

**ARMOGUARD P**

Creation date	26. September 2019	Version	1.0
Revision date			

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

- 1.1. Product identifier**  
Substance / mixture ARMOGUARD P  
Number 2-25  
UFI RJ10-W0XK-C00S-QDFW
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
Mixture's intended use  
Mixture uses advised against The product should not be used in ways other than those referred in Section 1.  
EuPCS PC-CON-5
- 1.3. Details of the supplier of the safety data sheet**  
**Manufacturer**  
Name or trade name BETOSAN s.r.o.  
Address Na Dolinách 28, Praha 4, 147 00  
Czech Republic  
Identification number (CRN) 48028177  
VAT Reg No CZ48028177  
Phone 241 431 212  
E-mail praha@betosan.cz  
Web address www.betosan.cz
- Competent person responsible for the safety data sheet**  
Name BETOSAN s.r.o.  
E-mail praha@betosan.cz
- 1.4. Emergency telephone number**  
not available

**SECTION 2: Hazards identification**

- 2.1. Classification of the substance or mixture**  
**Classification of the mixture in accordance with Regulation (EC) No 1272/2008**

The mixture is classified as dangerous.

Skin Corr. 1B, H314  
STOT SE 3, H335

Full text of all classifications and hazard statements is given in the section 16.

**Most serious adverse effects on human health and the environment**  
May cause respiratory irritation. Causes severe skin burns and eye damage.

- 2.2. Label elements**  
**Hazard pictogram**



**Signal word**  
Danger

**Hazardous substances**

2-aminoethanol

**Hazard statements**

H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

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- P102 Keep out of reach of children.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P271 Use only outdoors or in a well-ventilated area.
- P405 Store locked up.
- P501 Dispose of contents/container to by handing over to the person authorized to dispose of waste or by returning to the supplier.

**Requirements for child-resistant fastenings and tactile warning of danger**

Container must carry a tactile warning of danger. Container must be fitted with child-resistant fastening.

**2.3. Other hazards**

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

**Chemical characterization**

Mixture of substances and additives specified below.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
Index: 603-030-00-8 CAS: 141-43-5 EC: 205-483-3	2-aminoethanol	5	Acute Tox. 4, H302, H312, H332 Skin Corr. 1B, H314 Specific concentration limit: STOT SE 3, H335: C ≥ 5 %	

Full text of all classifications and hazard statements is given in the section 16.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

**If inhaled**

Take care of your own safety, do not let the affected person walk! Terminate the exposure immediately; move the affected person to fresh air. Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

**If on skin**

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Rinse skin with water/shower. Rinse cautiously with water for several minutes.

**If in eyes**

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

**If swallowed**

DO NOT INDUCE VOMITING - there is danger of further damage to the gastrointestinal tract!!! Danger of esophageal and gastric perforation! RINSE THE MOUTH WITH WATER IMMEDIATELY AND LET THE PERSON DRINK 2-5 dl of cold water to reduce the heating effect of the corrosive substance. Consuming larger amounts of liquid is not advisable as it may induce vomiting and potential inhaling of the corrosive substances in the lungs. The affected person must not be forced to drink, particularly if already feeling pain in the mouth or throat. In this case let the affected person only rinse the mouth with water. DO NOT PROVIDE ACTIVATED CARBON! Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible.

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**4.2. Most important symptoms and effects, both acute and delayed****If inhaled**

Inhaling vapours can cause corrosion of the breathing system. May cause respiratory irritation.

**If on skin**

Causes severe skin burns.

**If in eyes**

Causes serious eye damage.

**If swallowed**

Corrosion of the digestion system can occur.

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

Symptomatic treatment.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

**Unsuitable extinguishing media**

Water - full jet.

**5.2. Special hazards arising from the substance or mixture**

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

**5.3. Advice for firefighters**

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

**6.2. Environmental precautions**

Prevent contamination of the soil and entering surface or ground water.

**6.3. Methods and material for containment and cleaning up**

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

**6.4. Reference to other sections**

See the Section 7, 8 and 13.

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**SECTION 7: Handling and storage**
**7.1. Precautions for safe handling**

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Do not inhale aerosols. Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up. Keep container tightly closed.

Content 10 kg  
 Packaging type kanystr  
 Material of package PE (7), Polyethylene (Plastics)



PE

**7.3. Specific end use(s)**

not available

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**

The mixture contains substances for which occupational exposure limits are set.

**European Union**

Substance name (component)	Type	Time of exposure	Value	Note	Source
2-aminoethanol (CAS: 141-43-5)	OEL	8 hours	2,5 mg/m <sup>3</sup>		směrnice EU
	OEL	8 hours	1 ppm		
	OEL	Short-term	7,6 mg/m <sup>3</sup>		
	OEL	Short-term	3 ppm		

**8.2. Exposure controls**

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

**Eye/face protection**

Protective goggles or face shield (based on the nature of the work performed).

**Skin protection**

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

**Respiratory protection**

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

**Thermal hazard**

Not available.

**Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.

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**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Appearance	
Physical state	liquid at 20°C
color	data not available
Odour	data not available
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	data not available
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	
bottom	1 %
upper	6 %
Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	data not available
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available

**9.2. Other information**

Density	1.25 g/cm <sup>3</sup>
ignition temperature	data not available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

not available

**10.2. Chemical stability**

The product is stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Unknown.

**10.4. Conditions to avoid**

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

**10.5. Incompatible materials**

Protect against strong acids, bases and oxidizing agents.

**10.6. Hazardous decomposition products**

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

No toxicological data is available for the mixture.

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**Acute toxicity**

Based on available data the classification criteria are not met.

**Skin corrosion/irritation**

Causes severe skin burns and eye damage.

**Serious eye damage/irritation**

Causes severe skin burns and eye damage.

**Respiratory or skin sensitisation**

Based on available data the classification criteria are not met.

**Germ cell mutagenicity**

Based on available data the classification criteria are not met.

**Carcinogenicity**

Based on available data the classification criteria are not met.

**Reproductive toxicity**

Based on available data the classification criteria are not met.

**Toxicity for specific target organ - single exposure**

May cause respiratory irritation.

**Toxicity for specific target organ - repeated exposure**

Based on available data the classification criteria are not met.

**Aspiration hazard**

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. Based on available data the classification criteria are not met.

**SECTION 12: Ecological information****12.1. Toxicity****Acute toxicity**

Data for the mixture are not available.

**12.2. Persistence and degradability**

Data not available.

**12.3. Bioaccumulative potential**

Not available.

**12.4. Mobility in soil**

Not available.

**12.5. Results of PBT and vPvB assessment**

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

**12.6. Other adverse effects**

Not available.

**SECTION 13: Disposal considerations**

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**13.1. Waste treatment methods**

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

**Waste management legislation**

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

**Waste type code**

08 01 19 aqueous suspensions containing paint or varnish containing organic solvents or other dangerous Substances

**Packaging waste type code**

15 01 02 plastic packaging

**SECTION 14: Transport information****14.1. UN number**

Not subject to ADR

**14.2. UN proper shipping name**

not available

**14.3. Transport hazard class(es)**

not available

**14.4. Packing group**

not available

**14.5. Environmental hazards**

not available

**14.6. Special precautions for user**

Reference in the Sections 4 to 8.

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

not available

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the 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, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th 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, as amended.

**15.2. Chemical safety assessment**

not available

**SECTION 16: Other information****A list of standard risk phrases used in the safety data sheet**

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

**Guidelines for safe handling used in the safety data sheet**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

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P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P405	Store locked up.
P501	Dispose of contents/container to by handing over to the person authorized to dispose of waste or by returning to the supplier.

**Other important information about human health protection**

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

**Key to abbreviations and acronyms used in the safety data sheet**

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC50	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC50	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC50	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD50	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Skin Corr.	Skin corrosion
STOT SE	Specific target organ toxicity - single exposure

**Training guidelines**



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Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

**Recommended restrictions of use**

not available

**Information about data sources used to compile the Safety Data Sheet**

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.  
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. First aid principles after the exposure to the chemicals (Zásady pro poskytování první pomoci při expozici chemickým látkám, doc. MUDr. Daniela Pelclová, CSc., MUDr. Alexandr Fuchs, CSc., MUDr. Miroslava Hornyčová, CSc., MUDr. Zdeňka Trávníčková, CSc., Jiřina Fridrichovská, prom. chem.). Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

**More information**

Classification procedure - calculation method.

**Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.