

Technical/Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 12.12.2018

Version number 103

Revision: 12.12.2018

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

- 1.1 Product identifier

- Trade name **AD-BLUE-010**

- Article number: **AD-BLUE-010**

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

The substance is not classified as dangerous and/or is no subject to the requirement to produce a Chemical Safety Report under REACH, therefore no exposure scenarios are required for this safety data sheet.

- Application of the substance / the mixture **NOx reduction in exhaustgases.**

- 1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

HEPU-Autoteile GmbH

Am Kreuzweg 2

32689 Kalletal

Tel.: +49/0 5264-6483-40

- 1.4 Emergency telephone number:

Poison Control Center, NRW

Tel. 00 49 / 0228 / 19 240

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

- 2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008 Void

- Hazard pictograms Void

- Signal word Void

- Hazard statements Void

- 2.3 Other hazards

- Results of PBT and vPvB assessment

- PBT: Not applicable.

- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures

- Description: Mixture of the substances listed below with harmless additions (aqueous solution).

- Dangerous components:

CAS: 57-13-6

EINECS: 200-315-5

Reg.nr.: 01-2119463277-33

urea

25-50%

SECTION 4: First aid measures

- 4.1 Description of first aid measures

- General advice: Instantly remove any clothing soiled by the product.

- After inhalation Supply fresh air; consult doctor in case of symptoms.

- After skin contact

Instantly wash with water and soap and rinse thoroughly. If skin irritation persists, seek medical advice.

(Contd. on page 2)

GB

Technical/Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 12.12.2018

Version number 103

Revision: 12.12.2018

Trade name **AD-BLUE-010**

(Contd. of page 1)

- **After eye contact**
Rinse opened eye for 15 minutes under running water.
Consult a doctor in case of symptoms.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
In case of persistent symptoms consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Information for doctor** Symptomatic treatment.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents** Product is non-flammable. Use fire fighting measure that suit the surroundings.
- **5.2 Special hazards arising from the substance or mixture**
Can be released in case of fire:
carbon oxides (CO_x)
Nitrogen oxides (NO_x)
Hydrogen cyanide (HCN)
Ammonia vapours
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment and keep unprotected persons away.
Avoid eye and skin contact.
- **6.2 Environmental precautions:**
Prevent material from reaching sewage system, holes and cellars.
Dilute with much water.
If large amounts are released, the authorities must be informed.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Open and handle container with care.
Ensure good ventilation/exhaustion at the workplace. Avoid repeated or long-term skin contact.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage** Store in cool, dry conditions in well sealed containers.

(Contd. on page 3)

GB

Technical/Safety data sheet
 according to 1907/2006/EC, Article 31

Printing date 12.12.2018

Version number 103

Revision: 12.12.2018

Trade name **AD-BLUE-010**

(Contd. of page 2)

- **Requirements to be met by storerooms and containers:**
 Observe official regulations on storage and handling of water hazardous substances
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**
 Protect from heat and direct sunlight.
 Storage temperature: > -10 - < 25 °C
- **Storage class 12 (VCI - Konzept, 2007)**
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:**
 The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **DNELs**

57-13-6 urea

Oral	DNEL (population)	42 mg/kg bw/day (Long-term - systemic effects)
Dermal	DNEL (worker)	580 mg/kg bw/day (Long-term - systemic effects)
	DNEL (population)	580 mg/kg bw/day (Long-term - systemic effects)
Inhalative	DNEL (worker)	292 mg/m ³ (Long-term - systemic effects)
	DNEL (population)	125 mg/m ³ (Long-term - systemic effects)

- **PNECs**

57-13-6 urea

PNEC 0.047 mg/l (fresh water)

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **8.2 Exposure controls**

- **Personal protective equipment**

- **General protective and hygienic measures**

- Do not eat, drink or smoke while working.
- The usual precautionary measures should be adhered to in handling the chemicals.
- Keep away from food, beverages and fodder.
- Wash hands during breaks and at the end of the work.
- Avoid close or long term contact with the skin.

- **Breathing equipment:**

- Not necessary if room is well-ventilated.
- Use breathing protection in case of insufficient ventilation.

- **Recommended filter device for short term use:** Filter B

- **Protection of hands:** Protective gloves.

- **Material of gloves**

- Butyl rubber, BR
- Natural rubber, NR
- Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Not suitable are gloves made of the following materials:** Leathergloves

- **Eye protection:** Safety glasses

(Contd. on page 4)

Technical/Safety data sheet
 according to 1907/2006/EC, Article 31

Printing date 12.12.2018

Version number 103

Revision: 12.12.2018

Trade name **AD-BLUE-010**

(Contd. of page 3)

- **Body protection:** Protective workclothing.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Fluid

Colour: Colourless

- **Smell:** Weak, characteristic

- **Odour threshold:** Not determined

- **pH-value (100 g/l) at 20 °C:** < 10

- **Change in condition**

Melting point/Melting range: ~ - 11.5 °C

Boiling point/Boiling range: 106 - 110 °C

- **Flash point:** Product is non-flammable nor potentially explosive

- **Inflammability (solid, gaseous)** Product is not inflammable.

- **Ignition temperature:**

Decomposition temperature: Not determined

- **Self-inflammability:** Product is not selfigniting.

- **Danger of explosion:** Product is not potentially explosive

- **Vapour pressure at 20 °C:** 23 hPa

- **Density at 20 °C** 1.09 g/cm³

- **Relative density** Not determined

- **Vapour density** Not determined

- **Evaporation rate** Not determined

- **Solubility in / Miscibility with**

Water: Fully miscible

- **Partition coefficient (n-octanol/water):** -2.59 log POW (urea)

- **Viscosity:**

dynamic at 20 °C: ~ 1 mPas

kinematic: Not determined

- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.

- **10.2 Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.

- **10.3 Possibility of hazardous reactions** Formation of ammonia.

- **10.4 Conditions to avoid** No further relevant information available.

- **10.5 Incompatible materials:**

Strong bases

Strong oxidizing agents (permanganates, chromates, nitrates, nitrites, chlorine, hypochlorites)

(Contd. on page 5)

Technical/Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 12.12.2018

Version number 103

Revision: 12.12.2018

Trade name **AD-BLUE-010**

(Contd. of page 4)

- **10.6 Hazardous decomposition products:**
Ammonia
Nitrogen oxides (NO_x)
(possible HCN)

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **LD/LC50 values that are relevant for classification:**

Oral LD50	8471 mg/kg (rat)
-----------	------------------
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Slight irritant
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.
- **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.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**

LC 50	> 10000 mg/l (<i>Leuciscus idus</i>)
LC 0 / 48 h	> 6800 mg/l (<i>Leuciscus idus</i>)
- **12.2 Persistence and degradability** biodegradable
- **12.3 Bioaccumulative potential**
Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.
Water soluble. Adsorption to soil is low.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Respiratory inhibition of communal activated sludge EC 20 (mg/l according to ISO 8192 B):**

EC 10	> 120000 mg/l (Bacteria)
-------	--------------------------
- **Additional ecological information:**
- **General notes:**
Do not allow to enter drainage system, surface or ground water
Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

GB

(Contd. on page 6)

Technical/Safety data sheet
 according to 1907/2006/EC, Article 31

Printing date 12.12.2018

Version number 103

Revision: 12.12.2018

Trade name AD-BLUE-010

(Contd. of page 5)

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Must be specially treated under adherence to official regulations.
- **Waste disposal key number:**
 Since 01/01/99 the waste code numbers have not only been product-related but are also essentially application-related. The valid waste code number of the application can be obtained from the European waste catalogue.
- **Uncleaned packagings:** Disposal must be made according to official regulations.
- **Recommendation:** Containers may be completely emptied and cleaned and send to be reconditioned or recycled.
- **Recommended cleaning agent:** Water, if necessary with cleaningagent.

SECTION 14: Transport information

- 14.1 UN-Number - ADR, IMDG, IATA	Void
- 14.2 UN proper shipping name - ADR, IMDG, IATA	Void
- 14.3 Transport hazard class(es) - ADR, IMDG, IATA - Class	Void
- 14.4 Packing group - ADR, IMDG, IATA	Void
- 14.6 Special precautions for user	Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
- Transport/Additional information:	Not dangerous according to the above specifications.
- UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:** see item 1: Informing department
- **Abbreviations and acronyms:**
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 ICAO: International Civil Aviation Organisation

(Contd. on page 7)

Technical/Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 12.12.2018

Version number 103

Revision: 12.12.2018

Trade name AD-BLUE-010

(Contd. of page 6)

LEV: Local Exhaust Ventilation

RPE: Respiratory Protective Equipment

RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)

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

CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)

ISO: International Organisation for Standardisation

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative

- * **Data compared to the previous version altered.**