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

#### Silver bromide ROTI®METIC 99,999 % (5N)

date of compilation: 2022-05-04 article number: 5739 Version: 1.0 en



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

#### **Product identifier** 1.1

Identification of the substance Silver bromide ROTI®METIC 99,999 % (5N)

Article number 5739

EC number 232-076-8 CAS number 7785-23-1

#### 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:

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**

#### Classification of the substance or mixture 2.1

#### Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
4.1A	Hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400
4.1C	Hazardous to the aquatic environment - chronic hazard	1	Aquatic Chronic 1	H410

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

United Kingdom (en) Page 1 / 16

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

## Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739

#### 2.2 **Label elements**

Signal word Warning

**Pictograms** 

GHS09



# **Hazard statements**

H410 Very toxic to aquatic life with long lasting effects

# **Precautionary statements**

**Precautionary statements - prevention** 

Avoid release to the environment P273

**Precautionary statements - response** 

P391 Collect spillage

#### Other hazards 2.3

#### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

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

#### 3.1 **Substances**

Name of substance Silver bromide

Molecular formula AgBr

Molar mass 187,8 <sup>g</sup>/<sub>mol</sub> CAS No 7785-23-1 EC No 232-076-8

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

Specific Conc. Limits	M-Factors	ATE	Exposure route
-	M-factor (acute) = 100 M-factor (chronic) = 100	-	

United Kingdom (en) Page 2 / 16



Labelling

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

Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



# **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures



#### **General notes**

Take off contaminated clothing.

# Following inhalation

Provide fresh air.

# Following skin contact

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

Symptoms and effects are not known to date.

#### 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, foam, dry extinguishing powder, ABC-powder

# Unsuitable extinguishing media

water jet

# 5.2 Special hazards arising from the substance or mixture

Non-combustible.

## **Hazardous combustion products**

In case of fire may be liberated:

# 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.

United Kingdom (en) Page 3 / 16

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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



# **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 dust.

### 6.2 Environmental precautions

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

## 6.3 Methods and material for containment and cleaning up

# Advice on how to contain a spill

Covering of drains. Take up mechanically.

#### Advice on how to clean up a spill

Take up mechanically. Control of dust.

#### Other information relating to spills and releases

Place in appropriate containers for disposal.

#### 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

Avoid dust formation.

#### Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits.

#### 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.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place.

#### **Incompatible substances or mixtures**

Observe hints for combined storage.

# **Consideration of other advice:**

#### **Ventilation requirements**

Use local and general ventilation.

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

United Kingdom (en) Page 4 / 16

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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



# SECTION 8: Exposure controls/personal protection

#### 8.1 **Control parameters**

#### **National limit values**

#### Occupational exposure limit values (Workplace Exposure Limits)

Coun	Name of agent	CAS No	Identifi- er	TWA [mg/ m³]	STEL [mg/ m³]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
GB	dust		WEL	10			i	EH40/2005
GB	dust		WEL	4			r	EH40/2005

Notation

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

Inhalable fraction Respirable fraction

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)

Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 TWA

hours time-weighted average (unless otherwise specified)

#### **Human health values**

Relevant DNELs and other threshold levels						
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time		
DNEL	0,17 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects		

#### **Environmental values**

#### Relevant PNECs and other threshold levels End-Organism **Threshold Exposure time Environmental com**level point partment **PNEC** $0.04 \, \mu g/I$ aquatic organisms freshwater short-term (single instance) $0.86 \, \mu g/I$ **PNEC** aquatic organisms marine water short-term (single instance) **PNEC** 0,025 mg/l sewage treatment plant short-term (single instance) aquatic organisms (STP) 438,1 <sup>mg</sup>/<sub>kg</sub> **PNEC** freshwater sediment aquatic organisms short-term (single instance) 438,1 <sup>mg</sup>/<sub>kg</sub> **PNEC** aquatic organisms marine sediment short-term (single instance) 0,794 <sup>mg</sup>/<sub>kg</sub> **PNEC** terrestrial organisms soil short-term (single instance)

#### 8.2 **Exposure controls**

United Kingdom (en) Page 5 / 16



No information available.

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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



#### **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

>0,11 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.

#### Respiratory protection





Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.

United Kingdom (en) Page 6 / 16

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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

Physical state solid
Form powder
Colour yellow

Odour odourless

Melting point/freezing point 432 °C at 1.013 hPa (ECHA) Boiling point or initial boiling point and boiling 1.502 °C at 1.013 hPa (ECHA)

range

Flammability non-combustible
Lower and upper explosion limit not determined
Flash point not applicable
Auto-ignition temperature not determined
Decomposition temperature not relevant
pH (value) not applicable
Kinematic viscosity not relevant

Solubility(ies)

Water solubility (practically insoluble)

Partition coefficient

Partition coefficient n-octanol/water (log value): not relevant (inorganic)

Vapour pressure 0,01 hPa at 569 °C

Density and/or relative density

Density  $6,47 \, {}^{9}/_{\text{cm}^3} \text{(ECHA)}$ 

Relative vapour density information on this property is not available

Particle characteristics No data available.

Other safety parameters

Oxidising properties none

9.2 Other information

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

Other safety characteristics: There is no additional information.

United Kingdom (en) Page 7 / 16

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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



# **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, Metals, Sodium

#### 10.4 Conditions to avoid

UV-radiation/sunlight.

#### 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

#### Classification acc. to GHS

#### **Acute toxicity**

Shall not be classified as acutely toxic.

#### **Acute toxicity**

Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	>5.110 <sup>mg</sup> / <sub>kg</sub>	rat		ECHA

#### 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).

United Kingdom (en) Page 8 / 16

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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



# Specific target organ toxicity - repeated exposure

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

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

# Symptoms related to the physical, chemical and toxicological characteristics

#### If swallowed

Data are not available.

#### • If in eyes

Data are not available.

#### If inhaled

Data are not available.

#### • If on skin

Data are not available.

#### Other information

There is no additional information

## 11.2 Endocrine disrupting properties

Not listed.

#### 11.3 Information on other hazards

There is no additional information.

# **SECTION 12: Ecological information**

## 12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (act	ıte)			
Endpoint	Value	Species	Source	Exposure time
LC50	1,2 <sup>µg</sup> / <sub>l</sub>	fish	ECHA	96 h

# Aquatic toxicity (chronic) Endpoint Value Species Source Exposure time EC50 0,8 \(^{\mu}9/\_1\) aquatic invertebrates ECHA 7 d

# **Biodegradation**

The methods for determining the biological degradability are not applicable to inorganic substances.

## 12.2 Process of degradability

Data are not available.

# 12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

United Kingdom (en) Page 9 / 16

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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



#### 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

Not 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 3077
IMDG-Code UN 3077
ICAO-TI UN 3077

## 14.2 UN proper shipping name

ADRRID ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S.

IMDG-Code ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S.

ICAO-TI Environmentally hazardous substance, solid,

n.o.s.

United Kingdom (en) Page 10 / 16



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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



	Technical name	Silver bromide
14.3	Transport hazard class(es)	
	ADRRID	9
	IMDG-Code	9
	ICAO-TI	9
14.4	Packing group	
	ADRRID	III
	IMDG-Code	III
	ICAO-TI	III
14.5	Environmental hazards	hazardous to the aquatic environment

#### 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	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Particulars in the transport document	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (Silver bromide), 9, III, (-)
Classification code	M7
Danger label(s)	9, "Fish and tree"



Environmental hazards yes (hazardous to the aquatic environment)

Special provisions (SP) 274, 335, 375, 601

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 kg
Transport category (TC) 3
Tunnel restriction code (TRC) Hazard identification No 90
Emergency Action Code 22

# Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information

Classification code 9

Danger label(s) 9

Fish and tree

United Kingdom (en) Page 11 / 16

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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



Environmental hazards Ye

Hazardous to water

**Special provisions (SP)** 274, 335, 375, 601

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 kg
Transport category (TC) 3
Hazard identification No 90

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S.

Particulars in the shipper's declaration UN3077, ENVIRONMENTALLY HAZARDOUS SUB-

STANCE, SOLID, N.O.S., (Silver bromide), 9, III

Marine pollutant yes (hazardous to the aquatic environment), (Silver bromide)

Danger label(s) 9, "Fish and tree"

Special provisions (SP) 274, 335, 966, 967, 969

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 kg
EmS F-A, S-F

Stowage category A

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

Proper shipping name Environmentally hazardous substance, solid,

n.o.s.

Particulars in the shipper's declaration UN3077, Environmentally hazardous substance,

solid, n.o.s., (Silver bromide), 9, III

Environmental hazards yes (hazardous to the aquatic environment)

Danger label(s) 9, "Fish and tree"

Special provisions (SP) A97, A158, A179, A197, A215

Excepted quantities (EQ) E1

Limited quantities (LQ) 30 kg

United Kingdom (en) Page 12 / 16

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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



# **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/	2012/18/EU (Seveso III)						
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes				
E1	environmental hazards (hazardous to the aquatic environment, cat. 1)	100 200	56)				

#### Notation

56) Hazardous to the Aquatic Environment in category Acute 1 or Chronic 1

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

VOC content 0 %	
-----------------	--

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

VOC content 0 %	
-----------------	--

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

not listed

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

not listed

#### **Water Framework Directive (WFD)**

# List of pollutants (WFD) Name of substance Name acc. to inventory CAS No Listed in Remarks Silver bromide Metals and their compounds a)

# Legend

A) Indicative list of the main pollutants

# Regulation on the marketing and use of explosives precursors

not listed

# **Regulation on drug precursors**

not listed

Regulation on substances that deplete the ozone layer (ODS)

not listed

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

not listed

Regulation on persistent organic pollutants (POP)

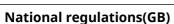
not listed

United Kingdom (en) Page 13 / 16

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

#### Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

Restrictions according to GB REACH, Annex 17

not 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**

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed

Legend

AIIC

Australian Inventory of Industrial Chemicals List of Existing and New Chemical Substances (CSCL-ENCS)

CSCL-ENCS DSL ECSI IECSC KECI DSL Domestic Substances List (DSL)
ECSI EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC Inventory of Existing Chemical Substances Produced or Imported in China 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

Taiwan Chemical Substance Inventory

TSCA Toxic Substance Control Act

#### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

# **SECTION 16: Other information**

#### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de naviga- tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In- land Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)

United Kingdom (en) Page 14 / 16



# **Safety data sheet Safety data sheet** acc. to Regulation (EC) No. 1907/2006 (REACH)

# Silver bromide ROTI®METIC 99,999 % (5N)

article number: **5739** 



Abbr.	Descriptions of used abbreviations
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
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-li- cence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
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
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
M-factor	Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
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)
STEL	Short-term exposure limit
TWA	Time-weighted average
VOC	Volatile Organic Compounds

Page 15 / 16 United Kingdom (en)

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

# Silver bromide ROTI®METIC 99,999 % (5N)

article number: 5739



Abbr.	Descriptions of used abbreviations
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).

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

Code	Text
H400	Very toxic to aquatic life.
H410	Very toxic 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.

United Kingdom (en) Page 16 / 16