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

#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33 date of compilation: 2021-07-27 Version: **2.0 en** Revision: 2023-03-13

Replaces version of: 2021-07-27

Version: (1)

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

#### **Product identifier** 1.1

Identification of the substance Roti®-Pol Mix TagHY 2x conc., ready-to-use

Article number 1K33

Registration number (REACH) not relevant (mixture)

#### 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 :Department Health, Safety and Environment

sheet:

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

#### 1.4 **Emergency telephone number**

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Centre Beaumont Hospital	Beaumont Road	Dublin 9	01 809 2166	https:// www.poisons.ie/

#### **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 (CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/ EC.

#### **Label elements** 2.2

# Labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

Ireland (en) Page 1 / 15

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



#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33

#### 2.3 Other hazards

#### Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of  $\geq$  0,1%.

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (EDC) in a concentration of  $\geq$  0,1%.

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

#### 3.1 **Substances**

not relevant (mixture)

#### 3.2 **Mixtures**

#### **Description of the mixture**

Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Ethylene glycol	CAS No 107-21-1 EC No 203-473-3 Index No 603-027-00-1	< 20	Acute Tox. 4 / H302 STOT RE 2 / H373	<b>!</b>	GHS-HC IOELV

#### Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/

2008/EC, Annex VI)
IOELV: Substance with a community indicative occupational exposure limit value

Name of sub- stance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
Ethylene glycol	CAS No 107-21-1	-	-	500 <sup>mg</sup> / <sub>kg</sub>	oral
	EC No 203-473-3				
	Index No 603-027-00-1				

For full text of abbreviations: see SECTION 16

# **SECTION 4: First aid measures**

#### 4.1 **Description of first aid measures**



#### **General notes**

No special measures are necessary.

#### **Following inhalation**

Provide fresh air.

#### Following skin contact

Ireland (en) Page 2 / 15

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

# ROTH

#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33

Rinse skin with water/shower.

#### Following eye contact

Rinse cautiously with water for several minutes.

#### **Following ingestion**

Rinse mouth. Call a doctor if you feel unwell.

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

Vomiting

#### 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, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

## 5.2 Special hazards arising from the substance or mixture

None.

#### **Hazardous combustion products**

In case of fire may be liberated: Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. 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

No special measures are necessary.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water.

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

#### Advice on how to contain a spill

Covering of drains.

Ireland (en) Page 3 / 15

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

#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33

### 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**

No special measures are necessary.

#### Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs.

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

Keep in a cool place.

# **Incompatible substances or mixtures**

Observe hints for combined storage.

Consideration of other advice:

#### Specific designs for storage rooms or vessels

Recommended storage temperature: -20 °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)**

Cou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
EU	ethylene glycol	107-21-1	IOELV	20	52	40	104			Н	2000/39/ EC
IE	ethane-1,2-diol	107-21-1	OELV	20	40	52	104			H	S.I. No. 619 of 2001

Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur

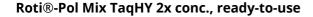
Absorbed through the skin Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-STEL

TWA

minute period (unless otherwise specified)
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)

Ireland (en) Page 4 / 15

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



article number: 1K33



instance)

short-term (single

instance)

Relevant DNELs	Relevant DNELs of components of the mixture												
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time							
Ethylene glycol	107-21-1	DNEL	35 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects							
Ethylene glycol	107-21-1	DNEL	106 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects							

#### Relevant PNECs of components of the mixture **CAS No** Name of sub-End-**Threshol** Organism **Environmental Exposure time** stance point d level compartment 10 <sup>mg</sup>/<sub>l</sub> Ethylene glycol 107-21-1 **PNEC** aquatic organfreshwater short-term (single isms instance) Ethylene glycol 107-21-1 PNEC 1 <sup>mg</sup>/<sub>I</sub> aquatic organmarine water short-term (single instance) isms Ethylene glycol 107-21-1 **PNEC** 199,5 <sup>mg</sup>/<sub>l</sub> aquatic organsewage treatment short-term (single plant (STP) instance) isms $37 \, ^{mg}/_{kg}$ Ethylene glycol 107-21-1 **PNEC** freshwater sedishort-term (single aquatic organisms ment instance) $3,7 \frac{mg}{kq}$ aquatic organ-Ethylene glycol 107-21-1 **PNEC** marine sediment short-term (single

1,53 <sup>mg</sup>/<sub>kg</sub>

isms

terrestrial organ-

isms

soil

#### 8.2 Exposure controls

## Individual protection measures (personal protective equipment)

**PNEC** 

#### **Eye/face protection**

Ethylene glycol





Use safety goggle with side protection.

107-21-1

#### Skin protection





hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

• type of material

NBR (Nitrile rubber)

material thickness

>0,11 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

Ireland (en) Page 5 / 15

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

# ®

#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33

#### other protection measures

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

#### **Respiratory protection**





Respiratory protection necessary at: Aerosol or mist formation. Usually no personal respirative protection necessary.

### **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 acc. to product description

Odour this information is not available

Melting point/freezing point not determined

Boiling point or initial boiling point and boiling 100 °C at 1.013 hPa

range

Flammability

Lower and upper explosion limit

Flash point

Auto-ignition temperature

Decomposition temperature

pH (value)

not determined

not relevant

not determined

not determined

not determined

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

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

Vapour pressure 23 hPa at 20 °C

Density and/or relative density

Density  $\sim 1 \, {}^{9}/_{\text{cm}^3}$  at 20  ${}^{\circ}\text{C}$ 

Relative vapour density information on this property is not available

Ireland (en) Page 6 / 15

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

#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

classes:

hazard classes acc. to GHS (physical hazards): not relevant

Other safety characteristics:

Miscibility completely miscible with water

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

#### 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

There are no specific conditions known which have to be avoided.

## 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 hazard classes as defined in Regulation (EC) No 1272/2008

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 according to GHS (1272/2008/EC, CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/ EC.

#### **Acute toxicity**

Shall not be classified as acutely toxic.

#### Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Ethylene glycol	107-21-1	oral	500 <sup>mg</sup> / <sub>kg</sub>

Ireland (en) Page 7 / 15



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



#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33

Acute toxicity of components of the mixture									
Name of substance	CAS No	Exposure route	Endpoint	Value	Species				
Ethylene glycol	107-21-1	dermal	LD50	>3.500 <sup>mg</sup> / <sub>kg</sub>	mouse				
Ethylene glycol	107-21-1	oral	LD50	4.700 <sup>mg</sup> / <sub>kg</sub>	rat				

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

## Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### 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

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

#### Specific target organ toxicity - repeated exposure

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

Hazard category	Target organ	Exposure route
2	kidney	if swallowed

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

### Symptoms related to the physical, chemical and toxicological characteristics

#### If swallowed

vomiting, nausea

## • If in eyes

Data are not available.

#### If inhaled

Data are not available.

#### • If on skin

Data are not available.

#### Other information

none

#### 11.2 Endocrine disrupting properties

Ireland (en) Page 8 / 15

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



#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33

Does not contain an endocrine disruptor (EDC) in a concentration of  $\geq$  0,1%.

#### 11.3 Information on other hazards

There is no additional information.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture											
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time						
Ethylene glycol	107-21-1	LC50	>72.860 <sup>mg</sup> / <sub>l</sub>	fish	96 h						
Ethylene glycol	107-21-1	EC50	>100 <sup>mg</sup> / <sub>l</sub>	daphnia magna	48 h						
Ethylene glycol	107-21-1	ErC50	<13.000 <sup>mg</sup> / <sub>l</sub>	algae	96 h						

Aquatic toxicity (c	Aquatic toxicity (chronic) of components of the mixture										
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time						
Ethylene glycol	107-21-1	LC50	>1.500 <sup>mg</sup> / <sub>l</sub>	fish	28 d						
Ethylene glycol	107-21-1	EC50	>15.000 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	21 d						

## 12.2 Persistence and degradability

Degradabilit	Degradability of components of the mixture									
Name of CAS No Process Degrada- substance Time Method						Source				
Ethylene glycol	107-21-1	biotic/abiotic	83 – 96 %	14 d						
Ethylene glycol         107-21-1         DOC removal         90 – 100 %         10 d         ECH										

## 12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture									
Name of substance	Name of substance CAS No BCF Log KOW BOD5/COD								
Ethylene glycol	Ethylene glycol 107-21-1 -1,36								

#### 12.4 Mobility in soil

Data are not available.

#### 12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance in a concentration of  $\geq 0.1\%$ .

#### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of  $\geq$  0,1%.

Ireland (en) Page 9 / 15

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

## Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33

#### 12.7 Other adverse effects

Data are not available.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods



Consult the appropriate local waste disposal expert about waste disposal.

#### Sewage disposal-relevant information

Do not empty into drains.

#### 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.

#### 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	not subject to transport regulations

**14.2 UN proper shipping name** not assigned

**14.3 Transport hazard class(es)** none

**14.4 Packing group** not assigned

**14.5 Environmental hazards** non-environmentally hazardous acc. to the dan-

gerous goods regulations

#### 14.6 Special precautions for user

There is no additional information.

#### 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

**International Maritime Dangerous Goods Code (IMDG) - Additional information**Not subject to IMDG.

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

Not subject to ICAO-IATA.

Ireland (en) Page 10 / 15



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

#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33



# SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Dangerous substances with restrictions	(RFACH	Anney XVII)
Dangerous substances with restrictions	(NEACII,	WILLIEV VATT)

Name of substance	Name acc. to inventory	CAS No	Restriction	No
Ethylene glycol	this product meets the criteria for classification in accordance with Reg- ulation No 1272/2008/EC		R3	3

#### Legend

- 1. Shall not be used in:
- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

- tricks and jokes,

games for one or more participants, or any article intended to be used as such, even with ornamental aspects,

- Articles not complying with paragraph 1 shall not be placed on the market.
   Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they
- can be used as fuel in decorative oil lamps for supply to the general public, and present an aspiration hazard and are labelled with H304.

- 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation
- (CEN).
  5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following require-
- (a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil or even sucking the wick of lamps may lead to life-threatening lung damage"; (b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage'; (c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black

opaque containers not exceeding 1 litre by 1 December 2010.';

#### **Seveso Directive**

2012/	2012/18/EU (Seveso III)		
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
	not assigned		

#### **Deco-Paint Directive**

VOC content	9,024 %
VOC content (Water content was discounted)	788,2 <sup>g</sup> / <sub>l</sub>

#### **Industrial Emissions Directive (IED)**

VOC content	9,024 %
VOC content (Water content was discounted)	788,2 <sup>g</sup> / <sub>l</sub>

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

none of the ingredients are listed

Ireland (en) Page 11 / 15

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

#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33

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

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

#### 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**

Inventory	Status
AIIC	not all ingredients are listed
DSL	not all ingredients are listed
IECSC	not all ingredients are listed
ECSI	not all ingredients are listed
REACH Reg.	not all ingredients are listed
CSCL-ENCS	not all ingredients are listed
ISHA-ENCS	not all ingredients are listed
KECI	not all ingredients are listed
INSQ	not all ingredients are listed
NZIoC	not all ingredients are listed
PICCS	not all ingredients are listed
CICR	not all ingredients are listed
TCSI	not all ingredients are listed
TSCA	not all ingredients are listed
	AIIC  DSL  IECSC  ECSI  REACH Reg.  CSCL-ENCS  ISHA-ENCS  KECI  INSQ  NZIOC  PICCS  CICR  TCSI

Legend

AIIC CICR Australian Inventory of Industrial Chemicals

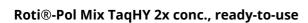
Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS) CSCL-ENCS DSL ECSI IECSC

Domestic Substances List (DSL)
EC Substance Inventory (EINECS, ELINCS, NLP)
Inventory of Existing Chemical Substances Produced or Imported in China National Inventory of Chemical Substances

National Inventory of Chemical Substances
ISHA-ENCS
KECI
NZIOC
NECS
PICCS
PICCS
REACH Reg.
REACH registered substances
National Inventory of Chemical Substances (ISHA-ENCS)
New Zealand Inventory of Chemicals
Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.
REACH registered substances
Taiwan Chemical Substance

Ireland (en) Page 12 / 15

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



article number: 1K33

Legend

TSCA Toxic Substance Control Act

## 15.2 Chemical Safety Assessment

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

# **SECTION 16: Other information**

## Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
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.	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance in a concentration of ≥ 0,1%.	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0,1%.	yes
14.8	Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information:  Not subject to ADR, RID and ADN.		yes
15.1		VOC content (Water content was discounted): 788,2 <sup>9</sup> / <sub>l</sub>	yes
15.1		VOC content (Water content was discounted): 788,2 <sup>9</sup> / <sub>l</sub>	yes
15.1		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.	yes
15.1		National inventories: change in the listing (table)	yes

## **Abbreviations and acronyms**

Abbr.	Descriptions of used abbreviations
2000/39/EC	Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC
Acute Tox.	Acute toxicity
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
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
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)

Ireland (en) Page 13 / 15



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

## Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33



Abbr.	Descriptions of used abbreviations
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)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
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
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
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
log KOW	n-Octanol/water
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)
S.I. No. 619 of 2001	Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

## Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Ireland (en) Page 14 / 15

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



#### Roti®-Pol Mix TaqHY 2x conc., ready-to-use

article number: 1K33

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
H302	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.

#### **Disclaimer**

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

Ireland (en) Page 15 / 15