SECTION 1: Identification of the substance / preparation and of the company

1.1 Product identifier

Opticool 372

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

1.2.1 Relevant uses

Metalworking

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Chesterton International GmbH
Am Lenzenfleck 23
85737 Ismaning / GERMANY
Phone +49 89-996546-0
Fax +49 89-996546-50
Homepage www.chesterton.com/GER/Pages/default.aspx
E-mail customer.service@chesterton.com

Address enquiries to

Technical information customer.service@chesterton.com

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency phone

Advisory body +49 (0)89-19240 (24h) (english)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

No classification.

2.1.2 Classification according to Directive 67/548/EEC or 1999/45/EC

No classification.

2.2 Label elements

The product is required to be labelled in accordance with EC-Directives.

Labelling according to Regulation (EC) 1272/2008

Hazard pictograms none

Signal word none

Hazard statements none

Precautionary statements none

Special labelling EUH210 Safety data sheet available on request.

Contains: 3-iodo-2-propynyl butylcarbamate. EUH208 May produce an allergic reaction.

2.3 Other hazards

Human health dangers Has a degreasing effect on the skin.
Frequent persistent contact with the skin can cause skin irritation.
If swallowed or in the event of vomiting, risk of product entering the lungs.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

Range [%]	Substance
< 5,5	Boric acid
	CAS: 10043-35-3, EINECS/ELINCS: 233-139-2, EU-INDEX: 005-007-00-2, ECB-Nr.: 01-2119486683-25-XXXX
	GHS/CLP: Repr. 1B: H360FD
	EEC: T, R 60-61
1 - 5	2-(2-Butoxyethoxy)ethanol
	CAS: 112-34-5, EINECS/ELINCS: 203-961-6, EU-INDEX: 603-096-00-8, ECB-Nr.: 01-2119475104-44-XXXX
	GHS/CLP: Eye Irrit. 2: H319
	EEC: Xi, R 36
1 - 5	2-Butyloctan-1-ol
	CAS: 3913-02-8, EINECS/ELINCS: 223-470-0
	EEC: N, R 50
1 - 5	Fatty acid amide, ethoxylated
	CAS: 85536-23-8, EINECS/ELINCS: Polymer
	GHS/CLP: Skin Irrit. 2: H315
	EEC: Xi, R 38
< 0,5	3-iodo-2-propynyl butylcarbamate
	CAS: 55406-53-6, EINECS/ELINCS: 259-627-5, EU-INDEX: 616-212-00-7
	GHS/CLP: Acute Tox. 3: H331 - Acute Tox. 4: H302 - STOT RE 1: H372 - Eye Dam. 1: H318 - Skin Sens. 1: H317 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410, M = 10
	EEC: T-N, R 22-23-41-43-48/23-50

Comment on component parts

Contains less than 3% w/w DMSO-extract (only for mineral oils)
SVHC (Candidate List of Substances of Very High Concern for authorisation) ≥ 0,1%
CAS 10043-35-3 - Boric acid
For full text of H-statements and R-phrases: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Take off contaminated clothing and wash before reuse.

Inhalation

Ensure supply of fresh air.
In the event of symptoms seek for medical treatment.

Skin contact

When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion

Supply with medical care.
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
If swallowed or in the event of vomiting, risk of product entering the lungs.
Forward this sheet to the doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam, dry powder, water spray jet, carbon dioxide.

Extinguishing media that must not be used

Full water jet.

5.2 Special hazards arising from the substance or mixture

Not combusted hydrocarbons.
Carbon monoxide (CO).
Carbon dioxide (CO2)
Nitrogen oxides (NOx).

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.
Use self-contained breathing apparatus.

Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use breathing apparatus if exposed to vapours/dust/aerosol.
High risk of slipping due to leakage/spillage of product.
Forms slippery surfaces with water.
Use personal protective equipment.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the subsoil/soil.
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. general-purpose binder).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid formation of oil dust.
Avoid spilling or spraying in enclosed areas.

Keep away from all sources of ignition - Refrain from smoking.

Do not eat or drink when working.
Wash hands before breaks and after work.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Only use containers that are approved specifically for the substance/product.
Prevent penetration into the ground.

Do not store together with oxidizing agents.

Keep container in a well-ventilated place.
Keep container tightly closed.
Keep away from frost.
Protect from sun.
Recommended storage temperature: 15-25 °C.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Range [%]	Substance
1 - 5	2-(2-Butoxyethoxy)ethanol
	CAS: 112-34-5, EINECS/ELINCS: 203-961-6, EU-INDEX: 603-096-00-8, ECB-Nr.: 01-2119475104-44-XXXX
	Long-term exposure: 10 ppm, 67,5 mg/m³
	Short-term exposure (15-minute): 15 ppm, 101,2 mg/m³
1 - <5,5	Boric acid
	CAS: 10043-35-3, EINECS/ELINCS: 233-139-2, EU-INDEX: 005-007-00-2, ECB-Nr.: 01-2119486683-25-XXXX
	Long-term exposure: 2 mg/m³, TWA (inhalable fraction, listed under Borate compounds, inorganic)

Ingredients with occupational exposure limits to be monitored (EU)

Range [%]	Substance / EC LIMIT VALUES
1 - 5	2-(2-Butoxyethoxy)ethanol
	CAS: 112-34-5, EINECS/ELINCS: 203-961-6, EU-INDEX: 603-096-00-8, ECB-Nr.: 01-2119475104-44-XXXX
	Eight hours: 10 ppm, 67,5 mg/m³
	Short-term (15-minute): 15 ppm, 101,2 mg/m³

DNEL

Range [%]	Substance
1 - 5	2-(2-Butoxyethoxy)ethanol, CAS: 112-34-5
	worker, dermal, Long-term - systemic effects: 20 mg/kg.
	worker, inhalative, Long-term - systemic effects: 67,5 mg/m³.
	general population, dermal, Long-term - systemic effects: 10 mg/kg.
	general population, inhalative, Long-term - systemic effects: 34 mg/m³.
	general population, inhalative, Acute - local effects: 50,6mg/m³.
< 5,5	Boric acid, CAS: 10043-35-3
	Industrial, dermal, Long-term - systemic effects: 0,34 mg B/kg.
	Industrial, inhalative, Long-term - systemic effects: 1,45 mg B/m³.
	general population, inhalative, Acute - local effects: 1,92 mg³/m³.
	general population, oral, Long-term - systemic effects: 0,17 mg B/kg.

PNEC

Range [%]	Substance
1 - 5	2-(2-Butoxyethoxy)ethanol, CAS: 112-34-5
	sewage treatment plants (STP), 200 mg/l.
	sediment (seaater), 0,4 mg/kg.
	sediment (freshwater), 4 mg/kg.
	seawater, 0,1 mg/l.
	freshwater, 1 mg/l.
< 5,5	Boric acid, CAS: 10043-35-3
	sewage treatment plants (STP), 10,75 mg³/l.
	soil, 5,4 mg B/kg.
	sediment (seaater), 1,80 mg B/l.
	sediment (freshwater), 1,80 mg B/l.
	seawater, 1,35 mg B/l.
	freshwater, 10,35 mg B/l.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	Safety glasses.
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. In full contact: Nitrile rubber, >480 min (EN 374). Polychloroprene, >480 min (EN 374). In splash contact Nitrile rubber, >60 min (EN 374).
Skin protection	Solvent-resistant protective clothing.
Other	Do not inhale gases/vapours/aerosols. Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.
Respiratory protection	Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, combination filter A-P1.
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Color	brown
Odor	like mineral oil
Odour threshold	not determined
pH-value	9,1 (DIN 51369)(20°C)
pH-value [1%]	not determined
Boiling point [°C]	> 160
Flash point [°C]	> 140 (DIN EN ISO 2592)
Flammability [°C]	> 240
Lower explosion limit	0,6 Vol.-%
Upper explosion limit	6,5 Vol.-%
Oxidizing properties	no
Vapour pressure/gas pressure [kPa]	0,1 (20°C)
Density [g/ml]	0,987 (DIN EN ISO 12185) (15 °C / 59,0 °F)
Bulk density [kg/m³]	not applicable
Solubility in water	miscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	130 mm²/s (20°C) (DIN EN ISO 3104)
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	<-20
Autoignition temperature [°C]	not determined
Decomposition temperature [°C]	not determined

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

No dangerous reactions known if used as directed.
In the event of fire: See SECTION 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Range [%]	Substance
1 - 5	2-Butyloctan-1-ol, CAS: 3913-02-8
	LD50, oral, Rat: > 2000 mg/kg.
1 - 5	2-(2-Butoxyethoxy)ethanol, CAS: 112-34-5
	LD50, dermal, Rabbit: > 2000 mg/kg (IUCLID).
	LD50, oral, Rat: > 2000 mg/kg (IUCLID).
< 5,5	Boric acid, CAS: 10043-35-3
	LD50, dermal, Rabbit: > 2000 mg/kg.
	LD50, oral, Rat: 4100 mg/kg.
	LD50, oral, Rat: 3500 mg/kg.
	LC50, inhalative, Rat: 2 mg/l.

Serious eye damage/irritation	not determined
Skin corrosion/irritation	not determined
Respiratory or skin sensitisation	not determined
Specific target organ toxicity — single exposure	not determined
Specific target organ toxicity — repeated exposure	not determined
Mutagenicity	not determined
Reproduction toxicity	not determined
Carcinogenicity	not determined
General remarks	Frequent persistent contact with the skin can cause skin irritation.
	Toxicological data of complete product are not available. The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials. No classification on the basis of the calculation procedure of the preparation directive.

SECTION 12: Ecological information

12.1 Toxicity

Range [%]	Substance
1 - 5	2-Butyloctan-1-ol, CAS: 3913-02-8
	EC50, (48h), Daphnia magna: < 1 mg/l.
1 - 5	2-(2-Butoxyethoxy)ethanol, CAS: 112-34-5
	LC50, (96h), Lepomis macrochirus: 1300 mg/l (IUCLID).
	EC50, (48h), Daphnia magna: > 100 mg/l (IUCLID).
< 5,5	Boric acid, CAS: 10043-35-3
	LC50, (96h), fish: 74 mg B/l.
	LC50, (48h), Daphnia magna: 133 mg B/l.
	NOEC, (21d), Daphnia magna: 6-13 mg B/l.
	EC10, (96h), Algae: 24 mg B/l.

12.2 Persistence and degradability

Behaviour in environment compartments not determined

Behaviour in sewage plant not determined

Biological degradability Slightly eliminable from water.
The product is not readily biodegradable.

12.3 Bioaccumulative potential

Bioaccumulation is potentially possible.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

Ecological data of complete product are not available.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.
Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.

Waste no. (recommended) 120107*
120109*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150102
150104
150110*

SECTION 14: Transport information

14.1 UN number

See SECTION 14.2 in accordance with UN shipping name

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name

14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC
TRANSPORT-REGULATIONS	DOT-Classification, ADR (2013); IMDG-Code (2013, 36. Amdt.); IATA-DGR (2013).
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4
- Observe employment restrictions for people	none
- VOC (1999/13/CE)	not determined

15.2 Chemical safety assessment

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

SECTION 16: Other information

16.1 R-phrases (SECTION 3)

R 60: May impair fertility.
R 61: May cause harm to the unborn child.
R 38: Irritating to skin.
R 50: Very toxic to aquatic organisms.
R 36: Irritating to eyes.
R 22: Harmful if swallowed.
R 23: Toxic by inhalation.
R 41: Risk of serious damage to eyes.
R 43: May cause sensitisation by skin contact.
R 48/23: Toxic - danger of serious damage to health by prolonged exposure through inhalation.

16.2 Hazard statements (SECTION 3)

H410 Very toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H372 Causes damage to organs through prolonged or repeated exposure.
H302 Harmful if swallowed.
H331 Toxic if inhaled.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H360FD May damage fertility. May damage the unborn child.

16.3 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.4 Other information

Customs Tariff not determined

Classification procedure

Modified position none