

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

1.1 Product identifier

Trade name

Octopol NB-47

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

Relevant identified uses of the substance or mixture

Industrial raw material

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

Tiarco Chemical Europe GmbH

Am Gut Baarking 12

46395 Bocholt

Telephone no. +49 2871 23476-0

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e-mail europeansales@trcc.com

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Acute Tox. 3; H311

Acute Tox. 4; H302

Aquatic Acute 1; H400

Eye Dam. 1; H318

Skin Corr. 1C; H314

Skin Sens. 1; H317

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms



GHS05



GHS06



GHS09

Signal word

Danger

Hazardous component(s) to be indicated on label:

sodium-dibutyldithiocarbamate

Hazard statement(s)

H302

Harmful if swallowed.

H311

Toxic in contact with skin.

H314

Causes severe skin burns and eye damage.



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H317 May cause an allergic skin reaction.
 H400 Very toxic to aquatic life.

Precautionary statement(s)

P260 Do not breathe gas/vapours/spray.
 P264 Wash thoroughly after handling.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P391 Collect spillage.

Labelling information

The substance is solely manufactured and marketed as ca. 47% aqueous solution. The classification applies to the substance as manufactured and shall not be applied to the pure substance.

2.3 Other hazards

PBT assessment
 The product is not considered to be a PBT.
 vPvB assessment
 The product is not considered to be a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization

aqueous solution

Hazardous ingredients

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	sodium-dibutylidithiocarbamate		
	136-30-1 205-238-0 - 01-2119560622-42	Acute Tox. 3; H311 Skin Corr. 1C; H314 Eye Dam. 1; H318 Acute Tox. 4; H302 Skin Sens. 1; H317 Aquatic Acute 1; H400	47.00 wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

Acute toxicity estimate (ATE) values

No	oral	dermal	inhalative
1	672 mg/kg bodyweight	300 mg/kg bodyweight	

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. Poisonous symptoms can first be observed after several hours, therefore medical observation for at least 48 hours is necessary.

After inhalation

Remove to fresh air, keep patient warm and at rest. Irregular breathing/no breathing: artificial respiration. Call a doctor immediately.

After skin contact

In case of contact with skin wash off immediately with soap and water. Call a doctor immediately.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion

Call a doctor immediately. Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Never give



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anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

burns; Allergic symptoms; Respiratory tract irritation; Harmful if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

General information for dithiocarbamates

- Biomonitoring for possible chronic exposure: Determination of TTCA in urine at the end of the Working days / week.

- Blood tests for delayed effects: liver values, kidney function, thyroid function

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Extinguishing powder; Water spray jet; Foam; Carbon dioxide

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide and carbon dioxide; Nitrous oxides (NO_x); Sulphur oxides (S_xO_y); Hydrogen cyanide (HCN)

5.3 Advice for firefighters

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Wear full protective suit. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation. Refer to protective measures listed in sections 7 and 8.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g., sand, kieselguhr, acid binder, universal binder, sawdust). When collected, handle material as described under the section heading "Disposal considerations".

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation at the work area (local exhaust ventilation, if necessary). Avoid eye, skin and clothing contact. Do not breathe steams or mist of the product.

General protective and hygiene measures

Wash hands before breaks and after work. Avoid contact with eyes and skin. Keep separated from food-stuffs and feed-stocks. Do not eat or drink during work - no smoking. Do not inhale gases/vapours/aerosols. Provide eye wash fountain in work area. Have emergency shower available.

Advice on protection against fire and explosion

Pay attention to general rules of internal fire prevention.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Store at cool and aired place.

Recommended storage temperature

Value 20 - 25 °C

Octopol NB-47**Requirements for storage rooms and vessels**

Keep only in the original container. Containers which are opened must be carefully closed and kept upright to prevent leakage.

Incompatible products

Do not store together with: Acids; oxidizing agents

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****DNEL, DMEL and PNEC values****DNEL values (worker)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	sodium-dibutyldithiocarbamate			136-30-1 205-238-0	
	dermal	Long term (chronic)	systemic	5	mg/kg/day
	inhalative	Long term (chronic)	systemic	2	mg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	sodium-dibutyldithiocarbamate			136-30-1 205-238-0	
	oral	Long term (chronic)	systemic	0.3	mg/kg/day
	dermal	Long term (chronic)	systemic	3	mg/kg/day
	inhalative	Long term (chronic)	systemic	0.5	mg/m ³
	inhalative	Short term (acut)	systemic	0.5	mg/m ³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	sodium-dibutyldithiocarbamate		136-30-1 205-238-0	
	water	fresh water	9.1	µg/L
	water	Aqua intermittent	9.1	µg/L
	water	marine water	0.91	µg/L
	water	fresh water sediment	2.09	mg/kg dry weight
	water	marine water sediment	0.209	mg/kg dry weight
	soil	-	0.412	mg/kg dry weight
	sewage treatment plant	-	36.5	µg/L

8.2 Exposure controls**Appropriate engineering controls**

Provide adequate ventilation. This should be achieved by the use of local exhaust ventilation and good general extraction.

Personal protective equipment**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol, vapour and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Chemical resistant gloves (EN 374); Besides the suitable material, the choice of protective gloves depends additionally on quality criteria which may vary from one manufacturer to the other.

Appropriate Material chloroprene

Other



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Normal chemical work clothing.

Environmental exposure controls

Avoid release into sewage and environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation			
liquid			
Form/Colour			
liquid			
yellowish to brown			
Odour			
slight, characteristic			
pH value			
Value	10	-	12
Source	supplier		
Boiling point / boiling range			
Value	>	100	°C
Source	supplier		
Melting point/freezing point			
no data available			
Decomposition temperature			
Value	appr.	150	°C
Source	supplier		
Flash point			
Not applicable			
Source	supplier		
Ignition temperature			
No data available			
Explosive properties			
Product does not present an explosion hazard.			
Flammability			
No data available			
Lower explosion limit			
No data available			
Upper explosion limit			
No data available			
Vapour pressure			
Value	220		hPa
Reference temperature	20		°C
Source	supplier		
Relative vapour density			
No data available			
Relative density			
No data available			
Density			
Value	1.07	-	1.09 g/cm ³
Reference temperature		20	°C
Source	supplier		
Solubility in water			
Value	475		g/L
Reference temperature	20		°C
Source	supplier		

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Solubility
No data available

Partition coefficient n-octanol/water (log value)			
No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0
log Pow	<=	-0.2	
Reference temperature		20	°C
with reference to	pH: > 7 - <= 9		
Method	OECD 107		
Source	ECHA		

Viscosity
No data available

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No data available.

10.2 Chemical stability

Stable if maintained in the original packaging and under ordinary storage conditions.

10.3 Possibility of hazardous reactions

Reacts with acids to form toxic and highly flammable carbon disulphide.

10.4 Conditions to avoid

Keep from freezing. Protect from exposure to air/oxygen. Temperatures > 30 °C

10.5 Incompatible materials

Acids; Oxidizing agents

10.6 Hazardous decomposition products

Carbon disulphide; None if stored, handled and transported properly. In case of fire: see section 5.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute oral toxicity (result of the ATE calculation for the mixture)	
No	Product Name
1	Octopol NB-47
ATE (Mixture)	1429.79 mg/kg
Method	Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0
LD50		672	mg/kg bodyweight
Species	rat		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are met.		

Acute dermal toxicity (result of the ATE calculation for the mixture)	
No	Product Name
1	Octopol NB-47
ATE (Mixture)	638.30 mg/kg
Method	Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0



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LD50	200	-	1000	mg/kg bodyweight
Species	rabbit			
Method	OECD 402			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are met.			

Acute inhalational toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/irritation

No data available

Respiratory or skin sensitisation

No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0
Route of exposure		Skin	
Species		mouse	
Method		OECD 429	
Source		ECHA	
Evaluation		sensitizing	
Evaluation/classification		Based on available data, the classification criteria are met.	

Germ cell mutagenicity

No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0
Type of examination		in vitro gene mutation study in bacteria	
Species		S. typhimurium TA 1535, TA 1537, TA 98 and TA 100	
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity

No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Carcinogenicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Information on other hazards**Endocrine disrupting properties**

No data available.

Other information

No data available.

SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0
LC50		211	mg/l
Duration of exposure		96	h
Species		Poecilia reticulata	
Source		ECHA	

Toxicity to fish (chronic)



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No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0
NOEC		1	mg/l
Duration of exposure		11	day(s)
Species		Danio rerio	
Method		OECD 210	
Source		ECHA	

Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0
EC50		0.91	mg/l
Duration of exposure		48	h
Species		Daphnia magna	
Method		OECD 202	
Source		ECHA / Read across	

Toxicity to Daphnia (chronic)			
No data available			

Toxicity to algae (acute)			
No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0
EC50		1.4	mg/l
Duration of exposure		96	h
Species		Chlorella pyrenoidosa	
Method		OECD 201	
Source		ECHA / Read across	

Toxicity to algae (chronic)			
No data available			

Bacteria toxicity			
No data available			

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	Substance name	CAS no.	EC no.
1	sodium-dibutyldithiocarbamate	136-30-1	205-238-0
log Pow		<=	-0.2
Reference temperature			20 °C
with reference to		pH: > 7 - <= 9	
Method		OECD 107	
Source		ECHA	

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	The product is not considered to be a PBT.
vPvB assessment	The product is not considered to be a vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

Other adverse effects	
Because of damage to water organism do not fill in presurge.	
Adverse effect due to pH-shifting.	

12.8 Other information

Other information	
Product is not allowed to discharge into aquatic environment, drains or sewage treatment plants.	

SECTION 13: Disposal considerations

**Octopol NB-47****13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

Class	8
Classification code	CT1
Packing group	II
Hazard identification no.	86
UN number	UN2922
Proper shipping name	CORROSIVE LIQUID, TOXIC, N.O.S.
Technical name	sodium-dibutyldithiocarbamate
Tunnel restriction code	E
Label	8+6.1
Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	8
Subsidiary Risk	6.1
Packing group	II
UN number	UN2922
Proper shipping name	CORROSIVE LIQUID, TOXIC, N.O.S.
Technical name	sodium-dibutyldithiocarbamate
EmS	F-A, S-B
Label	8+6.1
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	8
Subrisk	6.1
Packing group	II
UN number	UN2922
Proper shipping name	Corrosive liquid, toxic, n.o.s.
Technical name	sodium-dibutyldithiocarbamate
Label	8+6.1

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

To be transported always in closed, upright and safe containers. Make sure that persons handling these containers are aware of the rules of conduct in case of incident or spillage.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

**Octopol NB-47**

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No 3

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is subject to Part I of Annex I, risk category:

E1

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information**Further information**

Authors responsible for the compilation of the material safety data sheet: UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de.

The information is based on our current knowledge however it does not represent a guarantee of product properties nor does it create any legal obligation.

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H318 Causes serious eye damage.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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