SAFETY DATA SHEET
AdBlue

Section 1. Identification

GHS product identifier  AdBlue
Product code  0000003947
SDS no.  0000003947

Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture  Reactant for reducing NOx-emissions.
Manufacturer  BP Australia Pty Ltd
Supplier  Level 17, 717 Bourke Street
Docklands, Victoria 3008
ABN 53 004 085 616
www.bp.com.au
EMERGENCY TELEPHONE NUMBER  1300 139 700
1800 638 556

Section 2. Hazard(s) identification

Classification of the substance or mixture  Not classified.

GHS label elements
Signal word  No signal word.
Hazard statements  No known significant effects or critical hazards.

Precautionary statements
Prevention  Not applicable.
Response  Not applicable.
Storage  Not applicable.
Disposal  Not applicable.
Supplemental label elements  Not applicable.

Other hazards which do not result in classification  None known.

Section 3. Composition and ingredient information

Substance/mixture  Mixture
Water and Urea (32.5%)

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

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Version  1
Date of issue  20/01/2016
Format  (Australia)
Language  (ENGLISH)
Section 4. First-aid measures

**Description of necessary first aid measures**

**Eye contact**
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if symptoms occur.

**Inhalation**
If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. Get medical attention if symptoms occur.

**Skin contact**
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

**Ingestion**
Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute and delayed**
See Section 11 for more detailed information on health effects and symptoms.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician**
In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Treatment should in general be symptomatic and directed to relieving any effects.

**Specific treatments**
No specific treatment.

**Protection of first-aiders**
No action shall be taken involving any personal risk or without suitable training.

Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media**
In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.

**Unsuitable extinguishing media**
Do not use water jet.

**Specific hazards arising from the chemical**
In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products**
Combustion products may include the following:
carbon dioxide
carbon monoxide
nitrogen oxides

**Special protective actions for fire-fighters**
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**
Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

**For emergency responders**
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Section 6. Accidental release measures

Environmental precautions
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Small spill
Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill
Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures
Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Not suitable
Prolonged exposure to elevated temperature.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits
None.

Appropriate engineering controls
All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 8. Exposure controls and personal protection

Individual protection measures

Hygiene measures
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection
Safety glasses with side shields.

Skin protection

Hand protection
Wear suitable gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Recommended: Wear protective gloves if prolonged or repeated contact is likely.

Skin protection
Use of protective clothing is good industrial practice. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spills or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection
Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Refer to standards:
Respiratory protection: AS/NZS 1715 and AS/NZS 1716
Gloves: AS/NZS 2161.1
Eye protection: AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

Appearance

Physical state
Liquid.

Colour
Clear. Colourless.

Odour
Ammoniacal. [Slight]

Odour threshold
Not available.

pH
9.8 to 10 [Conc. (% w/w): 10%]

Melting point
Not available.

Boiling point
Decomposition temperature: 100°C (212°F)

Flashing point
Not available.

Evaporation rate
Not available.

Flammability (solid, gas)
Not applicable. Based on - Physical state

Lower and upper explosive (flammable) limits
Not available.

Vapour pressure
6.4 kPa (48 mm Hg) [40°C (104°F)]

Vapour density
Not available.
Section 9. Physical and chemical properties

Relative density: 1090 kg/m³ (1.09 g/cm³) at 20°C
Solubility: Soluble in water.
Partition coefficient: n-octanol/water: <1
Auto-ignition temperature: Not available.
Decomposition temperature: 100°C (212°F)
Viscosity: Not available.

Section 10. Stability and reactivity

Reactivity: No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability: The product is stable.
Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid: Avoid contamination by any source including metals, dust and organic materials.
Incompatible materials: No specific data.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Information on the likely routes of exposure

Potential acute health effects

Eye contact: Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.
Inhalation: At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility. May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.
Skin contact: Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis.
Ingestion: Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: No specific data.
Inhalation: No specific data.
Skin contact: No specific data.
Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Eye contact: Potential risk of transient stinging or redness if accidental eye contact occurs.
Inhalation: Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
Skin contact: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Ingestion: Ingestion of large quantities may cause nausea and diarrhoea.
General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Section 11. Toxicological information

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Section 12. Ecological information

Persistence and degradability
Expected to be biodegradable.

Bioaccumulative potential
This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil
- Soil/water partition coefficient (K_{OC}) Not available.
- Mobility Soluble in water.

Other adverse effects
No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods
The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Special Precautions for Landfill or Incineration
No additional special precautions identified.

Section 14. Transport information

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Special precautions for use  Not available.

Section 15. Regulatory information

**Standard Uniform Schedule of Medicine and Poisons**
Not regulated.

**Model Work Health and Safety Regulations - Scheduled Substances**
No listed substance

**International lists**

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**REACH Status**
For the REACH status of this product please consult your company contact, as identified in Section 1.

Section 16. Any other relevant information

**History**

| Date of printing | 20/01/2016 |
| Date of issue | 20/01/2016 |
| Date of previous issue | No previous validation |
| Version | 1 |

**Product Stewardship**

**Key to abbreviations**

ADG = Australian Dangerous Goods  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
NOHSC = National Occupational Health and Safety Commission  
STEL = Short term exposure limit  
SUSMP = Standard Uniform Schedule of Medicine and Poisons  
UN = United Nations  
TWA = Time weighted average

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**Section 16. Any other relevant information**

VOC = Volatile Organic Compound  
SADT = Self-Accelerating Decomposition Temperature  
Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64741-97-5, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0, 90669-74-2

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**Procedure used to derive the classification**

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*Indicates information that has changed from previously issued version.*

**Notice to reader**

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied, is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user’s obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.