

SAFETY DATA SHEET

PEMCO AdBlue

Prepared according to Commission Regulation (EC) No. 1907/2006(REACH)

Update according to Commission Regulation (EU) No. 2015/830



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

1.1 Product identifier: Pemco AdBlue

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

1.3 Details of the supplier of the safety data sheet: UAB "SCT Lubricants"

Address: Šilutės pl. 119, 5800 Klaipėda, Lithuania

Telephone: +370 46 340345

E-mail: klaipeda@sct.lt

Fax: (37046) 341891

1.4 Emergency telephone number: Address: Šiltnamiu 29, LT-2043 Vilnius, telephone 8-5236 20 52 or +370 687 53378 (All day)

2. SECTION HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008

This product is not meet the classification requirements of the current European legislation.

2.2 Label elements

Labeling according to Regulation No. 1272/2008: Keep out of reach of children (P102).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P305+P351+P338).

IF ON SKIN: Wash with plenty of soap and water.(P302+P352).

2.3 Other hazards

According to Annex XIII of Regulation (EC) No 1907/2006, no PBT and vPvB assessment has been conducted.

3. SECTION COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

NH₂-CO-NH₂

3.2 Mixtures

Hazardous ingredients:

EB Nr.	CAS Nr.	Reg. number	Name	Content %	Classification according to Regulation (EC) 1272/2008 (CLP)
200-315-5	57-13-6	01-2119463277-33-xxxx	Urea	<33,2	-

It contains the following components that are not classified as dangerous according to Regulation (EC) 1272/2008: polymethacrylate, polyisobutene (viscosity modifier), the base oil (DMSO extract <3%, IP 346) and by viscosity the substance does not hazard by aspiration.

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

4. SECTION FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: None.

Skin contact: After contact with urea solution, wash hands.

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Eye contact: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion: Rinse mouth, drink water, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Noneknown.

4.3 Indication of any immediate medical attention and special treatment needed

Note to physician: treat symptomatically

5. SECTION FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable: Non-:flammable Not suitable: None.

5.2 Special hazard arising from the substance or mixture

None

5.3 Advice for firefighters

Upon drying of a solution, when temperature exceeds 220 °C, urea decomposes forming substances :flammable with difficulty.

Personal protecti-ve equipment: insulating gas masks.

6. SECTION ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal protective equipment must be worn. Ventilate area if spilled in a confined space or other poorly ventilated area.

6.2 Environmental precautions

Prevent entry into sewers and waterways.

6.3 Methods and material for containment and cleaning up

Stop leak if possible without risk

Remove sources of ignition

Absorb in vermiculite, dry sand or earth and place into containers.

Collect spillage in containers, seal securely and deliver for disposal according to lical regulations

6.4 Reference to other section

See sections 8 and 13 for additional information.

7. SECTION HANDLING AND STORAGE

7.1 Precautions for safe handling

Usage requirements and recommendations: use as per instru.ctions for motor vehicles.

Technical measures/ Precautions: Store in a closed, dry room with good ventilation at temperature not below -11 °C and not above +30 °C. Instructions on the limit quantity of the substance/preparation to be stored under the conditions specified: no.

7.2 Conditions for safe storage, including any incompatibilities

Incompatible products: Due to very strict requirements applied for product cleanliness, contact with other substances shall not be allowed

Requirements to packages: Requirements for the package of the substance/preparation: packages (containers) manufactured of high-pressure polyethylene or polypropylene and high alloyed austenitic - Ni,

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Cr-Ni-Mo steels.

7.3 Specific end use(s)

NOx reducing agent -is injected to the exhaust systems of diesel engines before a selective catalytic converter.

8. SECTION EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Regulated occupational exposure limit values: None.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

8.2.2 Respiratory protection: Respirators. Dispose of rinse water in accordance with local and national regulations.

Eye protection: Wear protection glasses.

Hand protection: Protective gloves.

Skin and body protection: Work footwear and clothing.

Hygiene measures: Have a wash and change clothing.

8.2.3 Environmental exposure controls

No information available at present.

9. SECTION PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour	colourless
Odour	with mild odour of ammonia;
Odour threshold	Not determined
pH-value	(8-10) 10 % solution, mass fraction
Melting point/freezing point	-11 °C
Initial boiling point and boiling range	Not determined
Flash point, open cup (ASTM D-92)	~106 °C
Evaporation rate	Not determined
Flammability (solid, gas)	Non flammable (based on molecular structure)
Lower explosive limit	Not determined
Upper explosive limit	Not determined
Vapour pressure:	23 mbar at 20 °c
Vapour density (air = 1):	Not determined
Density:	1087 -1093 kg/m ³ at 20 °C
Bulk density:	Not determined
Solubility(ies):	Very soluble
Water solubility:	Not determined
Partition coefficient (n-octanol/water)	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	1,4 mPas at 25 °C;
Viscosity (at 25°C)	Not determined
Explosive properties:	When using product is not explosive. development of explosive vapour/air mixture

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Oxidising properties: possible
Not determined

9.2 Other information

Miscibility	Not determined
Fat solubility / solvent	Not determined
Conductivity	Not determined
Surface tension	Not determined
Solvents content	Not determined

10. SECTION STABILITY AND REACTIVITY

10.1 Reactivity

See also Subsection 10.2 to 10.6. The product has not been tested.

10.2 Chemical stability

Stable under regular conditions (see section 7, bandling and storage). Need for and the presence of stabilizers: not required.

10.3 Possibility of hazardous reactions

Will not occur.

10.4 Conditions to avoid

Environment temperature lower than crystallisation temperature and higher than 30 °C (urea hydrolysis takes place). Entrance of any materials will pollute the substance and it will be impossible to use the substance for intended purpose.

10.5 Incompatible materials

Entrance of any materials will pollute the substance and it will be impossible to use the substance for intended purpose.

10.6 Hazardous decomposition products

When heated dangerous gases might appear: HCN, NO_x, NH₃

11. SECTION TOXICOLOGICAL INFORMATION

Mixture:

Acute Toxicity

Acute oral toxicity: LD50:8471 mg/kg bw (for urea).

Acute dermal toxicity: LD50:8200 mg/kg bw (for urea). Acute inhalation toxicity: not relevant.

11.1.2. Skin irritation or/and sensitization: Not irritating. Not sensitizing effect known.

11.1.4. Mutagenicity: Ames-test: negative

11.1.5. Carcinogenicity: Ames-test: negative

11.1.6. Reproductive toxicity: Ames-test: negative

11.1.7 Speci.6.c toxicity for particular organ (ST01) (one time effect): None.

11.1.8 Speci.6.c toxicity for particular organ (ST01) (repeated effect): None.

12. SECTION ECOLOGICAL INFORMATION

12.1 Toxicity

In bodies of drinking water, maximum allowable concentration of urea shall not exceed the amount of organic matter established by calculations against the amounts of biochemical allowable concentration (BPC) and dissolved oxygen. In water bodies of fishing farms, maximum allowable concentration of urea is 80mg/dm³.

Leuciscus idus (orfe): 96-h LC50 > 6810 mg/l

Daphnia magna (short-term): 24-h EC50: > 10000 mg/l
Daphnia magna (long-term): No data.

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12.2 Persistence and degradability

Biodegradation: The compound is well degradable. 4 mg/l in 1 hat 20 °C / 68 °F Zahn-Wellens-Test / 400 mg/l: 3h: 2 %, 7d: 52 %, 14d: 85 %, 16 d: 96 %.

In soil and water, urea decomposes to ammonia and carbon dioxide and degrades easily. Hydrolysis: No hydrolysable group is present.

12.3 Bioaccumulative potential

Octanol-water partition coefficient (K_{ow}): Considered to be low (based on high water solubility). Urea does not have any bioaccumulative properties, does not form any toxic compound with other substances present in the air or drainage waters.

Bioconcentration factor (BCF): Low potential for bioaccumulation (based on substance properties).

12.4 Mobility in soil

Adsorption coefficient: Low potential for adsorption (based on substance properties).

12.5 Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No 1907/2006, no PBT and vPvB assessment has been conducted.

13. SECTION DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

For the substance/ mixture/residual amounts

urea solution waste at the customer place shall be collected and after dilution used as fertilisers.

For contaminated packing material

Pay attention to local and national official regulations Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

15 01 04 metallic packaging

14. SECTION TRANSPORT INFORMATION (RID/ADR)

14.1 UN number

ADR/RID Not regulated

ICAO Not regulated

IMDG Not regulated

14.2 Proper Shipping Name

Aqueous urea solution AUS 32

14.3 Hazard Class

ADR/RID not regulated

ICAO not regulated

IMDG not regulated

14.4 Packing Group

ADR/RID not regulated

ICAO not regulated

IMDG not regulated

14.5 Environmental hazard

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ADR/RID not regulated

ICAO not regulated

IMDG not regulated

14.6 Special precautions for user

Review classification requirements before shipping materials at elevated temperatures.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not determined

15. SECTION REGULATORY INFORMATION

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

- Regulation (EC) 1907/2006 (REACH);
- Regulation (EC) No 1272/2008 of the European parliament and of the council 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;
- Commission regulation (EU) No 453/2010, amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);
- in compliance with HN23 Maximum Allowable Concentrations of Hazardous Chemical Substances and Preparations in Working Environment. General Requirements;
- in compliance with HN36 Banned and Restricted Substances;
- As per applicable "Regulations on Personnel Protection Against Chemical Factors at Work" and "Regulations on Personnel Protection Against Carcinogenic Effects at Work";
- As per applicable "General Storage Rules of Hazardous Substances/Preparations";
- As per applicable "Law on Waste Handling of the Republic of Lithuania";
- As per applicable "Law on Package and Package Waste Handling of the Republic of Lithuania";
- As per applicable "Waste Handling Rules";
- As per applicable "Regulations for Labelling and Price Indication of the Items (Goods) Sold of the Republic of Lithuania";
- Directive 67/548/EEC (amended for the seventh time by Directive 92/32/EEC)- requirement to convey information on dangerous substances/preparations in the form of material safety data sheets;
- Directive 1999/45/EC- requirement to convey information on dangerous substances/preparations in the form of material safety data sheet.

Additional information provided on the label of the chemical preparation package:

Visual signs No. 4 „Protect from sun" and No. 17 „Temperature limitation" (-5°C + 25°C) in compliance with LST EN ISO 780.

15.2 Chemical safety assessment

As in accordance with Regulation No. 1272/2008 aqueous urea solution are not classified as hazardous consequently in accordance with REACH Article 14 no Chemical Safety Assessment has been carried out for this mixture.

16. SECTION OTHER INFORMATION

Additional data that may be important to consumers' safety and health, as well as environment protection.

Used abbreviations :

Keep out of reach of children (P102).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P305+P351+P338).

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IF ON SKIN: Wash with plenty of soap and water. (P302+P352). ADR -European Agreement on Dangerous Goods by Road; IATA- futernational Air Transport Organization;
IMO -International Marine Organization;
RID -Regulations Concerning the International Carriage of Dangerous Goods by Rail;
SMGS - International Agreement on Carriage of Loads by Rail.

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