ADBLUE®



Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law



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VERSION: 2.2

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

1.1. Product identifier

Product form : Mixture
Trade name : AdBlue®

Product code : Ford Internal Ref.: 196734

SDS Number : 6419
Product use : Public use

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

1.2.1. Relevant identified uses

Function or use category : Fuel additives

1.2.2. Uses advised against

Restrictions on use : None known

1.3. Details of the supplier of the safety data sheet

Supplier Distributor

Ford-Werke GmbH Ford Motor Company Ltd.
Edsel-Ford-Str. 2-14 Parts Distribution Centre
50769 Cologne Royal Oak Way South
Germany NN11 8NT Daventry, Northants

+49 221 90-33333 United Kingdom sdseu@ford.com +44 1327 305 198

1.4. Emergency telephone number

+49 (0) 6132-84463 (GBK GmbH - 24/7)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

2.2. Label elements

This mixture does not meet the criteria for labelling according to Regulation (EC) 1272/2008 as amended.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel

unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory

symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Wash skin with soap and water. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes

minimum). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after ingestion : May cause discomfort if swallowed. Not expected to present a significant ingestion hazard under

anticipated conditions of normal use.

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

Provide general supportive measures and treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No unusual fire or explosion hazards noted.

Hazardous decomposition products in case of fire : During fire, gases hazardous to health may be formed. Hydrogen cyanide. ammonia. Nitrogen

oxides. Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Precautionary measures fire : In case of fire: evacuate area. Use standard firefighting procedures and consider the hazards of

other involved materials.

Firefighting instructions : Move containers from fire area if it can be done without personal risk. Fight fire remotely due to the

risk of explosion.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

Other information : Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Keep unnecessary personnel away.

6.1.1. For non-emergency personnel

Protective equipment and clothing during clean-up. For personal protection, see

section 8 of the SDS.

Emergency procedures : Keep unnecessary personnel away. Ventilate spillage area. Avoid contact with skin and eyes. Do

not touch or walk on the spilled product.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to

section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Prevent product from entering drains. Dispose of waste in accordance with environmental

legislation.

Methods for cleaning up : Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to

remove residual contamination. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas. Absorb in vermiculite, dry sand or earth and place into containers. Following product

recovery, flush area with water.

Other information : Never return spills in original containers for re-use. Environmental manager must be informed of all

major releases.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13: "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Avoid contact with skin and eyes.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Always observe good personal hygiene measures, such as washing after handling the material and

before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to

remove contaminants.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep cool. Store in a dry place. Store in a closed container. Protect from sunlight.

Incompatible products : Oxidizing agent.

Incompatible materials : Store away from incompatible materials (see Section 10 of the SDS).

Storage temperature : -10 – 25 °C

7.3. Specific end use(s)

Fuel additives.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Safety glasses. EN 166. Wear security glasses which protect from splashes

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing. Long sleeved protective clothing

Hand protection:

Protective gloves. ISO 374-1. The recommendation is only valid for the supplied product and the stated application. Special working conditions, like heat or mechanical strain, which deviate from the test conditions, can reduce the protective effect provided by the recommended glove

Material	Permeation	Thickness (mm)	Comments
Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.
In case of splash contact: Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.

Other skin protection

Materials for protective clothing:

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions.

8.2.2.4. Thermal hazards

Thermal hazard protection:

Wear appropriate thermal protective clothing, when necessary.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Liquid.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: ≈-11.5 °C
Freezing point	: Not available
Boiling point	: 106 – 110 °C
Flammability	: Not applicable
Explosive properties	: Not explosive.
Oxidising properties	: Non oxidizing.
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: Not applicable
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: < 10 @ 20°C
Viscosity, kinematic	: ≈ 0.917 mm ² /s
Viscosity, dynamic	: ≈ 1 mPa·s @ 20°C
Solubility	: completely miscible.
Log Kow	: Not available
Log Pow	: -2.59 Urea
Vapour pressure	: 23 hPa @ 20°C
Vapour pressure at 50°C	: Not available
Density	: ≈ 1.09 g/cm³ @ 20 °C
Relative density	: Not available

: Not available Relative vapour density at 20°C Particle size : Not applicable Not applicable Particle size distribution Particle shape Not applicable Not applicable Particle aspect ratio Not applicable Particle aggregation state Not applicable Particle agglomeration state Not applicable Particle specific surface area Particle dustiness Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Contact with incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases.

10.6. Hazardous decomposition products

Ammonia. Nitrogen oxides. Hydrogen cyanide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Based on available data, the classification criteria are not met Acute toxicity (dermal) : Based on available data, the classification criteria are not met Acute toxicity (inhalation) : Based on available data, the classification criteria are not met Skin corrosion/irritation : Based on available data, the classification criteria are not met

pH: < 10 @ 20°C

Serious eye damage/irritation : Based on available data, the classification criteria are not met

pH: < 10 @ 20°C

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
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

AdBlue®		
Viscosity, kinematic	≈ 0.917 mm²/s	

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

11.2.2. Other information

Potential adverse human health effects and symptoms : Information on Effects: refer to section 4

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Hazardous to the aquatic environment, short-term

(acute)

: Based on available data, the classification criteria are not met

Hazardous to the aquatic environment, long-term

(chronic)

: Based on available data, the classification criteria are not met

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

AdBlue®

Log Pow -2.59 Urea

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

AdBlue®

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects : No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this product

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Avoid discharge into drains, water courses or onto the ground.

Product/Packaging disposal recommendations : Empty containers should be taken to an approved waste handling site for recycling or disposal.

European List of Waste (LoW, EC 2000/532) : The Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

06 10 99 - wastes not otherwise specified

15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID Not regulated for transport

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

VOC content : Not applicable

Other information, restriction and prohibition regulations: For details, refer to section 3 and 8. Directive 92/85/EEC on the safety and health of pregnant

workers and workers who have recently given birth or are breastfeeding as amended. Directive 94/33/EC on the protection of young people at work, as amended. Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as

amended.

Directive 2012/18/EU (SEVESO III)

Seveso Additional information : Not applicable

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes: SECTION 1 : Markets.

Abbreviations and acronyms

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE Acute Toxicity Estimate BCF Bioconcentration factor

CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL Derived Minimal Effect level

DNEL Derived-No Effect Level

EC50 Median effective concentration

 IARC
 International Agency for Research on Cancer

 IATA
 International Air Transport Association

 IMDG
 International Maritime Dangerous Goods

LC50 Median lethal concentration LD50 Median lethal dose

LOAEL Lowest Observed Adverse Effect Level

NOAEC No-Observed Adverse Effect Concentration

NOAEL No-Observed Adverse Effect Level NOEC No-Observed Effect Concentration

OECD Organisation for Economic Co-operation and Development

PBT Persistent Bioaccumulative Toxic
PNEC Predicted No-Effect Concentration

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS Safety Data Sheet
STP Sewage treatment plant
TLM Median Tolerance Limit

vPvB Very Persistent and Very Bioaccumulative

SDS Safety Data Sheet

OEL Occupational Exposure Limit
RRN REACH Registration no.
CAO Cargo Aircraft Only

TWA Time Weighted Average. The average concentration of a chemical in air over the total exposure time-usually an 8-hour

workday.

WES Workplace Exposure Standard – The airborne concentration of a biological or chemical agent to which a worker may be

exposed

VOC Volatile organic compounds STEL Short-term Exposure Limit Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 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.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.



Attachment to the Safety Data Sheet

Product Name: AdBlue®

Ford Int. Ref. No.: 196734 Revision Date: 20.02.2024

Involved Products:

Finiscode Part number Container Size:
1 2 513 124 HAMJ M99C130 AB 5 I

. 2 2 513 454 HAMJ M99C130 BB 10 I 3 2 513 456 HAMJ M99C130 CB 210 I