



# Safety Data Sheet

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

## OPN-Special Coolant for the Welding Technology to -10°C

Version number: 7.0  
Replaces version of: 2016-08-29

Revision: 2018-04-16  
First version: 2003-05-01

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

#### 1.1 Product identifier

Trade name	OPN-Special Coolant for the Welding Technology to -10°C
Article number	61096
Registration number (REACH)	not relevant (mixture)
CAS number	not relevant (mixture)

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

Relevant identified uses	professional use industrial use
Sector of use	Cooling Lubricant
Uses advised against	consumer use (private households) Do not use for products that are intended for contact with food - exclude food contact.

#### 1.3 Details of the supplier of the safety data sheet

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#### Further information obtainable from:

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#### 1.4 24 hours Emergency telephone number

Vergiftungs-Informationen-Zentrale Freiburg +49 (0) 761 / 192 40

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

Classification				
Section	Hazard class	Category	Hazard class and category	Hazard statement
2.6	flammable liquid	3	Flam. Liq. 3	H226
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319

for full text of abbreviations: see SECTION 16

#### The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

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## 2.2 Label elements

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

Signal word Warning

Pictograms

GHS02, GHS07



Hazard statements

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face 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.

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.

P337+P313 If eye irritation persists: Get medical advice/attention.

P403+P235 Store in a well-ventilated place. Keep Cool.

P501 Dispose of contents/container to hazardous or special waste.

Additional labelling requirements

Buildup of explosive mixtures possible without sufficient ventilation.

## 2.3 Other hazards

There is no additional information.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## SECTION 3: Composition/information on ingredients





### 3.1 Substances

not relevant (mixture)

### 3.2 Mixtures

Description of the mixture

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Hazardous ingredients					
Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	M-Factors
propan-2-ol	CAS No 67-63-0  EC No 200-661-7  Index No 603-117-00-0  REACH Reg. No 01-2119457588-25	10 – < 25	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336	 	
ethylene glycol	CAS No 107-21-1  EC No 203-473-3	5 – < 10	Acute Tox. 4 / H302 STOT RE 2 / H373	 	

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General notes

Take off immediately all contaminated clothing.  
In all cases of doubt, or when symptoms persist, seek medical advice.

##### Following inhalation

Provide fresh air.  
If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.  
Mouth to mouth resuscitation should be avoided. Use alternative methods, preferably with oxygen or compressed air driven apparatus.

##### Following skin contact

Wash with plenty of soap and water.

##### Following 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.

##### Following ingestion

Rinse mouth. Do not induce vomiting.  
Get medical advice/attention if you feel unwell.

##### Notes for the doctor

none

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

These information are not available.

## 4.3 Indication of any immediate medical attention and special treatment needed

none

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

water spray, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

### 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture.

Solvent vapours are heavier than air and may spread along floors.

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

#### Hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

### 5.3 Advice for firefighters

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

Co-ordinate firefighting measures to the fire surroundings.

Do not allow firefighting water to enter drains or water courses.

Collect contaminated firefighting water separately.

Fight fire with normal precautions from a reasonable distance.

#### Special protective equipment for firefighters

use suitable breathing apparatus

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Remove persons to safety.

Ventilate affected area.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

## 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

### Advices on how to clean up a spill

Collect spillage.  
Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

### Appropriate containment techniques

Use of adsorbent materials.

### Other information relating to spills and releases

Place in appropriate containers for disposal.  
Ventilate affected area.

## 6.4 Reference to other sections

Hazardous combustion products: see section 5.  
Personal protective equipment: see section 8.  
Incompatible materials: see section 10.  
Disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

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

Use local and general ventilation.  
Keep away from sources of ignition - No smoking.  
Take precautionary measures against static discharge.  
Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Use only non-sparking tools.

#### Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.  
Vapours are heavier than air, spread along floors and form explosive mixtures with air.

#### Measures to protect the environment

Avoid release to the environment.

#### Advice on general occupational hygiene

Do not eat, drink and smoke in work areas.  
Wash hands after use.  
Preventive skin protection (barrier creams/ointments) is recommended.  
Remove contaminated clothing and protective equipment before entering eating areas.

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## 7.2 Conditions for safe storage, including any incompatibilities

### Explosive atmospheres

Keep container tightly closed and in a well-ventilated place.

Use local and general ventilation.

Keep cool.

Protect from sunlight.

### Flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharge.

Ground/bond container and receiving equipment.

Protect from sunlight.

### Incompatible substances or mixtures

Incompatible materials: see section 10.

### Evaporative conditions

Keep container tightly closed and in a well-ventilated place.

Keep in a cool place.

### Consideration of other advice

Keep away from food, drink and animal feedingstuffs.

### General rule

Keep locked up and out of the reach of children.

### Ventilation requirements

Provision of sufficient ventilation.

### Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

## 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)									
Country	Name of agent	CAS No	Notation	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Source
EU	ethanediol (ethylene glycol)	107-21-1		IOELV	20	52	40	104	2017/2398/EU
GB	ethane-1,2-diol	107-21-1	particle	WEL		10			EH40/2005
GB	ethane-1,2-diol	107-21-1	vap	WEL	20	52	40	104	EH40/2005
GB	propan-2-ol	67-63-0		WEL	400	999	500	1,250	EH40/2005

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## Notation

particle as airborne particles

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)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

vap as vapours

Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
propan-2-ol	67-63-0	DNEL	500 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
propan-2-ol	67-63-0	DNEL	888 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
ethylene glycol	107-21-1	DNEL	106 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant PNECs of components of the mixture				
Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment
propan-2-ol	67-63-0	PNEC	140.9 mg/l	water
propan-2-ol	67-63-0	PNEC	140.9 mg/l	marine water
propan-2-ol	67-63-0	PNEC	2,251 mg/l	sewage treatment plant (STP)
propan-2-ol	67-63-0	PNEC	552 mg/kg	freshwater sediment
propan-2-ol	67-63-0	PNEC	552 mg/kg	marine sediment
propan-2-ol	67-63-0	PNEC	140.9 mg/l	freshwater
propan-2-ol	67-63-0	PNEC	28 mg/kg	soil
ethylene glycol	107-21-1	PNEC	10 mg/l	freshwater
ethylene glycol	107-21-1	PNEC	1 mg/l	marine water
ethylene glycol	107-21-1	PNEC	199.5 mg/l	sewage treatment plant (STP)
ethylene glycol	107-21-1	PNEC	37 mg/kg	freshwater sediment
ethylene glycol	107-21-1	PNEC	3.7 mg/kg	marine sediment
ethylene glycol	107-21-1	PNEC	1.53 mg/kg	soil

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## 8.2 Exposure controls

### Appropriate engineering controls

General ventilation.

### Individual protection measures (personal protective equipment)

#### Eye/face protection

Wear eye/face protection.

#### Hand protection

Material	Material thickness	Breakthrough times of the glove material
no information available	no information available	no information available

Wear suitable gloves.

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

Check leak-tightness/impermeability prior to use.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

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.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Type: A-P2 (combined filters against particles and organic gases and vapours, colour code: Brown/White).

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination.

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	liquid
Form	fluid
Colour	colourless
Odour	characteristic
Odour threshold	these information are not available

#### Other safety parameters

pH (value)	these information are not available
Melting point/freezing point	these information are not available
Initial boiling point and boiling range	~80 °C



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Flash point	<55 °C
Evaporation rate	these information are not available
Flammability (solid, gas)	not relevant (fluid)
<b>Explosive limits</b>	
Lower explosion limit (LEL)	these information are not available
Upper explosion limit (UEL)	these information are not available
Vapour pressure	these information are not available
Density	0.9 – 1.1 g/cm <sup>3</sup> at 20 °C
Vapour density	these information are not available
Relative density	these information are not available
<b>Solubility(ies)</b>	
Water solubility	miscible in any proportion
<b>Partition coefficient</b>	
n-octanol/water (log KOW)	these information are not available
Auto-ignition temperature	these information are not available
Relative self-ignition temperature for solids	not relevant (Fluid)
Decomposition temperature	these information are not available
<b>Viscosity</b>	
Kinematic viscosity	these information are not available
Dynamic viscosity	these information are not available
Explosive properties	not explosive
Oxidising properties	shall not be classified as oxidising

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

If heated:

risk of ignition

### 10.2 Chemical stability

See below "Conditions to avoid".

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## 10.3 Possibility of hazardous reactions

No known hazardous reactions.

## 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Take precautionary measures against static discharge.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

## 10.5 Incompatible materials

oxidisers

## 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Classification procedure

If not otherwise specified the classification is based on:

Ingredients of the mixture (additivity formula).

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

#### Acute toxicity

Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
propan-2-ol	67-63-0	inhalation: vapour	LC50	>25 mg/l/4h	rat
propan-2-ol	67-63-0	oral	LD50	5,840 mg/kg	rat
propan-2-ol	67-63-0	dermal	LD50	13,400 mg/kg	rabbit
ethylene glycol	107-21-1	oral	LD50	7,712 mg/kg	rat
ethylene glycol	107-21-1	dermal	LD50	>3,500 mg/kg	mouse

#### Skin corrosion/irritation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

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## Respiratory or skin sensitisation

### Skin sensitisation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

### Respiratory sensitisation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Germ cell mutagenicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Carcinogenicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Reproductive toxicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Specific target organ toxicity - single exposure

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Specific target organ toxicity - repeated exposure

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity (acute)

Test data are not available for the complete mixture.

#### Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
propan-2-ol	67-63-0	LC50	9,640 mg/l	fathead minnow (Pimephales promelas)	96 h
propan-2-ol	67-63-0	LC50	>10,000 mg/l	daphnia magna	24 h
ethylene glycol	107-21-1	LC50	>72,860 mg/l	fathead minnow (pimephales promelas)	96 h

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Name of substance	CAS No	Endpoint	Value	Species	Exposure time
ethylene glycol	107-21-1	EC50	>100 mg/l	daphnia magna	48 h
ethylene glycol	107-21-1	ErC50	650 – 13,000 mg/l	algae (pseudokirchneriella subcapitata)	96 h

### Aquatic toxicity (chronic)

Test data are not available for the complete mixture.

### Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
ethylene glycol	107-21-1	LC50	>1,500 mg/l	fish	28 d

## 12.2 Persistence and degradability

### Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
propan-2-ol	67-63-0	oxygen depletion	53 %	5 d
ethylene glycol	107-21-1	DOC removal	90 – 100 %	10 d

### Biodegradation

The relevant substances of the mixture are readily biodegradable.

### Persistence

Data are not available.

## 12.3 Bioaccumulative potential

Data are not available.

### Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW
propan-2-ol	67-63-0		0.05 (25 °C)
ethylene glycol	107-21-1		-1.36

## 12.4 Mobility in soil

Data are not available.

## 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## 12.6 Other adverse effects

Data are not available.

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## Endocrine disrupting potential

None of the ingredients are listed.

## Remarks

Wassergefährdungsklasse, WGK (water hazard class): 1

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste.

#### 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. Handle contaminated packages in the same way as the substance itself.

## Remarks


Please consider the relevant national or regional provisions.

## SECTION 14: Transport information


<b>14.1</b>	<b>UN number</b>	1987
<b>14.2</b>	<b>UN proper shipping name</b>	ALCOHOLS, N.O.S.
	<b>Technical name (hazardous ingredients)</b>	ISOPROPANOL
<b>14.3</b>	<b>Transport hazard class(es)</b>	
	<b>Class</b>	3
<b>14.4</b>	<b>Packing group</b>	III
<b>14.5</b>	<b>Environmental hazards</b>	non-environmentally hazardous acc. to the dangerous goods regulations
<b>14.6</b>	<b>Special precautions for user</b>	
		Provisions for dangerous goods (ADR) should be complied within the premises.
<b>14.7</b>	<b>Transport in bulk according to Annex II of MARPOL and the IBC Code</b>	
		The cargo is not intended to be carried in bulk.
<b>14.8</b>	<b><u>Information for each of the UN Model Regulations</u></b>	
	<b>Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)</b>	
	UN number	1987
	Proper shipping name	UN1987, ALCOHOLS, N.O.S., (contains: ISOPROPANOL), 3, III, (D/E)

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Class	3
Classification code	F1
Packing group	III
Danger label(s)	3
	
Special provisions (SP)	274, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3.
Tunnel restriction code (TRC)	D/E
Hazard identification No	30
Emergency Action Code	3YE

### International Maritime Dangerous Goods Code (IMDG)

UN number	1987
Proper shipping name	UN1987, ALCOHOLS, N.O.S., (contains: ISOPRO- PANOL), 3, III, <55°C c.c.
Class	3
Marine pollutant	-
Packing group	III
Danger label(s)	3
	
Special provisions (SP)	223, 274
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, S-D
Stowage category	A

### International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	1987
Proper shipping name	UN1987, Alcohols, n.o.s., (contains: ISOPROPAN- OL), 3, III
Class	3
Packing group	III

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Danger label(s)	3
	
Special provisions (SP)	A3, A180
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L

## 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

Name of substance	Name acc. to inventory	CAS No	Type of registration	No
Maschinenfrostschutz -15 Grad	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		1907/2006/EC annex XVII	3
ethylene glycol	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		1907/2006/EC annex XVII	3
propan-2-ol	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		1907/2006/EC annex XVII	3
propan-2-ol	flammable / pyrophoric		1907/2006/EC annex XVII	40

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

none of the ingredients are listed

#### Seveso Directive

2012/18/EU (Seveso III)				
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes
P5c	flammable liquids (cat. 2, 3)	5,000	50,000	51)

#### Notation

51) flammable liquids, categories 2 or 3 not covered by P5a and P5b

#### Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

none of the ingredients are listed

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### Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

### Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

none of the ingredients are listed

### Regulation 98/2013/EU on the marketing and use of explosives precursors

none of the ingredients are listed

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

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

## SECTION 16: Other information

### Indication of changes (revised safety data sheet)

Indication of changes: Section 2,3,14

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2017/2398/EU	Directive of the European Parliament and of the Council amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF	Bioconcentration factor
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)
DNEL	Derived No-Effect Level
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 ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule



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Abbr.	Descriptions of used abbreviations
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
log KOW	n-Octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
SVHC	Substance of Very High Concern
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### 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 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

# OPN-Special Coolant for the Welding Technology to -10°C

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## Classification procedure

Physical and chemical properties.

Health hazards.

Environmental hazards.

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

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

Code	Text
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

## Disclaimer

This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.