



SAFETY DATA SHEET

according to regulation (EU) No 2015/830

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

1.1. Product identifier

Trade name or designation of the mixture AdBlue®
Registration number -
Synonyms None.
SDS number 6419
Product code Ford Internal Ref.: 196734
Issue date 09-March-2016
Version number 1.0
Revision date 09-March-2016
Product use Public use

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

Identified uses Fuel additives
Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company name Ford Motor Company Ltd.
Address Parts Distribution Centre
Royal Oak Way South
NN11 8NT Daventry, Northants
United Kingdom
Telephone number +44 1327 305 198
Address Ford-Werke GmbH
Edsel-Ford-Str. 2-14
50769 Köln
Germany
Telephone number +49 221 90-33333
E-mail sdseu@ford.com
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

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

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

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms None.
Signal word None.
Hazard statements None.

Precautionary statements

Prevention None.
Response None.
Storage None.
Disposal None.

Supplemental label information Not applicable.

2.3. Other hazards The mixture contains no substance that fulfils the criteria of a PBT- or vPvB substance.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

The components are not hazardous or are below required disclosure limits.

SECTION 4: First aid measures

General information Get medical attention if any discomfort continues.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.

Ingestion If ingestion of a large amount does occur, call a poison control centre immediately.

4.2. Most important symptoms and effects, both acute and delayed Irritating and/or toxic fumes and gases may be emitted upon the products decomposition. Symptoms may be delayed.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture Fire may produce irritating, corrosive and/or toxic gases. Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x). Ammonia.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures In case of fire: Stop leak if safe to do so. Evacuate the area promptly. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Specific methods No unusual fire or explosion hazards noted.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel For personal protection, see section 8.

For emergency responders Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Dispose in accordance with all applicable regulations.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling 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 Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s) Fuel additives

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Follow standard monitoring procedures.
Derived no-effect level (DNEL)	Not available.
Predicted no effect concentrations (PNECs)	Not available.

8.2. Exposure 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.
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Individual protection measures, such as personal protective equipment

General information	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
- Hand protection	<p>Nitrile rubber</p> <p>Glove thickness 0.4 mm. Break through time \geq 480 min</p> <p>Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.</p> <p>Hand protection in case of splash contact:</p> <p>Nitrile rubber</p> <p>Glove thickness 0.4 mm. Break through time \geq 480 min</p> <p>Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.</p> <p>The protective gloves to be used must comply with the specification of EU directive 89/686/EC and the resultant standard EN374. The above given information is based on laboratory test in line with EN374. 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.</p>
- Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
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.
Environmental exposure controls	Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Colour	Colourless.
Odour	Slight. Ammoniacal.
Odour threshold	Not available.
pH	< 10
Melting point/freezing point	-10.5 °C (13.1 °F)

Initial boiling point and boiling range	100 °C (212 °F)
Flash point	not applicable
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	> 100 g/l soluble
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.
9.2. Other information	
Density	1.90 g/cm ³
VOC (EU)	not applicable
VOC (CH)	< 3 %

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Temperatures exceeding the decomposition temperature.
10.5. Incompatible materials	Calcium hypochlorite. Sodium hypochlorite. Acids. Alkalies. nitrite. Nitrates.
10.6. Hazardous decomposition products	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

SECTION 11: Toxicological information

General information	Not available.
Information on likely routes of exposure	
Inhalation	Irritating and/or toxic fumes and gases may be emitted upon the products decomposition.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms	Not available.
11.1. Information on toxicological effects	
Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
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.

Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Mixture versus substance information	No information available.
Other information	This product has no known adverse effect on human health.

SECTION 12: Ecological information

12.1. Toxicity	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.
12.2. Persistence and degradability	Is regarded as inherently biodegradable.
12.3. Bioaccumulative potential	The product is not bioaccumulating.
Partition coefficient n-octanol /water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	The mixture contains no substance that fulfils the criteria of a PBT- or vPvB substance.
12.6. 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

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. 06 10 99 15 01 06
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

SECTION 15: Regulatory information

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

EU regulations

Restrictions on use

Other regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 2015/830.

VOC (EU):

not applicable

Directive 2012/18/EU on major accident hazards involving dangerous substances

Not applicable

National regulations

Follow national regulation for work with chemical agents.

SECTION 16: Other information

List of abbreviations

AC: Article category.
acc., acc.to: according, according to.
ACGIH: American Conference of Governmental Industrial Hygienists.
AFNOR: French Institute for Standards (Association Française de Normalisation).
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures).
ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des marchandises dangereuses par route).
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
AICS: Australian Inventory of Chemical Substances.
ANSI: American National Standards Institute.
AOEL: Acceptable Operator Exposure Level.
AOX: adsorbable organic halogen compounds.
approx.: approximately.
ASTM: ASTM International.
ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).
BAM: Federal Institute for Materials Research and Testing, Germany (Bundesanstalt für Materialforschung und -prüfung).
Maximum permissible concentration of biological working substances (BAT: Biologische Arbeitsstofftoleranzwerte).
BAuA: Federal Institute for Occupational Health and Safety, Germany (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin).
BCF: Bio-concentration factor.
BET: Brunauer-Emmett-Teller.
BLV: Biological Limit Value.
BLV: Biological Limit Value (BGW: Biologischer Grenzwert, Austria).
BMGV: Biological Monitoring Guidance Value (EH40,UK).
BSI: British Standards Institution.
BS: British Standard.
BOD5: Biochemical oxygen demand within 5 days.
BOD: Biochemical oxygen demand.
bw: Body weight.
calcd.: calculated.
CAS: Chemical Abstract Service.
CEN: European Committee for Standardization (Comité Européen de Normalisation).
CESIO: European Committee on Organic Surfactants and their Intermediates (Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques).
ChemRRV: Ordinance on the risk reduction related to chemical products (ChemRRV: Chemikalien-Risikoreduktions-verordnung, Switzerland).
CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
CMR: Substances classified as Carcinogenic, Mutagenic or toxic for Reproduction.
CNS: Central Nervous System.
CNT: Carbon nanotubes.
COD: Chemical Oxygen Demand.
CSA: Chemical Safety Assessment.
CSR: Chemical Safety Report.
DETEC: Swiss Federal Department of the Environment, Transport, Energy and Communications.
DIN: German Standards Institute / German industrial norm (Deutsches Institut für Normung / Deutsche Industrienorm).
DMEL: Derived Minimum Effect Level.
DNEL: Derived No Effect Level.
DOC: Dissolved organic carbon.
DPD: Directive 1999-45-EC / Dangerous Preparations Directive.
DSD: Directive 67/548-EC / Dangerous Substances Directive.
DSL: Canada, Domestic Substances List.
DU: Downstream User.
dw: dry weight.
e.g.: For example, for instance.
EBW: Exposure Based Waiving.
EC: European Community.
EC50: Effective Concentration 50%.
ECHA: European Chemical Agency.
EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.
 EN: European norm.
 ENCS: Japan, Inventory of Existing and New Chemical Substances.
 EPA: United States Environmental Protection Agency.
 ERC: Environmental release category.
 ES: Exposure scenario.
 EUSES: European Union System for the Evaluation of Substances.
 EWC/EWL: European Waste Catalogue.
 GCL: General concentration limit.
 gen.: general.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 GLP: Good Laboratory Practice.
 GW/VL: Occupational exposure limit value.
 GW-kw: Occupational exposure limit value - short term.
 GW-M/VL-M: Occupational exposure limit value – "Ceiling".
 GWP: Global Warming Potential.
 HPV: High Production Volume Chemicals.
 HEPA: High Efficiency Particulate Air.
 IARC: International Agency for Research on Cancer.
 IATA: International Air Transport Association.
 IBC: Intermediate Bulk Container.
 IBC Code: International Bulk Chemical (Code) (International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk).
 ICAO: International Civil Aviation Organization.
 IC50: Inhibition Concentration 50%.
 IECSC: Inventory of Existing Chemical Substances in China.
 IMDG Code: International Maritime Dangerous Goods Code.
 IMO: International Maritime Organization.
 incl.: including, inclusive.
 ISO: International Standards Organization.
 IUCLID: International Uniform Chemical Information Database.
 IUPAC: International Union for Pure Applied Chemistry.
 KECI: Korea Existing Chemicals Inventory.
 LCA: Life Cycle Assessment.
 LC: Lethal Concentration.
 LC50: Lethal Concentration 50%.
 LCLo: Lowest published lethal concentration.
 LD50: Lethal Dose 50%.
 LEV: Local exhaust ventilation.
 LOAEL: Lowest observed adverse effect level.
 LOEC: Lowest observable effect concentration.
 LOEL: Lowest observable effect level.
 LPV: Low Production Volume Chemicals.
 LQ: Limited Quantities.
 Air Quality Control Regulation (LRV: Luftreinhalteverordnung, Switzerland).
 TLV-STEL: Threshold limit value - Short-term exposure limit / Technical reference concentration - short-time value (TRK-Kzw = Technische Richtkonzentration - Kurzzeitwert).
 Maximum allowable workplace concentration – instantaneous value (MAK-Mow: Maximale Arbeitsplatzkonzentration – Momentanwert, Austria)
 Maximum allowable workplace concentration – daily mean value / Technical standard concentration – daily mean value (MAK-Tmw, TRK-Tmw : Maximale Arbeitsplatzkonzentration - Tagesmittelwert / TRK-Tmw = Technische Richtkonzentration – Tagesmittelwert, Austria).
 MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG).
 MARPOL: International Convention for the Prevention of Pollution From Ships.
 MTD: Maximum tolerated dose.
 MWCNT: Multi-walled carbon nanotubes.
 n.a.: not applicable.
 N/A: Not available.
 n.d.: not determined.
 NLP: No Longer Polymers.
 NDSL: Canada, Non-Domestic Substances List.
 NF: French Norm (See AFNOR).
 NFPA: National Fire Protection Association.
 NIOSH: National Institute for Occupational Safety & Health.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No observed adverse effect level.
 NOEC: No observed effect concentration.
 NOEL: No observed effect level.

NTP: National Toxicology Program.
NZIoC: New Zealand Inventory of Chemicals.
ODP: Ozone Depletion Potential.
OECD: Organization for Economic Cooperation and Development.
OEL: Occupational Exposure Limit.
org.: organic.
OSHA: Occupational Safety & Health Administration.
PAH: Polycyclic Aromatic Hydrocarbons.
PBT: Persistent, bioaccumulative, toxic.
PC: Product category.
PE: Polyethylene.
PEC: Predicted Environmental Concentration.
PEL: Permissible Exposure Limit.
PIC: Prior Informed Consent.
PICCS: Philippines Inventory of Commercial Chemical Substances.
PNEC: Predicted No Effect Concentration.
POCP: Photochemical ozone creation potential (Photochemisches Ozonbildungspotenzial).
POP: Persistent Organic Pollutant.
PPORD: Product and Process Oriented Research and Development.
PPE: Personal Protective Equipment.
PROC: Process category.
RA: Risk Assessment.
RAR: Risk Assessment Report.
RCRA: Resource Conservation Recovery Act.
REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation, Authorization and Restriction of Chemicals).
RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).
RMM: Risk Management Measure.
RTECS: Registry of Toxic Effects of Chemical Substances.
QSAR: Quantitative Structure Activity Relation.
SARA: Superfund Amendments and Reauthorization Act.
SADT: Self-Accelerating Decomposition Temperature.
SCL: Specific concentration limit.
SEA: socio economic analysis.
STEL: Short-term Exposure Limit.
STP: Sewage treatment plant.
SU: Sector of use.
SVHC: Substance of Very High Concern.
SWCNT: single-walled carbon nanotubes.
ThOD: Theoretical oxygen demand.
TOC: Total Organic Carbon.
TLV: Threshold Limit Value.
TRA: Targeted Risk Assessment.
TSCA: Toxic Substance Control Act.
TWA: Time Weighted Average.
UC: Use category.
UDS: Use descriptor system.
UEC: Use and exposure categories.
UN: United Nations.
UN RTDG: United Nations Recommendations on the Transport of Dangerous Goods.
UVCB: Unknown or Variable Composition, Complex Reaction Products, and Biological Materials. Regulation on combustible liquids (VbF: Verordnung über brennbare Flüssigkeiten, Austria).
Regulation of the Austria Minister for Labor and Social Affairs regarding health surveillance at the workplace (VGÜ = Verordnung des Bundesministers für Arbeit und Soziales über die Gesundheitsüberwachung am Arbeitsplatz).
VOC: Volatile organic compounds.
vPvB: very Persistent, very Bioaccumulative.
WEL-TWA: Workplace Exposure Limit-Long term exposure limit (8-hour TWA(=time weighted average)reference period).
WEL-STEL: Workplace Exposure Limit-Short term exposure limit (15-minute reference period).
WoE: Weight of evidence.
WHMIS: Workplace Hazardous Materials Information System.
WHO: World Health Organization.
wwt: wet weight.
Not available.

References

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

None.

Revision information

None.

Training information

Follow training instructions when handling this material.

Disclaimer

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

Page: 1/1
Print Date: 09.03.2016

Involved Products:

	Finiscode	Part number	Container Size:
1.	2 039 564	GU7J M99C130 AA	5 l