

Safety Data Sheet

AdBlue

Revision date: 24/10/2022
Version number: 5.0

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

ADBLUE / BULK

Version 5.0

Print Date 09.11.2023

Revision date / valid from 24.10.2022

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

1.1. Product identifier

Trade name : ADBLUE / BULK

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

Use of the Substance/Mixture : Reduction of nitrogen oxides from exhaust gases

Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : Biofuel Express AB
Mariebergsgatan 6
SE-261 51 Landskrona
Telephone : +46 (0) 418-495 120
E-mail address : mail@biofuel-express.com

1.4. Emergency telephone number

Emergency telephone number : In case of personal injury call:
Denmark: +45 82 12 12 12 Giftlinien, Bispebjerg Hospital
Finland: +358 9 471 977 Finnish Poison Information Center (24 h/day)
Norway: +47 22 59 13 00 Giftinformasjonen (døgnåpent)
Sweden: +46-8-33 70 43 Giftinformationscentralen (24 hour service)
Outside these countries: Please call your local emergency services

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

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Most important adverse effects

Human Health	:	Splash in the eyes may cause discomfort. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Physical and chemical hazards	:	In case of fire hazardous decomposition products may be produced such as: ammonia, nitrogen oxides
Potential environmental effects	:	According to available data, this product is not harmful to the environment.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is not labeled as dangerous according to Regulation (EC) No. 1272/2008.

Hazardous components which must be listed on the label:

|| • Urea

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
ammonia (No hazardous ingredients)			
Index-No. : 007-001-01-2	>= 0,1 - <= 0,2	Skin Corr.1B	H314

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CAS-No. : 1336-21-6	Eye Dam.1	H318
EC-No. : 215-647-6	STOT SE3	H335
EU REACH- : 01-2119488876-14-xxxx	Aquatic Acute1	H400
Reg. No.	Aquatic Chronic2	H411
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M-Factor (Acute aquatic toxicity): 1		
specific concentration limit		
STOT SE 3; H335		
>= 5 %		
<hr/>		
Note B		

For the full text of the H-Statements mentioned in this Section, see Section 16.

For the full text of the Notes mentioned in this Section, see Section 16.

Non-hazardous component

Chemical name	Identification Number	Amount [%]
Urea	CAS-No. : 57-13-6 EC-No. 200-315-5 REACH-Reg. No. 01-2119463277-33-xxxx	>= 30 - <= 35

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	: Take off all contaminated clothing immediately.
If inhaled	: Move to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician. If symptoms persist, call a physician.
In case of eye contact	: Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

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

Symptoms	: See Section 11 for more detailed information on health effects and symptoms.
Effects	: See Section 11 for more detailed information on health effects and symptoms.

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

Treatment	: Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet

5.2. Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Heating or fire can release toxic gas.
- Hazardous combustion products : Carbon monoxide, Carbon dioxide (CO₂), ammonia, Nitrogen oxides (NO_x), Under certain fire conditions, traces of other toxic products cannot be excluded.

5.3. Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Wear personal protective equipment.
- Further advice : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Personal precautions : Use personal protective equipment. Keep away unprotected persons. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

- Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

6.3. Methods and materials for containment and cleaning up

- Methods and materials for containment and cleaning up : Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Treat recovered material as described in the section "Disposal considerations".
- Further information : Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

- See Section 1 for emergency contact information.
- See Section 8 for information on personal protective equipment.
- See Section 13 for waste treatment information.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes.
- Hygiene measures : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Store in original container.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Further information on storage conditions : Keep tightly closed in a dry and cool place.
- Advice on common storage : Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

- Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Component:	Urea	CAS-No. 57-13-6
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Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL	Workers, Long-term - systemic effects, Skin contact	: 580 mg/kg
DNEL	Workers, Acute - systemic effects, Skin contact	: 580 mg/kg
DNEL	Workers, Long-term - systemic effects, Inhalation	: 292 mg/m3
DNEL	Workers, Acute - systemic effects, Inhalation	: 292 mg/m3
DNEL		

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Consumers, Long-term - systemic effects, Skin contact	: 580 mg/kg
DNEL	
Consumers, Acute - systemic effects, Skin contact	: 580 mg/kg
DNEL	
Consumers, Long-term - systemic effects, Inhalation	: 125 mg/m3
DNEL	
Consumers, Acute - systemic effects, Inhalation	: 125 mg/m3
DNEL	
Consumers, Long-term - systemic effects, Ingestion	: 42 mg/kg
DNEL	
Consumers, Acute - systemic effects, Ingestion	: 42 mg/kg

Predicted No Effect Concentration (PNEC)

Fresh water	: 0,047 mg/l
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Component: ammonia **CAS-No. 1336-21-6**

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL	
Workers, Acute - local effects, Inhalation	: 36 mg/m3
DNEL	
Workers, Long-term - local effects, Inhalation	: 14 mg/m3
DNEL	
Workers, Acute - systemic effects, Inhalation	: 47,6 mg/m3
DNEL	
Workers, Long-term - systemic effects, Inhalation	: 47,6 mg/m3
DNEL	
Workers, Acute - systemic effects, Skin contact	: 6,8 mg/kg bw/day
DNEL	
Workers, Long-term - systemic effects, Skin contact	: 6,8 mg/kg bw/day
DNEL	
Consumers, Acute - local effects, Inhalation	: 7,2 mg/m3
DNEL	
Consumers, Long-term - local effects, Inhalation	: 2,8 mg/m3
DNEL	

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Consumers, Acute - systemic effects, Inhalation	: 23,8 mg/m3
DNEL	
Consumers, Long-term - systemic effects, Inhalation	: 23,8 mg/m3
DNEL	
Consumers, Acute - systemic effects, Skin contact	: 68 mg/kg bw/day
DNEL	
Consumers, Long-term - systemic effects, Skin contact	: 68 mg/kg bw/day
DNEL	
Consumers, Acute - systemic effects, Ingestion	: 6,8 mg/kg bw/day
DNEL	
Consumers, Long-term - systemic effects, Ingestion	: 6,8 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	: 0,0011 mg/l
Marine water	: 0,0011 mg/l
Intermittent releases	: 0,0068 mg/l

Other Occupational Exposure Limit Values

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Short Term Exposure Limit (STEL):
50 ppm, 36 mg/m3
Indicative

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA):
20 ppm, 14 mg/m3
Indicative

Sweden. Occupational Exposure Limit Values, as amended, Time Weighted Average (TWA):
20 ppm, 14 mg/m3

Sweden. Occupational Exposure Limit Values, as amended, Ceiling Limit Value:
50 ppm, 36 mg/m3

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation.

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Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Respiratory protection

Advice : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Advice : Protective gloves complying with EN 374.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Protective gloves should be replaced at first signs of wear.

Material : butyl-rubber
Break through time : ≥ 8 h
Glove thickness : 0,5 mm

Material : natural rubber
Break through time : ≥ 8 h
Glove thickness : 0,5 mm

Material : Nitrile rubber
Break through time : ≥ 8 h
Glove thickness : 0,35 mm

Eye protection

Advice : Safety glasses

Skin and body protection

Advice : Wear appropriate chemical resistant clothing and boots.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : Liquid

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Physical state	:	liquid
Colour	:	colourless
Odour	:	faint, ammoniacal
Odour Threshold	:	No data available
Melting point/range	:	ca. -11,5 °C
Boiling point/boiling range	:	ca. 100 °C
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	not determined
Decomposition temperature	:	No data available
Self-Accelerating decomposition temperature (SADT)	:	No data available
pH	:	9 - 10
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Flow time	:	No data available
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Dissolution Rate	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Dispersion Stability	:	No data available
Vapour pressure	:	ca. 23 hPa (20 °C)
Relative density	:	No data available

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Density : ca. 1,1 g/cm³ (20 °C)

Bulk density : No data available

Relative vapour density : No data available

Particle characteristics
No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Conditions to avoid : Avoid high temperatures.

10.5. Incompatible materials

Materials to avoid : Oxidizing agents, Acids, alkalis, nitrites, nitrates

10.6. Hazardous decomposition products

Hazardous decomposition products : Fire may cause evolution of: ammonia, Carbon dioxide (CO₂), Carbon monoxide, Nitrogen oxides (NO_x)

SECTION 11: Toxicological information

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

Data for the product

Acute toxicity

Oral

Acute toxicity estimate : > 2000 mg/kg) (Calculation method)

This material may be a slight health hazard if ingested in large quantities.

Inhalation

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No data available

Dermal

Please find this information in the listing of the component/components below in this section.

Irritation**Skin**

Result : No skin irritation

Eyes

Result : Splash in the eyes may cause discomfort.

Sensitisation

Result : No sensitizing effect known.

CMR effects**CMR Properties**

Carcinogenicity : It is not considered carcinogenic.
Mutagenicity : It is not considered mutagenic.
Reproductive toxicity : It is not considered toxic for reproduction.

Specific Target Organ Toxicity**Single exposure**

Remarks : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties**Repeated dose toxicity**

No data available

Aspiration hazard

No aspiration toxicity classification,

Component:

Urea

CAS-No. 57-13-6

Acute toxicity**Oral**

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LD50 : 14300 mg/kg (Rat)

Dermal

Study scientifically not justified.

11.2. Information on other hazards

Data for the product

Endocrine disrupting properties

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1. Toxicity

Component:	Urea	CAS-No. 57-13-6
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Acute toxicity

Fish

LC50 : > 6.810 mg/l (Leuciscus idus (Golden orfe)) (DIN 38412)

Toxicity to daphnia and other aquatic invertebrates

LC50 : > 10.000 mg/l (Daphnia magna; 48 h)

algae

: > 10000 mg/l (Scenedesmus quadricauda (Green algae); 8 d)

Bacteria

: > 10000 mg/l (Pseudomonas putida; 16 h)

12.2. Persistence and degradability

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Component:	Urea	CAS-No. 57-13-6
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Persistence and degradability

Persistence

Result : (Related to: Water) The product is water soluble.

Biodegradability

Result : 96 % (Exposure Time: 16 d)(OECD Test Guideline 302B)Readily biodegradable.

12.3. Bioaccumulative potential

Component:	Urea	CAS-No. 57-13-6
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Bioaccumulation

Result : log Kow -1,59 (20 °C)
: Bioaccumulation is not expected.

12.4. Mobility in soil

Component:	Urea	CAS-No. 57-13-6
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Mobility

: Not expected to adsorb on soil.

12.5. Results of PBT and vPvB assessment

Data for the product

Results of PBT and vPvB assessment

Result : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Endocrine disrupting properties

Data for the product

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

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Data for the product

Additional ecological information

Result : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product : In accordance with local and national regulations.

Contaminated packaging : Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number

|| Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

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SECTION 15: Regulatory information

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

Component:	Urea	CAS-No. 57-13-6
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EU. Regulation EC No. : ; The substance/mixture does not fall under this legislation.
689/2008

EU. REACH, Annex XVII, : ; The substance/mixture does not fall under this legislation.
Marketing and Use
Restrictions (Regulation
1907/2006/EC)

EU. Directive : ; The substance/mixture does not fall under this legislation.
2012/18/EU (SEVESO
III) on major accident
hazards involving
dangerous substances,
Annex I

Notification status

Urea:

Regulatory List	Notification	Notification number
EINECS	YES	200-315-5
DSL	YES	
KECI (KR)	YES	KE-35144
ENCS (JP)	YES	(2)-1732
JEX (JP)	YES	(2)-1732
ISHL (JP)	YES	(2)-1732
IECSC	YES	
ONT INV	YES	
INSQ	YES	
TCSI	YES	
PICCS (PH)	YES	
TSCA	YES	
VN INVL	YES	
TH INV	YES	3102.10
TH INV	YES	55-1-04503
PHARM (JP)	YES	
AU AIICL	YES	
NZIOC	YES	

15.2. Chemical safety assessment

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No data available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Full text of the Notes referred to under section 3.

Note B	Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: "nitric acid ...%". In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
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Abbreviations and Acronyms

AU AIICL	Australia. Industrial Chemicals Act (AIIC) List
BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
DSL	Canada. Environmental Protection Act, Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ENCS (JP)	Japan. Kashin-Hou Law List
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IECSC	China. Inventory of Existing Chemical Substances
INSQ	Mexico. National Inventory of Chemical Substances
ISHL (JP)	Japan. Inventory of Industrial Safety & Health
KECI (KR)	Korea. Existing Chemicals Inventory
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level

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LOEL	lowest observed effect level
NDSL	Canada. Environmental Protection Act. Non-Domestic Substances List
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
NZIOC	New Zealand. Inventory of Chemicals
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
ONT INV	Canada. Ontario Inventory List
PBT	persistent, bioaccumulative and toxic
PHARM (JP)	Japan. Pharmacopoeia Listing
PICCS (PH)	Philippines. Inventory of Chemicals and Chemical Substances
PNEC	predicted no-effect concentration
REACH Auth. No.:	REACH Authorisation Number
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
UK REACH Auth. No.:	UK REACH Authorisation Number
UK REACH AuthAppC. No.	UK REACH Authorisation Application Consultation Number
UK REACH-Reg.No	UK REACH Registration Number
STOT	specific target organ toxicity
SVHC	substance of very high concern
TCSI	Taiwan. Existing Chemicals Inventory
TH INV	Thailand. Existing Chemicals Inventory from FDA
TSCA	US. Toxic Substances Control Act

Further information

Key literature references and sources for data	:	Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.
Methods used for product classification	:	The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.
Hints for trainings	:	The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.
Other information	:	The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be

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considered as a warranty or quality specification and does not constitute a legal relationship.

The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

|| Indicates updated section.

Biofuel Express is a leading distributor of fossil-free biofuels such as HVO100 Renewable Diesel and B100 Biodiesel RME Premium. Our primary focus is the market of biofuels. We are passionate about the green environmental impact of sustainable fuel.

Biofuel Express specialises in providing advice and assessing the benefits of fossil-free fuels for your company. This makes us the right partner for you if you want to transition to fossil-free operation of your diesel-powered vehicles.

For the past 15 years, we have specialised in converting fleets and equipment for refueling buses, trucks, and cars from regular diesel to fossil-free operation.

Our market-leading, high-quality products can be refueled directly at our stations in Sweden and Denmark or delivered to your own tanks. Biofuel Express is your guarantee of reliable distribution.



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