Safety Data Sheet - AutoBlue DEF (COSHH)

ISO 22241 25th February 2010

1. Identification of Company and Product

1.1 Identification of Company

AutoBlue Tel: 0800 6 125 325

Unit 6

Ballymena Business Centre

62 Fenaghy Road

Galgorm Ballymena BT42 1FL

1.2 Identification of Product

Trade Name Autoblue

Commonly used Synonyms Adblue, DEF, Nox reducing agent

Chemical Name Carbonly Diamide

Application Reducing agent for reduction of

Nox gases in SCR after-treatment

CAS Number 57-13-6 EINECS Number 200-315-5

EINECS Name Preparation, name not relevant

Molecular Formula NH2-CO-NH2 Molar Mass 60.06 Kg/mol

1.3 Emergency Calls

AutoBlue 0044 (0) 800 6 125 325

2. Composition and Information for Ingredients

2.1 Ingredients and Concentration

Aqueous Urea Solution of 32.5% by weight urea

2.2 Classification

Not classed as a hazardous material according to EC Directive 67/548/EC

3. Hazards Identification

This product is not hazardous

4. First Aid Measures

4.1 Product

Contact with Skin

Wash the affected area thoroughly with clean water and soap.

Contact with Eyes

Rinse with plenty of clean water for a minimum of 15 minutes, if irritation of eyes persists obtain medical attention.

Ingestion

Do not induce vomiting
Give patient water to drink
Obtain medical attention if more than 30ml swallowed.

Inhalation

Remove patient from contaminated area to an area with a source of fresh air.

5. Fire Fighting Measures

This product is not flammable however if exposed to a constant source of heat > 35c this product can release ammonia gas.

5.1 If Autoblue is involved in a Fire

Wear an approved EU regulatory type breathing mask when fighting any fire.

In an enclosed area use self contained breathing apparatus Prevent water containing product from entering into drains or watercourse

6. Accidental Release Measures

6.1 Environmental Precautions

Avoid spillage into drains and watercourses. Should Autoblue enter drains or watercourse please inform the appropriate authority to reduce risk of contamination of watercourses.

6.2 Cleanup of Autoblue

Spillage of product should be cleaned up as soon as possible using dry sand, swept up, placed in an open container and labelled for disposal.

Dispose of cleanup by an authorised waste facility/authority

7. Handling and Storage

7.1 Handling

Autoblue should be handled in the same manner as any other bulk, water based solution.

7.2a Storage

Store away from sources of heat and direct sunlight. If stored in a building the building should be dry and well ventilated

To prevent crystallisation and hydrolysis of Autoblue the recommended storage temparature is between 20c and 25c. If storing at a constant environmental temperature of -10c the

product storage tank and all connecting pipes fittings and fixtures must be heated to 25c

7.2b Materials recommended for Storage

Materials recommended for storage of Autoblue are

High Density Polyethylene HDPE Low Density Polyethylene LDPE 304 Stainless Steel 316 Stainless Steel

Materials not recommended for Storage
Iron and metals containing copper and/or zinc alloys

8. Exposure Control and Personal Protection

Waterproof gloves should be worn when handling Autoblue Use of safety goggles is advised During handling of the product do not smoke, eat or drink. Clean hands after handling product

9. Physical and Chemical Properties

Appearance Colourless liquid, free from crystals at

20c

Odour Possible, slight odour of Ammonia

Water Soln pH (10%) 8-10

Explosive Properties Not Explosive

Oxidising Properties None Miscible in Water Yes

Density 1090g/1000ml @ 20c Vapour Pressure approx 48 mm Hg (at 40c)

10. Stability and Reactivity

10.1 Stability

Product is stable under normal conditions of storage, handling and

carriage

10.2 Conditions to Avoid

Temperatures below -10c

Temperatures above 35c

Prolonged storage below -10c or above 30c

At temperatures above 40c hydrolysis of solution can result in formation of ammonia and carbon dioxide gas, product will reduce in concentration, reducing overall effectiveness of solution

10.3 Other materials to avoid

Strong acids, alkalis, oxidisers, nitrates and nitrite.

Contamination with calcium hypochlorite and/or sodium-hypochlorite can produce explosive nitrogen tri-chloride.

- 11. Toxicological Information
- 11.1 General see section 3
- 11.2 Toxicity Data

LD50 (oral,rat) . 15.000mg/kg

Skin Irritation (Rabbit)

No Irritation

Eye Irritation (Rabbit)

No Irritation

- 12. Ecological Information
- 12.1 Mobility

Miscible in water

12.2 Persistence/Degradibility

Substantially degradable in soil and water

12.3 Bio-accumulation

Low potential

12.4 Ecotoxicity

Product has a low aquatic toxicity but will exert a high oxygen demand when spilled in significant quantities into a watercourse, posing a potential danger to oxygen dependent aquatic life.

Acute fish toxicity LC50 for urea > 10000mg/l 48hrs (gold fish)

- 13. Disposal Considerations
- 13.1 General section 6.2
- 14. Transportation Information

14.1 UN Classification

Not classed as product is considered non-hazardous according to UN Orange book and international transport codes RID, ADR, ADNR and IMDG

15. Regulatory Information

Not classified as hazardous according to EC directive 67/548/EC

16. Other Information

All information in this safety data sheet has been compiled in good faith and accuracy thereof is based on company knowledge of chemical composition, properties and preparation at time of publication.

Autoblue does not accept any legal responsibility for the consequences of the use or misuse of either safety data sheet or product under any circumstances