Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: **5384** Version: **2.0 en** Replaces version of: 2016-11-10 Version: (1)

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

1.1 Product identifier

Identification of the substance

Article number

Registration number (REACH)

Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

5384

207398-97-8

Laboratory chemical

sicherheit@carlroth.de

Laboratory and analytical use

It is not required to list the identified uses because the substance is not subject to registration according to REACH (< 1 t/a).

CAS number

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

Relevant identified uses:

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):

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



date of compilation: 2016-11-10 Revision: 2022-02-11

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



Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: 5384

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

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
2.14	2.14 Oxidising solid 2		Ox. Sol. 2	H272
3.2	3.2 Skin corrosion/irritation		Skin Irrit. 2	H315
3.3	3.3 Serious eye damage/eye irritation		Eye Irrit. 2	H319

For full text of abbreviations: see SECTION 16

2.2 Label elements

H319

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

Signal word	Danger
Pictograms	
GHS03, GHS07	
Hazard statements	
H272 H315	May intensify fire; oxidiser Causes skin irritation

Precautionary statements

Precautionary statements - prevention

P220Keep/store away from clothing/combustible materialsP280Wear protective gloves/eye protection

Causes serious eye irritation

Precautionary statements - response

P302+P352	IF ON SKIN: Wash with plenty of water
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	lenses, if present and easy to do. Continue rinsing

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger



2.3 Other hazards

Results of PBT and vPvB assessment

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

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



Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: 5384

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance Molecular formula Molar mass CAS No Indium(III) nitrate pentahydrate In(NO₃)₃ · 5 H₂O 390,9 ^g/_{mol} 207398-97-8

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.

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.

Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

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

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

Oxidising property. Non-combustible.

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



article number: **5384**

Hazardous combustion products

In case of fire may be liberated: Nitrogen oxides (NOx)

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

Avoid contact with skin, eyes and clothes. Do not breathe dust.

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. 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

Keep away from combustible material.

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 well-ventilated place. Keep container tightly closed. Store in a dry place.

Incompatible substances or mixtures

Observe hints for combined storage. Keep/store away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles.

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C



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



article number: 5384

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)

This information is not available.

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 consider-able 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





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



Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: 5384

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.

SECTION 9: Physical and chemical properties

9.1	Information on basic physical and chemical properties		
	Physical state	solid	
	Form	crystalline	
	Colour	white	
	Odour	odourless	
	Melting point/freezing point	not determined	
	Boiling point or initial boiling point and boiling range	not determined	
	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	(soluble)	
	Partition coefficient		
	Partition coefficient n-octanol/water (log value):	not relevant (inorganic)	
	Vapour pressure	not determined	
	Density and/or relative density		
	Density	not determined	
	Relative vapour density	information on this property is not available	
	Particle characteristics	No data available.	
	Other safety parameters		
	Oxidising properties	oxidiser	

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



Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: 5384

9.2 Other information

Information with regard to physical hazard classes:

There is no additional information.

There is no additional information.

Other safety characteristics:

SECTION 10: Stability and reactivity

10.1 Reactivity

It's a reactive substance. Oxidising property.

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: Reducing agents, Strong acid

- **10.4 Conditions to avoid** Humidity.
- **10.5 Incompatible materials** combustible materials, reducing agents
- **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

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

Acute toxicity

Shall not be classified as acutely toxic.

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

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

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



Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: 5384

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

Causes serious eye irritation

• If inhaled

Data are not available.

• If on skin

causes skin irritation

• Other information

This information is based upon the present state of our knowledge. Substance not yet fully tested. Headache, Dyspnoea, Nausea, Vomiting, Irritation

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

Shall not be classified as hazardous to the aquatic environment.

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

Data are not available.

- **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.

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



Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: **5384**

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.

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 1477
	IMDG-Code	UN 1477
	ICAO-TI	UN 1477
14.2	UN proper shipping name	
	ADRRID	NITRATES, INORGANIC, N.O.S.
	IMDG-Code	NITRATES, INORGANIC, N.O.S.
	ICAO-TI	Nitrates, inorganic, n.o.s.
14.3	Transport hazard class(es)	
	ADRRID	5.1
	IMDG-Code	5.1
	ICAO-TI	5.1
14.4	Packing group	
	ADRRID	II
	IMDG-Code	II
	ICAO-TI	II
14.5	Environmental hazards	non-environmentally hazardous acc. to the dan- gerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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



Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: 5384

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 information	l inland waterway (ADR/RID/ADN) - Additional
Proper shipping name	NITRATES, INORGANIC, N.O.S.
Particulars in the transport document	UN1477, NITRATES, INORGANIC, N.O.S., 5.1, II, (E)
Classification code	02
Danger label(s)	5.1
0 51	
Special provisions (SP)	511
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 kg
Transport category (TC)	2
Tunnel restriction code (TRC)	E
Hazard identification No	50
Emergency Action Code	1Y
Regulations concerning the International Carrini information	iage of Dangerous Goods by Rail (RID)Additional
Classification code	5.1
Danger label(s)	5.1
Special provisions (SP)	511
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 kg
Transport category (TC)	2
Hazard identification No	50
International Maritime Dangerous Goods Code	(IMDG) - Additional information
Proper shipping name	NITRATES, INORGANIC, N.O.S.
Particulars in the shipper's declaration	UN1477, NITRATES, INORGANIC, N.O.S., 5.1, II
Marine pollutant	-
Danger label(s)	5.1

Special provisions (SP)

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



Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 kg
EmS	F-A, S-Q
Stowage category	A
International Civil Aviation Organization (IC	AO-IATA/DGR) - Additional information
Proper shipping name	Nitrates, inorganic, n.o.s.
Particulars in the shipper's declaration	UN1477, Nitrates, inorganic, n.o.s., 5.1, II
Danger label(s)	5.1
Special provisions (SP)	A3
Excepted quantities (EQ)	E2
Limited quantities (LQ)	2,5 kg

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)

Restrictions according to REACH, Annex XVII

Dangerous substances with restrictions (REACH, Annex XVII)				
Name of substance	Name acc. to inventory	CAS No	Restriction	No
Indium(III) nitrate pentahydrate	substances in tattoo inks and perman- ent make-up		R75	75
 stances shall not be used for tatt are present in the following circu (a) in the case of a substance clas 1A, 1B or 2, or germ cell mutage equal to or greater than 0,00005 (b) in the case of a substance clas category 1A, 1B or 2, the substar weight; (c) in the case of a substance clas egory 1, 1A or 1B, the substance weight; (d) in the case of a substance clas egory 1, 1A, 1B or 1C or skin irrit. substance is present in the mixtu (i) 0,1% by weight, in all other of (e) in the case of a substance last mixture in a concentration equal (f) in the case of a substance for (Product type, Body parts) of the mixture in a concentration equal (ii) "Not to be used in products ap (iii) "Not to be used in eye produc (g) in the case of a substance for preparation) or column i (Other) the mixture in a concentration, o (h) in the case of a substance list tration equal to or greater than t 2. For the purposes of this entry ture into a person's skin, mucous 	ssified in Part 3 of Annex VI to Regulation n category 1A, 1B or 2, the substance is p % by weight; ssified in Part 3 of Annex VI to Regulation nce is present in the mixture in a concentu ssified in Part 3 of Annex VI to Regulation is present in the mixture in a concentrati ssified in Part 3 of Annex VI to Regulation ant category 2, or as serious eye damage ure in a concentration equal to or greater ice is used solely as a pH regulator; cases; ed in Annex II to Regulation (EC) No 1223 to or greater than 0,00005 % by weight; which a condition of one or more of the f table in Annex IV to Regulation (EC) No 1 to or greater than 0,00005 % by weight; polied on mucous membranes";	he substance of (EC) No 1272/ resent in the n (EC) No 1272/ ration equal to (EC) No 1272/ on equal to or (EC) No 1272/ on equal to or (EC) No 1272/ category 1 or than: /2009 (*1), the ollowing kinds 223/2009, the h (Maximum cc) No 1223/200 d with the constance in the means injection procedure (in the constance)	or substances in ques 2008 as carcinogen of nixture in a concentr 2008 as reproductive or greater than 0,00 2008 as skin sensitise greater than 0,001 % 2008 as skin corrosiv eye irritant category substance is present substance is present oncentration in ready 9, the substance is present dition specified in colum substance is present oncentration in ready 9, the substance is p dition specified in that nt in the mixture in a tat Appendix. on or introduction of icluding procedures of	tion is c ategory ation toxicar toxica

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

Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: 5384

Legend

making a mark or design on his or her body. 3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of

4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
(a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
(b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).
5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a sub-transfer to the better the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify a sub-transfer to the bar of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify a sub-transfer to the bar of Annex VI to Re stance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of ap-

that it then falls within a different one of those points from the one within which it fell previously, and the date of ap-plication of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, para-graph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification. 6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made. 7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information: (a) the statement "Mixture for use in tattoos or permanent make-up"; (b) a reference number to uniquely identify the batch; (c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient

(c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredi-ent does not need to be marked in accordance with this Regulation; (d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1; (e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentra-tion line for a statement "contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentra-

tion limit specified in Appendix 13

(f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below (r) the statement contains chromium (vi). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13; (g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.

The information shall be clearly visible, easily legible and marked in a way that is indelible. The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise. Where necessary because of the size of the package, the information listed in the first subparagraph, except for point

(a), shall be included instead in the instructions for use.

Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this para-

graph. 8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.

 9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).
 10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device. accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclus ively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

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

Not listed.

Seveso Directive

2012/18/EU (Seveso III)				
No	Dangerous substance/hazard categories	es Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes
P8	oxidising liquids and solids	50	200	55)

Notation

Oxidising liquids, category 1, 2 or 3, or oxidising solids, category 1, 2 or 3 55)



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



Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: 5384

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
Indium(III) nitrate pentahydrate	Substances which contribute to eutrophication (in particular, ni- trates and phosphates)		a)	
Indium(III) nitrate pentahydrate	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

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
TW	TCSI	substance is listed

Legend

TCSI Taiwan Chemical Substance Inventory

15.2 Chemical Safety Assessment

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

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

Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)



article number: **5384**

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Alignment to regulation: Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

Restructuring: section 9, section 14

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.1		Classification according to Regulation (EC) No 1272/2008 (CLP): change in the listing (table)	yes
2.1	Remarks: Caution substance not yet fully tested. For full text of Hazard- and EU Hazard-state- ments: see SECTION 16.		yes
2.2		Pictograms: change in the listing (table)	yes
2.2		Precautionary statements - prevention: change in the listing (table)	yes
2.3	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.	yes

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 concern- ing the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EmS	Emergency Schedule
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions
ΙΑΤΑ	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
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals

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



Indium(III) nitrate pentahydrate ROTI®METIC 99,999 % (5N)

article number: **5384**

Abbr.	Descriptions of used abbreviations	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)	
SVHC	Substance of Very High Concern	
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.

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
H272	May intensify fire; oxidiser.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Disclaimer

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