



Kemetyl

Safety data sheet

According to Regulation (EU) No 2020/878

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

1.1. Product identifier

Product name : BLACK ARROW ANTI CRYSTAL ADDITIVE FOR ADBLUE
Product code : CRX870, BT92I
Chemical name : [(Butoxymethylethoxy)methylethoxy]propan-1-ol
Registration nr. : 01-2119453620-46
CAS nr. : 55934-93-5

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

Application : SU21 Consumer product. PC0 Other. Other products for chemical or technical processes.

1.3. Details of the supplier of the safety data sheet

Supplier : Kemetyl Polska Sp. z o. o.
Al. Jerozolimskie 146
02-305 Warszawa, Poland
Telephone : +48 22 822 5390
E-mail : msds@kemetyl.com
Website : www.kemetyl.pl

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

PL - Telephone : +48 22 822 5390

(During office hours only)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification : Not classified as dangerous according to Regulation (EC) No 1272/2008.
(1272/2008/EC)

Human health hazards : Low hazard for usual industrial or commercial handling.
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives.
Environmental hazards : Not classified as dangerous according to statutory EC-Directives.

2.2. Label elements

Label elements ((EU) 1272/2008):

Hazard pictograms : None.

Signal word : Not applicable.

H- and P-phrases : None.

Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases:

Hazard pictograms : None.

Signal word : Not applicable.

H- and P-phrases : None.

2.3. Other hazards



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Other information : Not classified as PBT or vPvB. Human health: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher. Environment: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Product description : Substance. Not classified as PBT or vPvB. Not included in the EU list with SVHC substances.

Information on substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
[(Bu-toxymethylethoxy)methylethoxy]propan-1-ol	95 - 100	55934-93-5	259-910-3		01-2119453620-46

Occupational exposure limit(s), if relevant, are listed in section 8.

Substance name	Hazard Class	H-phrases	Pictograms	
[(Bu-toxymethylethoxy)methylethoxy]propan-1-ol	-----	-----	-----	

SECTION 4 FIRST-AID MEASURES

4.1. Description of first aid measures

First aid measures

- Inhalation : Move victim into fresh air. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up.
- Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor if irritation persists.
- Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

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

Effects and symptoms

- Inhalation : No specific effects and/or symptoms are known.
- Skin contact : No specific effects and/or symptoms are known.
- Eye contact : May cause stinging of eyes and redness.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

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

Note to physicians :
General : Call a poison control centre for guidance.

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Product name : Black Arrow Anti crystal additive for Adblue
Date of issue : 2023-11-29 Replaces issue dated : ---

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Extinguishing media

- Suitable : Carbondioxide (CO2). Foam. Dry chemical. Water fog.
- Not suitable : Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

- Special exposure hazards : None known.
- Hazardous thermal decomposition and combustion products : Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

- Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

- Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles.

6.2. Environmental precautions

- Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike. Large scale discharge causing a very high pH may impair the biological system in sewage plants. Inform the official bodies if necessary.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Collect spilled material in containers. Carefully neutralise residues with acid. Absorb residues in sand or other inert material. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

- Reference to other sections : See also section 8.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

- Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. When dissolving or diluting, always add product to water. NEVER vice versa. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

- Storage : Keep in a cool, dry and well-ventilated place.
- Recommended packaging : Keep only in the original container.
- Non recommended packaging : None known.

7.3. Specific end use(s)

- Use : Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION



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8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
[(Bu-toxymethylethoxy)methylethoxy]propan-1-ol	Inhalation				420 mg/m ³
	Dermal				238 mg/kg bw/day

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
[(Bu-toxymethylethoxy)methylethoxy]propan-1-ol	Inhalation				124 mg/m ³
	Dermal				143 mg/kg bw/day
	Oral				36 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
[(Butoxymethylethoxy)methylethoxy]propan-1-ol	Water	0.564 mg/l	0.056 mg/l	
	Sediment	2.59 mg/kg	0.259 mg/kg	
	STP			100 mg/l
	Soil			0.188 mg/kg

8.2. Exposure controls

Engineering measures : Use only in well-ventilated areas. Comply with standard precautionary measures for working with chemicals.

Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

Body protection : Use of specific protective industrial clothing is not required under normal conditions of use.

Respiratory protection : Take care of sufficient ventilation.

Hand protection : Under normal conditions of use specific gloves are not required.

Eye protection : Wear appropriate safety glasses when there is danger of possible eye contact.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state : Liquid.

Colour : Colourless.

Odour : Mild.

Odour threshold : Not known.

pH : Not applicable. Almost waterfree product.



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Solubility in water	: Soluble.	
Partition coefficient (n-octanol/water)	: 1,9	
Flash point	: 126 °C	Closed cup.
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: 202 °C	
Boiling point/boiling range	: 275 °C	
Melting point/melting range	: < -60 °C	
Explosive properties	: Not an explosive.	Does not contain explosives.
Explosion limits (% in air)	: Not known.	
Oxidising properties	: Not oxidizing.	
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: 7 mm ² /sec	(1 mm ² /sec = 1cSt)
Viscosity (40°C)	: < 7 mm ² /sec	
Vapour pressure (20°C)	: 0,2 Pa	
Relative vapour density	: Not relevant.	The solvent content of this product is less than 1%.
Relative density (20°C)	: 0,93 g/ml	
Particle characteristics	: Not applicable.	Liquid.

9.2. Other information

Other information : Not relevant.

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : No specific recommendations.

10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

SECTION 11 TOXICOLOGICAL INFORMATION

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

Inhalation

- | | |
|----------------------|--|
| Acute toxicity | : Not classified - based on available data, the classification criteria are not met. |
| Corrosion/irritation | : Not classified - based on available data, the classification criteria are not met. |
| Sensitisation | : Not classified - based on available data, the classification criteria are not met. |



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Carcinogenicity : Not classified - based on available data, the classification criteria are not met.
Mutagenicity : Not classified - based on available data, the classification criteria are not met.

Skin contact

Acute toxicity : Low toxicity. Not classified - based on available data, the classification criteria are not met.
Corrosion/irritation : No specific effects and/or symptoms are known. Not classified - based on available data, the classification criteria are not met.

Sensitisation : Not classified - based on available data, the classification criteria are not met.
Carcinogenicity : Not classified - based on available data, the classification criteria are not met.
Mutagenicity : Not classified - based on available data, the classification criteria are not met.

Eye contact

Corrosion/irritation : Slight irritation possible. Not classified - based on available data, the classification criteria are not met.

Ingestion

Acute toxicity : Low toxicity. Not classified - based on available data, the classification criteria are not met.
Aspiration : Danger of aspiration is not expected. Not classified - based on available data, the classification criteria are not met.
Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.
Carcinogenicity : Not classified - based on available data, the classification criteria are not met.
Mutagenicity : Not classified - based on available data, the classification criteria are not met.
Reprotoxicity : Development: Not classified - Based on available data, the classification criteria are not met.
Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
[(Butoxymethylethoxy)methylethoxy]propyl-1-ol	LD50 (oral)	> 2000 mg/kg bw	OECD 401	Rat
	LD50 (dermal)	> 2000 mg/kg bw	OECD 402	Rat
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig
	Skin irritation	Non-irritant	OECD 404	Rabbit
	Eye irritation	Non-irritant	OECD 405	Rabbit

11.2. Information on other hazards

Endocrine disrupting properties : This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other information : Not applicable.

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity : Not classified - based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Persistence – degradability : Ultimate biodegradability (%): 72

12.3. Bioaccumulative potential

Bioaccumulative potential : Fulfills the very bioaccumulative criterion according to Regulation (EC) No 1907/2006 (REACH). Classified as very bioaccumulative (vB). BCF: < 100 l/kg.bw

12.4. Mobility in soil

Mobility : If product enters soil, it will be highly mobile and may contaminate groundwater.



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12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Not classified as PBT or vPvB.

12.6. Endocrine disrupting properties

Endocrine disrupting properties : This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

Other adverse effects : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
[(Butoxymethylethoxy)methylethoxy]propyl-1-ol	EC50 (fish)	564 mg/l	OECD 203	Poecilia reticulata
	EC50 (waterflea)	> 1000 mg/l	OECD 202	Daphnia magna
	IC50 (algae)	> 265 mg/l		Selenastrum capricornutum
	Primary aerobic biodegradation (%)	93 %	OECD 302 B	
	Ultimate aerobic biodegradation (%)	72 %	OECD 301 F	
	Log P(ow)	1,9		
	BCF	< 100		

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as chemical waste. Dispose waste to an official chemical waste depot.

Additional warning : None.

Waste water discharge : Do not dispose of into the environment, drains, sewers or water courses.

Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION

14.1. UN number or ID number

UN nr. : None.

14.2. UN proper shipping name

Transport name : Not regulated.

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : This product is not classified according to ADR/RID/ADN.

IMDG (sea)

Class : This product is not classified according to IMDG.



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Marine pollutant : No

IATA (air)

Class : This product is not classified according to IATA.

14.6. Special precautions for user

Other information : Country specific variations may apply.

14.7. Maritime transport in bulk according to IMO instruments

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION

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

Community regulations : Regulation (EU) No 2020/878 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations. Directive 2008/98/EC (waste).

15.2. Chemical safety assessment

Chemical safety assessment : Not available.

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2020/878 dated 18 June 2020 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE : Acute Toxicity Estimate
CLP : Classification, Labeling & Packaging
CMR : Carcinogenic, Mutagenic or toxic for Reproduction
EEC : European Economic Community
GHS : Globally Harmonized System of Classification and Labelling of Chemicals
IATA : International Air Transport Association
IBC code : International Bulk Chemical Code
IMDG : International Maritime Dangerous Goods Code
LD50/LC50 : Lethal Dose/Concentration for 50% of a population
MAC : Maximum Allowable Concentration
MARPOL : International Convention for the Prevention of Pollution From Ships
NO(A)EL : No Observed (Adverse) Effect Level
OECD : Organisation for Economic Co-operation and Development
PBT : Persistent, Bioaccumulative and Toxic
PC : Chemical product category
PT : Product type



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REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
UFI	: Unique formula identifier
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

Key data used to compile the Safety Data Sheet are from, but not limited to, one or more sources of information e.g. toxicological data from material suppliers, CONCAWE, IFRA, CESIO, Regulation EG 1272/2008, etc.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Not classified : Based on test methods, experts judgement, bridging principles and calculation methods.

Full text of hazard classes mentioned in section 3: Not applicable.

Full text of H-phrases mentioned in section 3: Not applicable.

Advice on any training appropriate for workers: none.

Country / Language code : EC / EN

Number format : "," used as decimal separator.

End of safety data sheet.

Print date : 2023-12-04