

according to UK REACH Regulation

DIVINOL MULTI-FLUID

24.01.2024 Article No.: 22530 Page 1 of 9

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

1.1. Product identifier

Revision date:

22530 DIVINOL MULTI-FLUID

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

Use of the substance/mixture

See technical information

1.3. Details of the supplier of the safety data sheet

Company name: Zeller+Gmelin GmbH & Co. KG

Street: Schlossstr. 20
Place: D-73054 Eislingen

Telephone: +49 (0) 7161 / 802-0 Telefax: +49 (0) 7161 / 802-290

E-mail: info@zeller-gmelin.de

Contact person: Thorsten Grönig Telephone: +49 (0) 7161 / 802-268

E-mail: produktsicherheit@zeller-gmelin.de

Internet: www.zeller-gmelin.de

Responsible Department: Produktsicherheit / Product Safety

1.4. Emergency telephone In England and Wales: NHS Direct: 0845 4647 or 111 In Scotland: NHS 24 -

number: 08454 24 24 24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Asp. Tox. 1; H304

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

Signal word: Danger

Pictograms:



Hazard statements

H304 May be fatal if swallowed and enters airways.

Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH208 Contains polysulfides, di-tert-dodecyl. May produce an allergic reaction.

2.3. Other hazards

No further relevant information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Hydrocarbon-based mixture.



according to UK REACH Regulation

Revision date:

24.01.2024

DIVINOL MULTI-FLUID

Article No.: 22530

Page 2 of 9

Relevant ingredients

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification (GB CLP Regulation)					
64742-48-9	hydrocarbons, C10-C13, n-alkanes	, isoalkanes, cyclics, <2% aromatics		25 - < 100 %		
	918-481-9		01-2119457273-39			
	Asp. Tox. 1; H304 EUH066					
112-34-5	2-(2-butoxyethoxy)ethanol		1 - < 2.5 %			
	203-961-6	603-096-00-8	01-2119475104-44			
	Eye Irrit. 2; H319					
68425-15-0	polysulfides, di-tert-dodecyl			0.3 - < 1 %		
	270-335-7		01-2119540516-41			
	Skin Sens. 1B; H317					

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. L	Specific Conc. Limits, M-factors and ATE			
64742-48-9	918-481-9	hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	25 - < 100 %		
	inhalation: LC50 = >4951 mg/l (vapours); dermal: LD50 = >5000 mg/kg; oral: LD50 = >5000 mg/kg				
112-34-5	203-961-6	2-(2-butoxyethoxy)ethanol	1 - < 2.5 %		
	dermal: LD50 = 4120 mg/kg; oral: LD50 = 5660 mg/kg				

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. If unconscious but breathing normally, place in recovery position and seek medical advice. Remove contaminated, saturated clothing immediately.

After inhalation

Remove casualty to fresh air and keep warm and at rest.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Let water be drunken in little sips (dilution effect). Call a physician immediately. Do NOT induce vomiting.

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

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

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

Full water jet.



according to UK REACH Regulation

DIVINOL MULTI-FLUID

24.01.2024 Article No.: 22530 Page 3 of 9

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon monoxide Carbon dioxide (CO2). Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

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

Additional information

Revision date:

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Do not allow to enter into soil/subsoil.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Protective measures: see section 7 + 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Clean contaminated articles and floor according to the environmental legislation.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Protective measures: see section 7 + 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Do not eat, drink or smoke when using this product. Provide fresh air. Handle and open container with care. Conditions to avoid: generation/formation of aerosols.

Advice on protection against fire and explosion

No special measures are necessary.

Advice on general occupational hygiene

When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Protect against: Frost. Keep away from heat. Protect from direct sunlight. Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	WEL
		15	101.2		STEL (15 min)	WEL



according to UK REACH Regulation

Revision date:

24.01.2024

DIVINOL MULTI-FLUID

Article No.: 22530

Page 4 of 9

DNEL/DMEL values

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
112-34-5	2-(2-butoxyethoxy)ethanol					
Worker DNEL,	long-term	dermal	systemic	83 mg/kg bw/day		
Consumer DN	EL, long-term	dermal	systemic	20 mg/kg bw/day		
Consumer DNEL, long-term		inhalation	systemic	40,5 mg/m³		
Consumer DNEL, acute		inhalation	local	60,7 mg/m³		
Consumer DNEL, long-term		inhalation	local	40,5 mg/m³		
Consumer DNEL, long-term		oral	systemic	5 mg/kg bw/day		
Worker DNEL, acute		inhalation	local	101,2 mg/m³		
Worker DNEL, long-term		inhalation	systemic	67,5 mg/m³		
Worker DNEL, long-term		inhalation	local	67,5 mg/m³		

PNEC values

CAS No	Substance			
Environment	Environmental compartment			
112-34-5	2-(2-butoxyethoxy)ethanol			
Freshwater		1,1 mg/l		
Marine water	r	0,11 mg/l		
Marine water	r (intermittent releases)	11 mg/l		
Freshwater s	sediment	4,4 mg/l		
Marine sediment		0,44 mg/l		
Secondary p	Secondary poisoning			
Micro-organisms in sewage treatment plants (STP)		200 mg/l		
Soil		0,32 mg/l		

Additional advice on limit values

- a no restriction
- b End of exposure or end of shift
- c at long-term exposure:
- d before next shift
- Y: A risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept
- Z: A risk of reproductive effects cannot to be excluded if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

blood (B)

Urine (U)

8.2. Exposure controls

Appropriate engineering controls

See section 7. No additional measures necessary.

Individual protection measures, such as personal protective equipment

Eye/face protection

Eye glasses with side protection (EN ISO 16321).

Hand protection

Wear suitable gloves. Recommended glove articles: EN ISO 374. Suitable material: NBR (Nitrile rubber). Breakthrough time: > 480 min (Thickness of the glove material: 0.4 mm). Breakthrough times and swelling properties of the material must be taken into consideration. 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. Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.



according to UK REACH Regulation

DIVINOL MULTI-FLUID

24.01.2024 Article No.: 22530 Page 5 of 9

Skin protection

Revision date:

Protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. When splashes or fine mist form, a permitted breathing apparatus suitable for these purposes must be used. Suitable respiratory protection apparatus: Filtering Half-face mask (EN 149), e.g. FFA P / FFP3.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: yellow
Odour: characteristic

Test method

Print date: 04.05.2024

Melting point/freezing point:

Boiling point or initial boiling point and

not determined

not determined

boiling range:

Flammability: not determined Lower explosion limits: 0,6 vol. % Upper explosion limits: 7,0 vol. %

Flash point: > 61 °C EN ISO 2719

Auto-ignition temperature: not determined

Decomposition temperature: not determined

pH-Value: not applicable

Viscosity / kinematic: 3,7 mm²/s ASTM D 7042

(at 20 °C)

Water solubility: insoluble
Partition coefficient n-octanol/water: not determined
Vapour pressure: < 1 hPa

(at 20 °C)

Density (at 15 °C): 0,82 g/cm³ DIN EN ISO 12185

Relative vapour density: not determined Particle characteristics: not applicable

9.2. Other information

Other safety characteristics

Pour point: not determined
Viscosity / dynamic: not determined
Flow time: not determined

Further Information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Heat.



according to UK REACH Regulation

Revision date: DIVINOL MULTI-FLUID

24.01.2024 Article No.: 22530 Page 6 of 9

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No information available.

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	
64742-48-9	hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics						
	oral	LD50 >50 mg/kg	000	Rat			
	dermal	LD50 >50 mg/kg	00	Rabbit			
	inhalation (4 h) vapour	LC50 >49 mg/l	51	Rat			
112-34-5	2-(2-butoxyethoxy)ethan	ol					
	oral	LD50 566 mg/kg	0	Rat			
	dermal	LD50 412 mg/kg	0	Rabbit			

Irritation and corrosivity

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

Repeated exposure may cause skin dryness or cracking.

Sensitising effects

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

Contains polysulfides, di-tert-dodecyl. May produce an allergic reaction.

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

May be fatal if swallowed and enters airways.

11.2. Information on other hazards

Other information

Keeping to the general worker's protection rules and the industrial hygienics, there is no risk in handling this product through the personnel.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.



according to UK REACH Regulation

Revision date: DIVINOL MULTI-FLUID

24.01.2024 Article No.: 22530 Page 7 of 9

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
64742-48-9	hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics						
	Acute fish toxicity	LC50 mg/l	>1000		Oncorhynchus mykiss (Rainbow trout)	OECD 203	
	Acute algae toxicity	ErC50 mg/l	>1000	72 h	Pseudokirchneriella subcapitata	OECD 201	
	Acute crustacea toxicity	EC50 mg/l	>1000		Daphnia magna (Big water flea)	OECD 202	
112-34-5	2-(2-butoxyethoxy)ethanol						
	Acute algae toxicity	ErC50 mg/l	> 100		Scenedesmus sp.		
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna		
68425-15-0	polysulfides, di-tert-dodec	polysulfides, di-tert-dodecyl					
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Danio rerio (zebrafish)		OECD 203

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-34-5	2-(2-butoxyethoxy)ethanol	0,56 (25°C)
68425-15-0	polysulfides, di-tert-dodecyl	> 12

BCF

CAS No	Chemical name	BCF	Species	Source
68425-15-0	polysulfides, di-tert-dodecyl	< 1		

12.4. Mobility in soil

No data available

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 data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of Wastes Code - residues/unused products

070604 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease,

soaps, detergents, disinfectants and cosmetics; other organic solvents, washing liquids and mother liquors; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Consult the appropriate local waste disposal expert about waste disposal.



according to UK REACH Regulation

Revision date: DIVINOL MULTI-FLUID

24.01.2024 Article No.: 22530 Page 8 of 9

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine pollutant: NO

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No data available

14.7. Maritime transport in bulk according to IMO instruments

No data available

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 28, Entry 75

Directive 2010/75/EU on industrial 73,2 % (600,3 g/l)

emissions:

Information according to Directive

2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

National regulatory information

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

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,6,8,9,11,12,13,14,15,16.



according to UK REACH Regulation

Revision date: DIVINOL MULTI-FLUID

24.01.2024 Article No.: 22530 Page 9 of 9

Abbreviations and acronyms

Asp. Tox: Aspiration hazard Eye Irrit: Eye irritation Skin Sens: Skin sensitisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning

the International Carriage of Dangerous Goods by Road)

RID: Règlement concernant le transport international ferroviaire des marchandises dangereuses (Regulations

concerning the International Carriage of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

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

CAS: Chemical Abstracts Service (a division of the American Chemical Society)

DNEL/DMEL: Derived No-Effect Level / Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration WEL (UK): Workplace Exposure Limits TWA (EC): Time-Weighted Average STEL (EC): Short Term Exposure Limit

ATE: Acute Toxicity Estimate

LD50: Lethal Dose, 50% (median lethal dose)

LC50: Lethal Concentration, 50% (median lethal concentration)

EC50: half maximal Effective Concentration ErC50: EC50 in terms of reduction of growth rate

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

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

Classification	Classification procedure	
Asp. Tox. 1; H304	Calculation method	

Relevant H and EUH statements (number and full text)

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH208 Contains polysulfides, di-tert-dodecyl. May produce an allergic reaction.

Further Information

Safety Data Sheet according to COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to 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.

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