



according to UK REACH Regulation

## KF37E

Revision date: 11.08.2023 Page 1 of 11

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

#### 1.1. Product identifier

KF37E

Product code:

094-006256-XXXXX

UFI: 6NGS-AGYS-1WSR-F0J9

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

# Use of the substance/mixture

Coolant for corresponding EWM welding systems

Heat transfer fluids/Anti-freezing agent

## 1.3. Details of the supplier of the safety data sheet

Company name: EWM GmbH

Street: Dr. Günter Henle Str. 8
Place: D-56271 Mündersbach

Telephone: +49 (0)2680 181-0 Telefax: +49 (0)2680 181-244

E-mail: service@ewm-group.com
E-mail (Contact person): msds@ewm-group.com

Responsible Department: Kontaktstelle für techn. Information:

Technische Dienste

Telephone: +49 (0)2680 181-290

**1.4. Emergency telephone** +49 (0)30 - 19240

number: Giftnotruf - Institut für Toxikologie (Berlin)

## **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

## **GB CLP Regulation**

Flam. Liq. 3; H226

Full text of hazard statements: see SECTION 16.

## 2.2. Label elements

## **GB CLP Regulation**

Signal word: Warning

Pictograms:



#### **Hazard statements**

H226 Flammable liquid and vapour.

#### **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P233 Keep container tightly closed.

P243 Take action to prevent static discharges.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or

shower.

P403+P235 Store in a well-ventilated place. Keep cool.





according to UK REACH Regulation

#### KF37E

Revision date: 11.08.2023 Page 2 of 11

#### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### **Chemical characterization**

in aqueous solution

#### **Hazardous components**

CAS No	Chemical name	Chemical name		
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
64-17-5	ethanol; ethyl alcohol	ethanol; ethyl alcohol		
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc.	Specific Conc. Limits, M-factors and ATE	
64-17-5	200-578-6 ethanol; ethyl alcohol		25 - < 36 %
	dermal: LD50	= > 15800 mg/kg; oral: LD50 = 7060 mg/kg Eye Irrit. 2; H319: >= 50 - 100	

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

When in doubt or if symptoms are observed, get medical advice.

#### After inhalation

Provide fresh air. If experiencing respiratory symptoms: Call a doctor.

#### After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

## After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

## After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of of water. When in doubt or if symptoms are observed, get medical advice.

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

No information available.

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

#### Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), alcohol resistant foam, Extinguishing powder.

Co-ordinate fire-fighting measures to the fire surroundings.



**EWM GmbH** 

according to UK REACH Regulation

#### KF37E

Revision date: 11.08.2023 Page 3 of 11

#### Unsuitable extinguishing media

Full water jet

#### 5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air.

In case of fire may be liberated: Carbon dioxide, Carbon monoxide. Pyrolysis products, toxic

#### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

#### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

#### General advice

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Evacuate area.

#### For non-emergency personnel

Remove all sources of ignition. Provide adequate ventilation. Use personal protection equipment.

#### For emergency responders

Wear personal protection equipment (refer to section 8).

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

#### 6.3. Methods and material for containment and cleaning up

#### For containment

Stop leak if safe to do so. Cover drains.

#### For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

Ventilate affected area.

## Other information

Use non-sparking tools.

Clean contaminated articles and floor according to the environmental legislation.

#### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

## Advice on safe handling

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

# Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

## Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

## 7.2. Conditions for safe storage, including any incompatibilities





according to UK REACH Regulation

#### KF37E

Revision date: 11.08.2023 Page 4 of 11

#### Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

## Hints on joint storage

Do not store together with: Acid, Alkali (Iye), Oxidizing agent. Pyrophoric or self-heating substances.

#### Further information on storage conditions

Keep away from heat. Protect from direct sunlight.

# 7.3. Specific end use(s)

Coolant for corresponding EWM welding systems Heat transfer fluids/Anti-freezing agent

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
78-83-1	2-Methylpropan-1-ol	50	154		TWA (8 h)	WEL
		75	231		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

# 8.2. Exposure controls







## Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

## Individual protection measures, such as personal protective equipment

#### Eye/face protection

Use eye protection according to EN 166.

#### Hand protection

Wear suitable gloves tested to EN374.

Suitable material:

CR (polychloroprene, chloroprene rubber): 0,5 mm

NBR (Nitrile rubber): 0,35 mm

Butyl caoutchouc (butyl rubber): 0,5 mm

FKM (fluoro rubber): 0,4

Unsuitable material: NR (natural rubber, Natural latex), PVC (polyvinyl chloride).

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Skin protection

Wear suitable protective clothing.





according to UK REACH Regulation

#### KF37E

Revision date: 11.08.2023 Page 5 of 11

#### Respiratory protection

Respiratory protection necessary at: insufficient ventilation, exceeding exposure limit values.

Filtering device (full mask or mouthpiece) with filter: A

#### Thermal hazards

Flame-retardant protective clothing. Wear anti-static footwear and clothing

## **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
Odour: like: Alcohol
Odour threshold: not determined

Melting point/freezing point: - 20 °C
Boiling point or initial boiling point and boiling 85 °C

range:

Flammability: Flammable liquid and vapour. Lower explosion limits: 3.9 vol. % 20,5 vol. % Upper explosion limits: Flash point: 28 °C Auto-ignition temperature: > 535 °C Decomposition temperature: not determined pH-Value: Viscosity / kinematic: not determined Water solubility: completely miscible

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

Density (at 20 °C):

Relative vapour density:

Particle characteristics:

not determined

0,94 - 0,95 g/cm³

not determined

not determined

not applicable

#### 9.2. Other information

# Information with regard to physical hazard classes

Explosive properties

Danger of explosion: Vapours can form explosive mixtures with air.

Sustaining combustion: Sustaining combustion

**Further Information** 

No information available.

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Flammable.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

## 10.3. Possibility of hazardous reactions

Vapours can form explosive mixtures with air.



**EWM GmbH** 

according to UK REACH Regulation

#### KF37E

Revision date: 11.08.2023 Page 6 of 11

#### 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Heat. UV-radiation/sunlight.

#### 10.5. Incompatible materials

Acid, Alkali (Iye), Oxidizing agent. Pyrophoric or self-heating substances.

## 10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon dioxide, Carbon monoxide. Pyrolysis products, toxic

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in GB CLP Regulation

#### **Acute toxicity**

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

#### **ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
64-17-5	ethanol; ethyl alcohol					
	oral	LD50 mg/kg	7060	Rat	ECHA	
	dermal	LD50 mg/kg	> 15800	Rabbit	ECHA	

## Irritation and corrosivity

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

## Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

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.

#### Information on likely routes of exposure

oral, Skin contact, Eye contact, Inhalation.

## 11.2. Information on other hazards

#### **Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

# **SECTION 12: Ecological information**

# 12.1. Toxicity

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

The product is not: Ecotoxic.





according to UK REACH Regulation

## KF37E

Revision date: 11.08.2023 Page 7 of 11

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method	
64-17-5	ethanol; ethyl alcohol							
	Acute fish toxicity	LC50 mg/l	> 10000	96 h	Piscis	ECHA		
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris	ECHA		
	Acute crustacea toxicity	EC50	5012 mg/l	48 h	Ceriodaphnia spec	ECHA		

#### 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
64-17-5	ethanol; ethyl alcohol				
	OECD 301E	94 %	28	Pre-supplier/manu	facturer
	Readily biodegradable (according to OECD criteria).	-		•	

#### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol; ethyl alcohol	-0,32

### 12.4. Mobility in soil

The product has not been tested.

# 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

## 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

# 12.7. Other adverse effects

No information available.

## **Further information**

Avoid release to the environment.

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

# **Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

## Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

## **SECTION 14: Transport information**

## Land transport (ADR/RID)

14.1. UN number or ID number: UN 1170

14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3. Transport hazard class(es): 3



according to UK REACH Regulation

**KF37E**Revision date: 11.08.2023

Page 8 of 11

14.4. Packing group:
Hazard label:
3



Classification code: F1
Special Provisions: 144 601
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1170

14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Classification code: F1
Special Provisions: 144 601
Limited quantity: 5 L
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 1170

14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Marine pollutant:

Special Provisions: 144, 223
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1170

14.2. UN proper shipping name: ETHYL ALCOHOL SOLUTION

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Special Provisions: A3 A58 A180

Limited quantity Passenger: 10 L Passenger LQ: Y344





according to UK REACH Regulation

KF37E

Revision date: 11.08.2023 Page 9 of 11

Excepted quantity: E1

IATA-packing instructions - Passenger:355IATA-max. quantity - Passenger:60 LIATA-packing instructions - Cargo:366IATA-max. quantity - Cargo:220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No.

14.6. Special precautions for user

Warning: Flammable liquids! Vapours can form explosive mixtures with air.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

# **SECTION 15: Regulatory information**

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

### **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

2010/75/EU (VOC): < 36,5 %

Information according to 2012/18/EU

(SEVESO III):

P5c FLAMMABLE LIQUIDS

## **National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work

protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

**Additional information** 

Observe in addition any national regulations!

## 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## **SECTION 16: Other information**



## according to UK REACH Regulation

#### KF37E

Revision date: 11.08.2023 Page 10 of 11

#### Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

**UN: United Nations** 

CAS: Chemical Abstracts Service
M-Factor: Multiplication Factor
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

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)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

TI: Technical Instructions

DGR: Dangerous Goods Regulations

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container VOC: Volatile Organic Compounds EG or EC: European Community

IE: Industrial Emissions

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment,

chapter R.20 (Table of terms and abbreviations).

Flam. Liq: Flammable liquids Skin Irrit: Skin irritation Eye Dam: Eye damage Eye Irrit: Eye irritation

STOT SE: Specific target organ toxicity - single exposure

#### Key literature references and sources for data

Ethanol (SECTION 11: Toxicological information, Section 12 - Ecotoxicological Information): Registration Dossier according to Regulation (EC) No. 1907/2006 [REACH]. (17.05.2023)

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data

### Relevant H and EUH statements (number and full text)





according to UK REACH Regulation

## KF37E

Revision date: 11.08.2023 Page 11 of 11

H225 Highly flammable liquid and vapour.
 H226 Flammable liquid and vapour.
 H319 Causes serious eye irritation.

#### **Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)