butoxypropan-2-ol; propylene glycol monobutyl ether	1,2

BCF

CAS No	Chemical name	BCF	Species	Source
	3-butoxypropan-2-ol; propylene glycol monobutyl ether	<100		

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 UK REACH.

The product has not been tested.

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.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods





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Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

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)			
<u>14.1. UN number or ID number:</u>	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 information available.			
14.7. Maritime transport in bulk according to	<u>IMO instruments</u>		
not applicable			
SECTION 15: Regulatory information			
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture			
Ell regulatory information			

EU regulatory information	
Restrictions on use (REACH, annex XVII): Entry 3, Entry 75	
2004/42/EC (VOC):	99,9%
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)
National regulatory information	
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	1 - slightly hazardous to water



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15.2. Chemical safety assessment

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

SECTION 16: Other information

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

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%

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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