

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: **AN92**
Version: **2.0 en**
Replaces version of: 2019-10-04
Version: (1)

date of compilation: 2019-10-04
Revision: 2022-07-11

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

1.1 Product identifier

Identification of the substance **Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy**

Article number AN92

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

Relevant identified uses: Laboratory chemical
Laboratory and analytical use

Uses advised against: Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone:+49 (0) 721 - 56 06 0
Telefax: +49 (0) 721 - 56 06 149
e-mail: sicherheit@carlroth.de
Website: www.carlroth.de

Competent person responsible for the safety data sheet: :Department Health, Safety and Environment

e-mail (competent person): **sicherheit@carlroth.de**

1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Cat-egory	Hazard class and category	Hazard statement
2.6	Flammable liquid	2	Flam. Liq. 2	H225
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.8D	Specific target organ toxicity - single exposure (narcotic effects, drowsiness)	3	STOT SE 3	H336

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

Section	Hazard class	Cat-egory	Hazard class and category	Hazard statement
3.10	Aspiration hazard	1	Asp. Tox. 1	H304
4.1C	Hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources. Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling

Signal word

Danger

Pictograms

GHS02, GHS07,
GHS08, GHS09



Hazard statements

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects

Precautionary statements

Precautionary statements - prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P280	Wear protective gloves/eye protection/face protection

Precautionary statements - response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor
P302+P352	IF ON SKIN: Wash with plenty of soap and water
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing

Precautionary statements - storage

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

Hazardous ingredients for labelling:

Hydrocarbons, C₆-C₇, n-alkanes, isoalkanes, cyclics, <5% n-hexane, Hydrocarbons C₉-C₁₀, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics., Hydrocarbons C₈-C₉, isoalkanes

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Hydrocarbons, C ₆ -C ₇ , n-alkanes, isoalkanes, cyclics, <5% n-hexane	CAS No 92128-66-0 EC No 921-024-6	65 – < 75	Flam. Liq. 2 / H225 Skin Irrit. 2 / H315 STOT SE 3 / H336 Asp. Tox. 1 / H304 Aquatic Chronic 2 / H411		IOELV
Gum arabic	CAS No 9000-01-5 EC No 232-519-5	20 – < 25	Eye Irrit. 2 / H319		
Hydrocarbons C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics.	EC No 927-241-2	> 7,5	Flam. Liq. 3 / H226 STOT SE 3 / H336 Asp. Tox. 1 / H304 Aquatic Chronic 3 / H412 EUH066		
Hydrocarbons C8-C9, isoalkanes	EC No 932-020-9	< 2,5	Flam. Liq. 3 / H226 STOT SE 3 / H336 Asp. Tox. 1 / H304 Aquatic Acute 1 / H400 Aquatic Chronic 3 / H412 EUH066		

Notes

IOELV: Substance with a community indicative occupational exposure limit value

For full text of abbreviations: see SECTION 16

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: **AN92**

Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

Call a physician immediately. Observe aspiration hazard if vomiting occurs.

4.2 Most important symptoms and effects, both acute and delayed

Aspiration hazard, Irritation, Dizziness, Drowsiness, Narcosis

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings
water spray, dry extinguishing powder, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours may form explosive mixtures with air.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂), May produce toxic fumes of carbon monoxide if burning.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. Danger of explosion.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation.

Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage

of vapours into cellars, flues and ditches.

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Ground/bond container and receiving equipment.

Ventilation requirements

Use local and general ventilation.

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
EU	n-hexane	110-54-3	IOELV	20	72						2006/15/EC
GB	n-hexane	110-54-3	WEL	20	72						EH40/2005
GB	paraffin wax	8002-74-2	WEL		2		6			fume	EH40/2005

Notation

Ceiling-C	Ceiling value is a limit value above which exposure should not occur
fume	As fume
STEL	Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Hydrocarbons, C ₆ -C ₇ , n-alkanes, isoalkanes, cyclics, <5% n-hexane	92128-66-0	DNEL	2.035 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Hydrocarbons, C ₆ -C ₇ , n-alkanes, isoalkanes, cyclics, <5% n-hexane	92128-66-0	DNEL	773 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Hydrocarbons C ₉ -C ₁₀ , n-alkanes, isoalkanes, cycloalkanes, <2% aromatics.		DNEL	871 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Hydrocarbons C ₉ -C ₁₀ , n-alkanes, isoalkanes, cycloalkanes, <2% aromatics.		DNEL	77 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Hydrocarbons C ₈ -C ₉ , isoalkanes		DNEL	2.035 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Hydrocarbons C8-C9, isoalkanes		DNEL	773 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection.

Skin protection



• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. 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. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

• type of material

NBR (Nitrile rubber)

• material thickness

0,4 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Flame-retardant protective clothing.

Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: **AN92**

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	red - cloudy
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	~84 °C
Flammability	flammable liquid in accordance with GHS criteria
Lower and upper explosion limit	0,7 vol% (LEL) - 8 vol% (UEL)
Flash point	<0 °C
Auto-ignition temperature	>201 °C (auto-ignition temperature (liquids and gases))
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not determined

Solubility(ies)

Water solubility (insoluble (< 1 mg/l))

Partition coefficient

Partition coefficient n-octanol/water (log value): this information is not available

Vapour pressure not determined

Density and/or relative density

Density 0,74 g/cm³ at 20 °C

Relative vapour density information on this property is not available

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard classes: There is no additional information.

Other safety characteristics: There is no additional information.

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

SECTION 10: Stability and reactivity

10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition. Vapours may form explosive mixtures with air.

If heated

Risk of ignition.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser

10.4 Conditions to avoid

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

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Hydrocarbons, C ₆ -C ₇ , n-alkanes, isoalkanes, cyclics, <5% n-hexane	92128-66-0	inhalation: vapour	LC50	>25,2 mg/l/4h	rat
Hydrocarbons, C ₆ -C ₇ , n-alkanes, isoalkanes, cyclics, <5% n-hexane	92128-66-0	dermal	LD50	>2.800 - 3.100 mg/kg	rat
Gum arabic	9000-01-5	oral	LD50	>16.000 mg/kg	rat
Hydrocarbons C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics.		oral	LD50	>5.000 mg/kg	rat
Hydrocarbons C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics.		inhalation: dust/mist	LC50	≥6.100 mg/m ³ /4h	rat

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: **AN92**

Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Hydrocarbons C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics.		dermal	LD50	>2.000 mg/kg	rat
Hydrocarbons C8-C9, isoalkanes		oral	LD50	>7.100 – 7.800 mg/kg	rat
Hydrocarbons C8-C9, isoalkanes		dermal	LD50	>2.200 – 2.500 mg/kg	rabbit

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

vomiting, aspiration hazard

• If in eyes

Causes serious eye irritation

• If inhaled

dizziness, fatigue, narcosis

• If on skin

causes skin irritation

• Other information

none

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

11.2 Endocrine disrupting properties

None of the ingredients are listed.

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Hydrocarbons C8-C9, isoalkanes		LC50	0,11 mg/l	fish	96 h
Hydrocarbons C8-C9, isoalkanes		EC50	0,4 mg/l	aquatic invertebrates	48 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Hydrocarbons, C ₆ -C ₇ , n-alkanes, isoalkanes, cyclics, <5% n-hexane	92128-66-0	EC50	0,23 mg/l	aquatic invertebrates	21 d
Hydrocarbons C8-C9, isoalkanes		EC50	0,23 mg/l	aquatic invertebrates	21 d

Biodegradation

Data are not available.

12.2 Process of degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
Hydrocarbons, C ₆ -C ₇ , n-alkanes, isoalkanes, cyclics, <5% n-hexane	92128-66-0	oxygen depletion	83 %	16 d		ECHA
Hydrocarbons C8-C9, isoalkanes		oxygen depletion	10,5 %	15 d		ECHA

12.3 Bioaccumulative potential

Data are not available.

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

Bioaccumulative potential of components of the mixture				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Hydrocarbons, C ₆ -C ₇ , n-alkanes, isoalkanes, cyclics, <5% n-hexane	92128-66-0		3,4 – 5,2	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste catalogue ordinance (Germany).

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number or ID number

ADRRID	UN 1268
IMDG-Code	UN 1268
ICAO-TI	UN 1268

14.2 UN proper shipping name

ADRRID	PETROLEUM PRODUCTS, N.O.S.
IMDG-Code	PETROLEUM PRODUCTS, N.O.S.



Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

ICAO-TI	Petroleum products, n.o.s.
14.3 Transport hazard class(es)	
ADRRID	3
IMDG-Code	3
ICAO-TI	3
14.4 Packing group	
ADRRID	II
IMDG-Code	II
ICAO-TI	II
14.5 Environmental hazards	hazardous to the aquatic environment
Environmentally hazardous substance (aquatic environment):	Hydrocarbons, C ₆ -C ₇ , n-alkanes, isoalkanes, cyclics, <5% n-hexane
14.6 Special precautions for user	
Provisions for dangerous goods (ADR) should be complied within the premises.	
14.7 Maritime transport in bulk according to IMO instruments	
The cargo is not intended to be carried in bulk.	
14.8 Information for each of the UN Model Regulations	
Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information	
Proper shipping name	PETROLEUM PRODUCTS, N.O.S.
Particulars in the transport document	UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II, (D/E), environmentally hazardous, special provision 640D Special provision 640D
Classification code	F1
Danger label(s)	3, "Fish and tree"
 	
Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	640D, 664
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	D/E
Hazard identification No	33
Emergency Action Code	3YE
Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information	
Classification code	F1

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

Danger label(s)

3
Fish and tree



Environmental hazards

Yes
Hazardous to water

Special provisions (SP)

640D, 664

Excepted quantities (EQ)

E2

Limited quantities (LQ)

1 L

Transport category (TC)

2

Hazard identification No

33

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name

PETROLEUM PRODUCTS, N.O.S.

Particulars in the shipper's declaration

UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II, <0°C c.c., MARINE POLLUTANT

Marine pollutant

yes (hazardous to the aquatic environment)

Danger label(s)

3, "Fish and tree"



Excepted quantities (EQ)

E2

Limited quantities (LQ)

1 L

EmS

F-E, S-E

Stowage category

B

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name

Petroleum products, n.o.s.

Particulars in the shipper's declaration

UN1268, Petroleum products, n.o.s., 3, II

Environmental hazards

yes (hazardous to the aquatic environment)

Danger label(s)

3



Special provisions (SP)

A3

Excepted quantities (EQ)

E2

Limited quantities (LQ)

1 L

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Seveso Directive

2012/18/EU (Seveso III)			
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
E2	environmental hazards (hazardous to the aquatic environment, cat. 2)	200 500	57)

Notation

57) Hazardous to the Aquatic Environment in category Chronic 2

Deco-Paint Directive

VOC content	76,95 % 569,4 g/l
-------------	----------------------

Industrial Emissions Directive (IED)

VOC content	76,95 %
VOC content	569,4 g/l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Water Framework Directive (WFD)

none of the ingredients are listed

Regulation on the marketing and use of explosives precursors

none of the ingredients are listed

Regulation on drug precursors

none of the ingredients are listed

Regulation on substances that deplete the ozone layer (ODS)

none of the ingredients are listed

Regulation concerning the export and import of hazardous chemicals (PIC)

none of the ingredients are listed

Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

National regulations(GB)

Restrictions according to GB REACH, Annex 17

none of the ingredients are listed

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

Dangerous substances with restrictions (GB REACH, Annex 17)

Name of substance	Name acc. to inventory	CAS No	No
Roti®-Liquid Barrier Marker	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	Inventory	Status
AU	AIIC	not all ingredients are listed
CA	DSL	not all ingredients are listed
CN	IECSC	not all ingredients are listed
EU	ECSI	not all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	not all ingredients are listed
PH	PICCS	not all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	not all ingredients are listed
US	TSCA	not all ingredients are listed

Legend

AIIC	Australian Inventory of Industrial Chemicals
CICR	Chemical Inventory and Control Regulation
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

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

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Alignment to regulation:

Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.1		Classification acc. to GHS: change in the listing (table)	yes
2.1	The most important adverse physicochemical, human health and environmental effects: Narcotic effects.	The most important adverse physicochemical, human health and environmental effects: The product is combustible and can be ignited by potential ignition sources. Spillage and fire water can cause pollution of watercourses.	yes
2.2	Hazardous ingredients for labelling: Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, Hydrocarbons C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics., Hydrocarbons C8-C9, isoalkanes	Hazardous ingredients for labelling: Hydrocarbons, C ₆ -C ₇ , n-alkanes, isoalkanes, cyclics, <5% n-hexane, Hydrocarbons C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics., Hydrocarbons C8-C9, isoalkanes	yes
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2	contains: Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, Hydrocarbons C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics., Hydrocarbons C8-C9, isoalkanes		yes
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2006/15/EC	Commission Directive establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: AN92

Abbr.	Descriptions of used abbreviations
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
IOELV	Indicative occupational exposure limit value
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
log KOW	n-Octanol/water
NLP	No-Longer Polymer

Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Roti®-Liquid Barrier Marker , red, ready-to-use, for microscopy

article number: **AN92**

Abbr.	Descriptions of used abbreviations
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TWA	Time-weighted average
UEL	Upper explosion limit (UEL)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties. The classification is based on tested mixture.

Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.