

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

1.1. Product identifier

Product form : Mixture
Trade name : Perfect Joint Tooling Agent

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Professional use, Consumer use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

DL CHEMICALS N.V.
Roterijstraat 201-203
B-8793 Waregem
Belgium
T + 32 56 62 70 51 - F + 32 56 60 95 68
MSDS@dl-chem.com - www.dl-chem.com

1.4. Emergency telephone number

Emergency number : + 32 56 62 70 51
Only available during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Contains 1,2-benzisothiazolin-3-one, reaction mass of: 5-chloro-2-methyl-EUH208
4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.
Safety data sheet available on request. EUH210
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
EUH-statements : EUH208 - Contains 1,2-benzisothiazolin-3-one, reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.
EUH210 - Safety data sheet available on request.
Child-resistant fastening : Not applicable

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Tactile warning : Not applicable

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
reaction mass of: 5-chloro-2- methyl-4- isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3- one [EC no. 220-239-6] (3:1) (55965-84-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2-benzisothiazolin-3-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6	< 0,05	Acute Tox. 4 (Oral), H302 (ATE=1193 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1)

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
reaction mass of: 5-chloro-2- methyl-4- isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3- one [EC no. 220-239-6] (3:1) (Note B)	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5	< 0,0015	Acute Tox. 3 (Oral), H301 (ATE=100 mg/kg bodyweight) Acute Tox. 2 (Dermal), H310 (ATE=50 mg/kg bodyweight) Acute Tox. 2 (Inhalation), H330 (ATE=0,33 mg/l/4h) Acute Tox. 2 (Inhalation:dust,mist), H330 (ATE=0,33 mg/l/4h) Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
1,2-benzisothiazolin-3-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6	(0,05 ≤ C < 100) Skin Sens. 1, H317
reaction mass of: 5-chloro-2- methyl-4- isothiazolin-3-one [EC no. 247-500-7] and 2- methyl-2H -isothiazol-3- one [EC no. 220-239-6] (3:1)	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5	(0,0015 ≤ C ≤ 100) Skin Sens. 1A, H317 (0,06 ≤ C < 0,6) Eye Irrit. 2, H319 (0,06 ≤ C < 0,6) Skin Irrit. 2, H315 (0,6 ≤ C ≤ 100) Eye Dam. 1, H318 (0,6 ≤ C ≤ 100) Skin Corr. 1C, H314

Note B - Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: '... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
First-aid measures after skin contact	: Wash with plenty of water/....
First-aid measures after eye contact	: Rinse opened eye for several minutes under running water. Then consult doctor.
First-aid measures after ingestion	: Rinse mouth.

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

Symptoms/effects after eye contact : May cause slight irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

No additional information available

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not combustible.

5.3. Advice for firefighters

No additional information available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : If spilled, may cause the floor to be slippery.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Eye protection should only be necessary where hot liquid could be splashed or sprayed.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool area.

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Information on mixed storage : None.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Even though no eye contact is expected under reasonable normal conditions of use, appropriate eye protection should be worn when handling this material

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses		With side shields	EN 166

8.2.2.2. Skin protection

Hand protection:

Time of penetration is to be checked with the glove producer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

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Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,1		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: yellowish.
Appearance	: Liquid.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: 0 °C
Boiling point	: 100 °C
Flammability	: Not available
Explosive properties	: Product is not explosive.
Oxidising properties	: Not applicable.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not applicable
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Water: completely soluble
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1 g/ml
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal use.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

1,2-benzisothiazolin-3-one (2634-33-5)	
LD50 oral rat	1193 mg/kg
LD50 dermal rat	4115 mg/kg
reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H - isothiazol-3- one [EC no. 220-239-6] (3:1) (55965-84-9)	
LD50 oral rat	457 mg/kg
LD50 dermal rabbit	660 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	0,33 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

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11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

1,2-benzisothiazolin-3-one (2634-33-5)

LC50 - Fish [1]	1,6 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	3,27 mg/l Daphnia magna (Big water flea)
EC50 72h - Algae [1]	0,11 mg/l Selenastrum capricornutum
NOEC chronic fish	0,21 mg/l
NOEC chronic crustacea	1,2 mg/l
NOEC chronic algae	0,04 mg/l

reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H - isothiazol-3- one [EC no. 220-239-6] (3:1) (55965-84-9)

LC50 - Fish [1]	0,22 mg/l (OECD 203 method)
EC50 - Crustacea [1]	0,1 mg/l (OECD 202 method)
EC50 72h - Algae [1]	0,048 mg/l (OECD 201 method)
NOEC (chronic)	0,1 mg/l
NOEC chronic fish	0,098 mg/l (OECD 215 method)
NOEC chronic crustacea	0,004 mg/l (OECD 211 method)
NOEC chronic algae	0,0012 mg/l (OECD 201 method)

12.2. Persistence and degradability

1,2-benzisothiazolin-3-one (2634-33-5)

Persistence and degradability	Readily biodegradable.
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reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H - isothiazol-3- one [EC no. 220-239-6] (3:1) (55965-84-9)

Biodegradation	> 60 % (OECD 301D method)
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12.3. Bioaccumulative potential

1,2-benzisothiazolin-3-one (2634-33-5)

Bioconcentration factor (BCF REACH)	6,95 (OECD 305 method)
Partition coefficient n-octanol/water (Log Kow)	0,7 (OECD 117 method)

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reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H - isothiazol-3- one [EC no. 220-239-6] (3:1) (55965-84-9)

Bioconcentration factor (BCF REACH)	3,16 (calculated value)
Partition coefficient n-octanol/water (Log Kow)	≤ 0,71 (OECD 117 method)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Empty the packaging completely prior to disposal.
European List of Waste (LoW) code	: 08 04 16 - aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

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ADR	IMDG	IATA	ADN	RID
No supplementary information available				

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Inland waterway transport

No data available

Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

CESIO recommendations : The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

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Explosives Precursors Regulation (2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Please see https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

Regulatory information.

Abbreviations and acronyms:	
CAS-No.	Chemical Abstract Service number
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BOD	Biochemical oxygen demand (BOD)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
IOELV	Indicative Occupational Exposure Limit Value
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
OECD	Organisation for Economic Co-operation and Development
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic

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Abbreviations and acronyms:

PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA (European Chemicals Agency). Supplier's safety documents. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H- and EUH-statements:

Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazolin-3-one, reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3- one [EC no. 220-239-6] (3:1). May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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Full text of H- and EUH-statements:	
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
EUH208	EUH208	Calculation method
EUH210	EUH210	Calculation method

SDS EU DL Chemicals

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.