



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 1 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : DEICER
Registration number : not required

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

Use of the Sub- : Anti-freezing agents
stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : Volkswagen Zubehör GmbH
An der Trift 67
D-63303 Dreieich
Telephone : +49/(0)561-490-3267/-5196
Telefax : +49/(0)561-490-85196/-83267
E-mail address : Christof.Blath@Volkswagen.de
Contact person : HK-TW/31

1.4 Emergency telephone number

For 24-hour emergency assistance, call: +49/(0)6132/84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2 H225: Highly flammable liquid and vapour.
Eye irritation, Category 2 H319: Causes serious eye irritation.

Classification (67/548/EEC, 1999/45/EC)

Highly flammable R11: Highly flammable.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 2 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

Hazard pictograms

:



Signal word

: Danger

Hazard statements

: H225
H319

Highly flammable liquid and vapour.
Causes serious eye irritation.

Precautionary statements

: P101

P102
Prevention:
P210

P233
Response:
P370 + P378

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.

In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Disposal:
P501

Dispose of contents/ container to an approved waste disposal plant.

Additional Labelling:

Tactile warning of danger (EN/ISO 11683)

2.3 Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Alcohol
Paint



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 3 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

Hazardous components

Chemical name	CAS-No.	Classification (67/548/EEC)	Classification (1272/2008/EC)	Concentration [%]
	EC-No.			
	Registration number			
ethanol	64-17-5	F; R11	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 80 - < 85
	01- 2119457610- 43			
ethanediol	107-21-1	Xn; R22	Acute Tox. 4; H302 STOT RE 2; H373	>= 2 - < 3

For the full text of the R-phrases mentioned in this Section, see Section 16.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Remove from exposure, lie down. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person. Take off all contaminated clothing immediately.
- If inhaled : Remove to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician. If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Wash off immediately with soap and plenty of water. Do NOT use solvents or thinners.
- In case of eye contact : Remove contact lenses. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- If swallowed : If swallowed, seek medical advice immediately and show this container or label. If a person vomits when lying on his back, place him in the recovery position. Do NOT induce vomiting.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 4 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

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 fire-fighting : Fire will produce dense black smoke containing hazardous combustion products (see section 10). Do not use a solid water stream as it may scatter and spread fire.

5.3 Advice for firefighters

Special protective equipment for firefighters : Complete suit protecting against chemicals

Further information : Standard procedure for chemical fires. Exposure to decomposition products may be a hazard to health. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8. Ventilate the area. Remove all sources of ignition. Avoid inhalation of vapour or mist.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 5 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

6.2 Environmental precautions

Should not be released into the environment. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations. Clean with detergents. Avoid solvents.

6.4 Reference to other sections

see chapter: 7, 8, 11, 12 and 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes. Do not breathe vapours or spray mist. Take precautionary measures against static discharges. For personal protection see section 8.

Advice on protection against fire and explosion : Vapours are heavier than air and may spread along floors. Vapours may form explosive mixture with air. Keep away from heat and sources of ignition. Do not smoke. Electrical equipment should be protected to the appropriate standard.

Dust explosion class : Not applicable

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Keep away from heat. No smoking.

Advice on common storage : Keep away from oxidizing agents and strongly acid or alkaline materials. Keep away from food, drink and animal feed-stuffs.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 6 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Control parameters	Basis	Update
ethanol	64-17-5	TWA: 1.920 mg/m ³ , 1.000 ppm 2,	GB EH40	2005-04-06
Propane-1,2-diol	57-55-6	TWA (particles): 10 mg/m ³ , 2, TWA (Total vapour and particles): 474 mg/m ³ , 150 ppm 2,	GB EH40	2011-12-01
ethanediol	107-21-1	TWA (Vapour): 52 mg/m ³ , 20 ppm Sk, TWA (particles): 10 mg/m ³ , Sk, STEL (Vapour): 104 mg/m ³ , 40 ppm Sk,	GB EH40	2011-12-01
Components	CAS-No.	Control parameters	Basis	Update
ethanediol	107-21-1	TWA: 52 mg/m ³ , 20 ppm skin, STEL: 104 mg/m ³ , 40 ppm skin,	2000/39/EC	2000-06-16

Other information on limit values: see chapter 16

8.2 Exposure controls

Engineering measures

Provide adequate ventilation.

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 7 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

equipment.

Hand protection

Material : Nitrile rubber
Glove thickness : > 0,68 mm

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

Eye protection : Please wear suitable protective goggles. Also wear face protection if there is a splash hazard.

Skin and body protection : Impervious clothing

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
General industrial hygiene practice.
When using do not eat, drink or smoke.
Avoid contact with skin, eyes and clothing.
Wash hands before breaks and at the end of workday.
Wash contaminated clothing before re-use.

Environmental exposure controls

General advice : Should not be released into the environment.
If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid
Colour : blue
Odour : alcohol-like
Odour Threshold : No data available



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 8 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

Flash point : 15 °C

Ignition temperature : No data available
Thermal decomposition : Heating can release hazardous gases.

Lower explosion limit : No data available
Upper explosion limit : No data available
Explosive properties : In use, may form flammable/explosive vapour-air mixture.

Flammability : No data available
Oxidizing properties : No data available
Auto-ignition temperature : not auto-flammable
Burning number : No data available
Molecular weight : No data available
pH : No data available
Melting point/range : No data available
Boiling point/boiling range : > 78 °C

Vapour pressure : No data available
Density : 0,83 g/cm³ at 20 °C

Bulk density : No data available
Water solubility : completely soluble

Partition coefficient: n-octanol/water : No data available
Solubility in other solvents : No data available
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Flow time : No data available
Impact sensitivity : No data available
Relative vapour density : No data available
Surface tension : No data available
Evaporation rate : No data available
Minimum ignition energy : No data available
Acid number : No data available
Refraction index : No data available
Miscibility in water : No data available
Solvent separation test : No data available

9.2 Other information

None known.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 9 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

10. Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Vapours may form explosive mixture with air.

Stability : Stable under recommended storage conditions.

10.4 Conditions to avoid

Keep away from heat and sources of ignition.

10.5 Incompatible materials

Materials to avoid : Strong acids and strong bases, Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : Acute toxicity estimate : > 2.000 mg/kg
Method: Calculation method

Acute inhalation toxicity:

ethanol : LC50 Rat: 124,7 mg/l
Test atmosphere: vapour
Exposure time: 4 h
Method: OECD Test Guideline 403



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 10 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

Acute dermal toxicity:

No data available

Acute toxicity (other routes of administration):

No data available

Skin corrosion/irritation

ethanol : Species: Rabbit
No skin irritation
Method: OECD Test Guideline 404

Serious eye damage/eye irritation

ethanol : Species: Rabbit
irritating
Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Sensitisation:

ethanol : Test Method: Local lymph node assay (LLNA)
Species: Mouse
Result: Does not cause skin sensitisation.
Method: OECD Test Guideline 429

Germ cell mutagenicity

Genotoxicity in vitro:

No data available

Genotoxicity in vivo:

No data available

Carcinogenicity

Remarks

ethanol : Carcinogenicity:
No evidence of carcinogenicity in animal studies.

Mutagenicity:

In vivo tests did not show mutagenic effects



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 11 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

Reproductive toxicity

ethanol : Note: No toxicity to reproduction

Teratogenicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration hazard

Aspiration toxicity

No data available

Neurological effects

No data available

Toxicology Assessment

Toxicology, Metabolism, Distribution

No data available

Acute effects

No data available

Further information

: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

12. Ecological information

12.1 Toxicity

Toxicity to fish



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 12 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

ethanol : LC50 (Pimephales promelas (fathead minnow)): 14,2 g/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates

ethanol : EC50 (Ceriodaphnia dubia (water flea)): 5.012 mg/l
Exposure time: 48 h

Toxicity to algae

ethanol : ErC50 (Chlorella vulgaris (Fresh water algae)): 675 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

ethanol : NOEC: 9,6 mg/l
Exposure time: 9 d
Species: Daphnia magna (Water flea)

12.2 Persistence and degradability

Biodegradability

ethanol : Concentration: 10 mg/l
Result: Readily biodegradable
Biodegradation: ca. 84 %
Exposure time: 20 d

12.3 Bioaccumulative potential

Bioaccumulation

ethanol : Species: Leuciscus idus (Golden orfe)
Exposure time: 3 d
Bioconcentration factor (BCF): < 10

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 13 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

Adsorbed organic bound halogens (AOX) : Remarks:
not included

Additional ecological information : The product should not be allowed to enter drains, water courses or the soil.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Advice on disposal and packaging : Disposal:
In accordance with local and national regulations.
Waste codes should be assigned by the user based on the application for which the product was used.

The following Waste Codes are only suggestions:

Waste Code (EWC) : Waste Key (unused product):
070104, other organic solvents, washing liquids and mother liquors

Waste key (used product):
070104, other organic solvents, washing liquids and mother liquors

Disposal of uncleaned packaging : Waste key (uncleaned packaging):
150110, packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

14.1 UN number

ADR : 1170
RID : 1170
IMDG : 1170
IATA : 1170

14.2 Proper shipping name

ADR : ETHANOL SOLUTION
RID : ETHANOL SOLUTION



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 14 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

IMDG : ETHANOL SOLUTION

IATA : ETHANOL SOLUTION

14.3 Transport hazard class(es)

ADR : 3

RID : 3

IMDG : 3

IATA : 3

14.4 Packing group

ADR

Packing group : II

Classification Code : F1

Hazard Identification Number : 33

Labels : 3

Limited quantity : 1,00 L

Tunnel restriction code : (D/E)

RID

Packing group : II

Classification Code : F1

Hazard Identification Number : 33

Labels : 3

Limited quantity : 1,00 L

IMDG

Packing group : II

Labels : 3

EmS Number : F-E, S-D

IATA

Packing instruction (cargo aircraft) : 364

Packing instruction (passenger aircraft) : 353

Packing instruction (LQ) : Y341

Packing group : II

Labels : 3

14.5 Environmental hazards

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

IATA

Environmentally hazardous : no



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 15 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

14.6 Special precautions for user

see chapter: 6, 7 and 8

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

VOC : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
92,53 %
VOC content less water: 799,3 g/l

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances : Update:
Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Update: Quantity 1 Quantity 2

FLAMMABLE LIQUIDS 5.000 t 50.000 t

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

R11 Highly flammable.
R22 Harmful if swallowed.

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



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 22.03.2016

Revision Date : 11.01.2016

Page 16 of 16

Commercial Product Name: **DEICER**

Part number: 000096322F

Material number: 888100007737

Version : 2.0

GB / EN

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
