

**Safety data sheet**  
according to UK REACH

Printing date 14.01.2025

Version number 6 (replaces version 5)

Revision: 14.01.2025

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**Trade name **INDULINE DW-631**

Article number: 1656-1659

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

No further relevant information available.

Technical function Plating agent

**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Remmers GmbH

Bernhard-Remmers-Str. 13  
D-49624 Lönningen / Germany

Tel.: +49(0)5432/83-0

Fax: +49(0)5432/3985

Remmers (UK) Limited  
Suites 1 & 2 · The Gardens · Coleshill Manor Office Campus  
South Drive · Coleshill · Birmingham · B46 1DL

fon +44 (0) 333 034 8126

**Information department:**

fon +44 (0) 333 034 8126

Email: remmers.sales.uk@remmers.com

**1.4 Emergency telephone number:**

National Poisons Information Service (NPIS):

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

24h-Transport Emergency Contact Phone Number:

within USA and Canada: 1-800-424-9300

outside USA and Canada: 001-703-527-3887

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

**Hazard pictograms** Void**Signal word** Void**Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:**

EUH208 Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1). May produce an allergic reaction.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Determination of endocrine-disrupting properties** Not applicable.

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### \* SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

**Description:** Mixture of the substances listed below with harmless additions.

<b>Dangerous components [% w/w]:</b>		
CAS: 13463-67-7 EINECS: 236-675-5	titanium dioxide substance with a Community workplace exposure limit	≥10-<20%
CAS: 34590-94-8 EINECS: 252-104-2 Reg.nr.: 01-2119450011-60-XXXX	(2-methoxymethylethoxy)propanol substance with a Community workplace exposure limit	≥5-<10%
CAS: 1314-13-2 EINECS: 215-222-5 Index number: 030-013-00-7 Reg.nr.: 01-2119463881-32-XXXX	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	≥0.25-≤0.5%
CAS: 112-34-5 EINECS: 203-961-6 Index number: 603-096-00-8 Reg.nr.: 01-2119475104-44-XXXX	2-(2-butoxyethoxy)ethanol Eye Irrit. 2, H319	≥0.25-≤0.5%
CAS: 57-55-6 EINECS: 200-338-0 Reg.nr.: 01-2119456809-23-XXXX	propylene glycol substance with a Community workplace exposure limit	≥0.25-≤0.5%
CAS: 2634-33-5 EINECS: 220-120-9 Index number: 613-088-00-6	1,2-benzisothiazol-3(2H)-one Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317 Specific concentration limit: Skin Sens. 1;H317: C ≥ 0.05 %	≥0.0015-<0.05%
CAS: 55965-84-9 Index number: 613-167-00-5	reaction mass of 5-chloro-2- methyl-2H- isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1) Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330; Skin Corr. 1C, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); Skin Sens. 1A, H317, EUH071 ATE: LD50 oral: 100 mg/kg LD50 dermal: 50 mg/kg LC50/4 h inhalative: 0.05 mg/l Specific concentration limits: Skin Corr. 1C;H314: C ≥ 0.6 % Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 % Eye Dam. 1; H318: C ≥ 0.6 % Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 % Skin Sens. 1A; H317: C ≥ 0.0015 %	≥0.00025-<0.0015%

**Additional information** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

**General information** When symptoms occur or in case of doubt, seek medical advice

**After inhalation** Take affected persons into the open air and position comfortably

**After skin contact** If skin irritation continues, consult a doctor.

**After eye contact** Rinse opened eye for several minutes under running water.

**After swallowing** Seek immediate medical advice.

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

No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed**  
symptomatic treatment**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents** Use fire fighting measures that suit the environment.**5.2 Special hazards arising from the substance or mixture** No further relevant information available.**5.3 Advice for firefighters****Protective equipment:** No special measures required.**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures** Not required.**6.2 Environmental precautions:**

Do not allow product to reach sewage system or water bodies.

Inform responsible authorities in case product reaches bodies of water or sewage system.

Dilute with plenty of water.

**6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

**6.4 Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

No special measures required.

No special precautions necessary if used correctly.

**Information about protection against explosions and fires:** The product is not flammable**7.2 Conditions for safe storage, including any incompatibilities****Storage****Requirements to be met by storerooms and containers:** No special requirements.**Further information about storage conditions:** None.**\* SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Components with limit values that require monitoring at the workplace:****CAS: 13463-67-7 titanium dioxide**WEL Long-term value: 10\* 4\*\* mg/m<sup>3</sup>  
\*total inhalable \*\*respirable**CAS: 34590-94-8 (2-methoxymethylethoxy)propanol**WEL Long-term value: 308 mg/m<sup>3</sup>, 50 ppm  
Sk**CAS: 112-34-5 2-(2-butoxyethoxy)ethanol**WEL Short-term value: 101.2 mg/m<sup>3</sup>, 15 ppm  
Long-term value: 67.5 mg/m<sup>3</sup>, 10 ppm**CAS: 57-55-6 propylene glycol**WEL Long-term value: 474\* 10\*\* mg/m<sup>3</sup>, 150\* ppm  
\*total vapour and particulates \*\*particulates**Additional information:** The lists that were valid during compilation were used as a basis.**8.2 Exposure controls****Appropriate engineering controls** No further data; see section 7.

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**Individual protection measures, such as personal protective equipment****General protective and hygienic measures**

Do not eat, drink or smoke while working.

Wash hands before pauses and after work.

The following indication regarding the personal protective equipment are to be considered as suggestions. The selection of the necessary personal protective equipment is to be evaluated by the employer depending on the types of operations and the local circumstances. If a risk assessment on-site shows that there is no risk for employees, the personal protective equipment is not required or the amount of the PPE can be adapted accordingly.

**Respiratory equipment:**

Respiratory protection if there is a risk of splashes/mist.

Filter A/P2.

**Hand protection**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**

Break through time: max. 240 min (DIN EN 374).

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye/face protection** Safety glasses recommended during refilling.**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information**

<b>Physical state</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.
<b>Melting point/freezing point:</b>	Not determined
<b>Boiling point or initial boiling point and boiling range</b>	100 °C
<b>Flammability</b>	Not applicable.
<b>Lower and upper explosion limit</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Flash point:</b>	>100 °C
<b>Auto-ignition temperature:</b>	not applicable
<b>Decomposition temperature:</b>	Not determined.
<b>pH at 20 °C</b>	9
<b>Viscosity:</b>	
<b>Kinematic viscosity</b>	Not determined.
<b>dynamic at 20 °C:</b>	2,500 mPas
<b>Solubility</b>	
<b>Water:</b>	Fully miscible
<b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
<b>Vapour pressure at 20 °C:</b>	23 hPa
<b>Density and/or relative density</b>	
<b>Density at 20 °C:</b>	1.13-1.15 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.

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<b>9.2 Other information</b>	
<b>Appearance:</b>	
<b>Form:</b>	thixotropic
<b>Important information on protection of health and environment, and on safety.</b>	
<b>Explosive properties:</b>	Product is not explosive.
<b>Solvent separation test</b>	< 3 %
<b>VOC EU</b>	<130 g/l
<b>Change in condition</b>	
<b>Evaporation rate</b>	Not determined.
<b>Information with regard to physical hazard classes</b>	
<b>Explosives</b>	Void
<b>Flammable gases</b>	Void
<b>Aerosols</b>	Void
<b>Oxidising gases</b>	Void
<b>Gases under pressure</b>	Void
<b>Flammable liquids</b>	Void
<b>Flammable solids</b>	Void
<b>Self-reactive substances and mixtures</b>	Void
<b>Pyrophoric liquids</b>	Void
<b>Pyrophoric solids</b>	Void
<b>Self-heating substances and mixtures</b>	Void
<b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
<b>Oxidising liquids</b>	Void
<b>Oxidising solids</b>	Void
<b>Organic peroxides</b>	Void
<b>Corrosive to metals</b>	Void
<b>Desensitised explosives</b>	Void

### SECTION 10: Stability and reactivity

**10.1 Reactivity** No further relevant information available.

#### 10.2 Chemical stability

**Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**10.3 Possibility of hazardous reactions** No dangerous reactions known

**10.4 Conditions to avoid** No further relevant information available.

**10.5 Incompatible materials:** No further relevant information available.

**10.6 Hazardous decomposition products:** No dangerous decomposition products known

### SECTION 11: Toxicological information

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

**Acute toxicity:** Based on available data, the classification criteria are not met.

**LD/LC50 values that are relevant for classification:** No further relevant information available.

**Skin corrosion/irritation:** Based on available data, the classification criteria are not met.

**Serious eye damage/irritation:** Based on available data, the classification criteria are not met.

**Sensitisation:** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

**Carcinogenicity:** Based on available data, the classification criteria are not met.

**Reproductive toxicity:** Based on available data, the classification criteria are not met.

**STOT-single exposure:** Based on available data, the classification criteria are not met.

**STOT-repeated exposure:** Based on available data, the classification criteria are not met.

**Aspiration hazard:** Based on available data, the classification criteria are not met.

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

None of the ingredients is listed.

\* **SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:** No further relevant information available.**12.2 Persistence and degradability** No further relevant information available.**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

**12.7 Other adverse effects** No further relevant information available.**Remark:** Harmful to fish**Additional ecological information:****General notes:**

Do not allow product to reach ground water, bodies of water or sewage system.

Harmful to aquatic organisms

\* **SECTION 13: Disposal considerations****Recommendation**

The given refuse codes are recommendations based upon the intended use of the product. Because of special use and disposal conditions at the user's, other codes may apply under other conditions. Do not dispose of together with household garbage. Do not allow product to reach sewage system.

**European waste catalogue**

08 01 19*	aqueous suspensions containing paint or varnish containing organic solvents or other hazardous substances
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**Uncleaned packaging:****Recommendation:**

Disposal must be made according to official regulations.

Packaging can be reused or recycled after cleaning.

**Recommended cleaning agent:** Water, if necessary with cleaning agent.**SECTION 14: Transport information****14.1 UN number or ID number****ADR, IMDG, IATA**

Void

**14.2 UN proper shipping name****ADR, IMDG, IATA**

Void

**14.3 Transport hazard class(es)****ADR, ADN, IMDG, IATA****Class**

Void

**14.4 Packing group****ADR, IMDG, IATA**

Void

**14.5 Environmental hazards:****Marine pollutant:**

No

**14.6 Special precautions for user**

Not applicable.

**14.7 Maritime transport in bulk according to****IMO instruments**

Not applicable.

**UN "Model Regulation":**

Void

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### \* SECTION 15: Regulatory information

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

##### Poisons Act

<b>Regulated explosives precursors</b>		
None of the ingredients is listed.		
<b>Regulated poisons</b>		
None of the ingredients is listed.		
<b>Reportable explosives precursors</b>		
CAS: 7631-99-4	Sodium nitrate	Listed
<b>Reportable poisons</b>		
CAS: 1336-21-6	ammonia, aqueous solution	10%
CAS: 7664-41-7	ammonia, anhydrous	Listed
CAS: 1336-21-6	ammonia, aqueous solution	10%
CAS: 1310-58-3	potassium hydroxide	17% of total caustic alkalinity

##### Directive 2012/18/EU

**Named dangerous substances - ANNEX I** None of the ingredients is listed.

**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

<b>DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II</b>
None of the ingredients is listed.

##### REGULATION (EU) 2019/1148

<b>Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))</b>
None of the ingredients is listed.
<b>Annex II - REPORTABLE EXPLOSIVES PRECURSORS</b>
None of the ingredients is listed.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### \* SECTION 16: Other information

This data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship. Delivery specifications are found in the respective Technical Information Sheets.

#### Relevant phrases

- 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.
- EUH071 Corrosive to the respiratory tract.

**Classification according to Regulation (EC) No 1272/2008** Calculation method

**Department issuing data specification sheet:** Product Safety department / EHS

**Version number of previous version:** 5

#### Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 2: Acute toxicity – Category 2

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

**\* Data compared to the previous version altered.**

This document replaces all previous versions. The information in this safety data sheet corresponds to our current state of knowledge and complies with national and EU legislation. However, the given working conditions of the user are beyond our knowledge and control. The product must not be used for purposes other than those specified in section 1 without written authorization. The user is responsible for compliance with all necessary legal regulations. The information in this safety data sheet describes the safety requirements of our product and does not constitute a guarantee of product properties. We accept no liability for errors in the printed form.