

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product Identifier

**Product Form** : Mixture  
**Product Name** : Ovadine  
**Synonyms** : 10% Povidone Iodine

#### 1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

##### 1.2.1. Relevant Identified Uses

**Use of the Substance/Mixture** : Used as a fish egg disinfectant.

##### 1.2.2. Uses Advised Against

**Uses Advised Against** : Uses other than indicated above or on the product labelling.

#### 1.3. Details of the Supplier of the Safety Data Sheet

Syndel  
1441 W Smith RD  
Ferndale, WA  
98248  
t: 1-800-283-5292  
[www.syndel.com](http://www.syndel.com)  
[sales@syndel.com](mailto:sales@syndel.com)

#### 1.4. Emergency Telephone Number

**Emergency Number** : VelocityEHS  
(800)255-3924 (North America)  
+1 (813)248-0585 (International)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

##### Classification According to Regulation (EC) No. 1272/2008

Skin Irrit. 2 H315  
Eye Irrit. 2 H319  
Skin Sens. 1 H317  
Aquatic Chronic 3 H412

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

#### 2.2. Label Elements

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

###### Hazard Pictograms (CLP)



###### Signal Word (CLP)

: Warning

###### Hazard Statements (CLP)

: H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H412 - Harmful to aquatic life with long lasting effects.

###### Precautionary Statements (CLP)

: P261 - Avoid breathing mist, vapours, spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
P273 - Avoid release to the environment.  
P280 - Wear protective clothing, eye protection, face protection.  
P302+P352 - IF ON SKIN: Wash with plenty of water.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.

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P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## 2.3. Other Hazards

**Other Hazards Not Contributing to the Classification** : Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

This substance/mixture does not meet the PBT/vPvB criteria of REACH regulation, annex XIII

The substance/mixture does not contain substance(s) equal to or greater than 0.1% by weight that are present in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or 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

## 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
2-Pyrrolidinone, 1-ethenyl-, homopolymer, compound with iodine	(CAS-No.) 25655-41-8 (EC-No.) 607-771-8	10,38	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Citric acid substance with national workplace exposure limit(s) (CZ, DE, CH)	(CAS-No.) 77-92-9 (EC-No.) 201-069-1 (EC Index-No.) 607-750-00-3	0,35	Eye Irrit. 2, H319 STOT SE 3, H335

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 General** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-Aid Measures After Inhalation** : When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
- First-Aid Measures After Skin Contact** : Remove contaminated clothing. Wash affected area with soap and water for at least 15 minutes. Obtain medical attention if irritation/rash develops or persists.
- First-Aid Measures After Eye Contact** : Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
- First-Aid Measures After Ingestion** : Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

- Symptoms/Effects** : Skin sensitisation. Causes skin irritation. Causes serious eye irritation.
- Symptoms/Effects After Inhalation** : Prolonged exposure may cause irritation.
- Symptoms/Effects After Skin Contact** : May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis.
- Symptoms/Effects After Eye Contact** : Contact causes severe irritation with redness and swelling of the conjunctiva.
- Symptoms/Effects After Ingestion** : Ingestion may cause adverse effects.
- Chronic Symptoms** : Repeated and prolonged exposure may cause an allergic skin reaction.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing Media

- Suitable Extinguishing Media** : Water spray, fog, carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam, or dry chemical.
- Unsuitable Extinguishing Media** : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

- Fire Hazard** : Not considered flammable but may burn at high temperatures.
- Explosion Hazard** : Product is not explosive.
- Reactivity** : Hazardous reactions will not occur under normal conditions.
- Hazardous Combustion Products** : Carbon oxides (CO, CO<sub>2</sub>). Smoke.

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## 5.3. Advice for Firefighters

- Precautionary Measures Fire** : Exercise caution when fighting any chemical fire.
- Firefighting Instructions** : Use water spray or fog for cooling exposed containers.
- Protection During Firefighting** : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other Information** : Do not allow run-off from fire fighting to enter drains or water courses.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

- General Measures** : Avoid breathing (vapor, mist, spray). Do not get in eyes, on skin, or on clothing.

#### 6.1.1. For Non-Emergency Personnel

- Protective Equipment** : Use appropriate personal protective equipment (PPE).
- Emergency Procedures** : Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

- Protective Equipment** : Equip cleanup crew with proper protection.
- Emergency Procedures** : Upon arrival at the scene, a first responder is expected to recognise the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

### 6.3. Methods and Materials for Containment and Cleaning Up

- For Containment** : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for Cleaning Up** : Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

- Precautions for Safe Handling** : Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapors, mist, spray.

- Hygiene Measures** : Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

- Technical Measures** : Comply with applicable regulations.
- Storage Conditions** : Store in accordance with applicable national storage class systems. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
- Incompatible Materials** : Strong acids, strong bases, strong oxidisers.

### 7.3. Specific End Use(S)

Used as a fish egg disinfectant.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

Please see section 16 for the legal basis of limit value information in section 8.1, including the national legislation or provision which gives rise to a given limit.

Citric acid (77-92-9)		
Czech Republic	OEL TWA (Legal Basis:Reg. 41/2020)	4 mg/m <sup>3</sup> (dust)
Germany	OEL TWA (Legal Basis:TRGS 900)	2 mg/m <sup>3</sup> (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	4 mg/m <sup>3</sup> (inhalable dust)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	2 mg/m <sup>3</sup> (inhalable dust)

### 8.2. Exposure Controls

- Appropriate Engineering Controls** : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

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## Personal Protective Equipment

: Gloves. Protective clothing. Protective goggles. Personal protective equipment should be chosen in accordance with Regulation (EU) 2016/425, CEN standards, and in discussion with the supplier of the protective equipment.



## Materials for Protective Clothing

: Chemically resistant materials and fabrics.

## Hand Protection

: Wear protective gloves.

## Eye Protection

: Chemical safety goggles.

## Skin and Body Protection

: Wear suitable protective clothing.

## Respiratory Protection

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

## Other Information

: When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Colour, Appearance	: Brown
Colour	: No data available
Odour	: Faint Characteristic
Odour Threshold	: No data available
pH	: 5 – 7,5
Evaporation Rate	: No data available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: 130 °C Not applicable (266 °F)
Flash Point	: Not applicable
Auto-Ignition Temperature	: Not applicable
Decomposition Temperature	: No data available
Flammability	: Not applicable
Vapour Pressure	: No data available
Relative Vapour Density At 20 °C	: No data available
Relative Density	: 1 – 1,08 (water = 1)
Solubility	: Water: Miscible
Partition Coefficient n-Octanol/Water	: No data available
Viscosity	: No data available
Explosive Properties	: No data available
Oxidising Properties	: No data available
Explosive Limits	: Not available
Particle Aspect Ratio	: Not applicable
Particle Aggregation State	: Not applicable
Particle Agglomeration State	: Not applicable
Particle Specific Surface Area	: Not applicable
Particle Dustiness	: Not applicable

### 9.2. Other Information

No additional information available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

### 10.2. Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

**10.5. Incompatible Materials**

Strong acids, strong bases, strong oxidisers.

**10.6. Hazardous Decomposition Products**Thermal decomposition may produce: Carbon oxides (CO, CO<sub>2</sub>). Smoke.**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Information On Hazard Classes As Defined In Regulation (Ec) No 1272/2008**

<b>Likely Routes of Exposure</b>	: Dermal, Eye Contact, Inhalation, Oral
<b>Acute Toxicity (Oral)</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Acute Toxicity (Dermal)</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Acute Toxicity (Inhalation)</b>	: Not classified (Based on available data, the classification criteria are not met)

**2-Pyrrolidinone, 1-ethenyl-, homopolymer, compound with iodine (25655-41-8)**

<b>LD50 Oral Rat</b>	> 8 g/kg
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**Citric acid (77-92-9)**

<b>LD50 Oral Rat</b>	5400 mg/kg
<b>LD50 Dermal Rat</b>	> 2000 mg/kg

<b>Skin Corrosion/Irritation</b>	: Causes skin irritation. pH: 5 – 7,5
<b>Eye Damage/Irritation</b>	: Causes serious eye irritation. pH: 5 – 7,5
<b>Respiratory or Skin Sensitisation</b>	: May cause an allergic skin reaction.
<b>Germ Cell Mutagenicity</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Carcinogenicity</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Reproductive Toxicity</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Specific Target Organ Toxicity (Single Exposure)</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Specific Target Organ Toxicity (Repeated Exposure)</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Aspiration Hazard</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Symptoms/Injuries After Inhalation</b>	: Prolonged exposure may cause irritation.
<b>Symptoms/Injuries After Skin Contact</b>	: May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis.
<b>Symptoms/Injuries After Eye Contact</b>	: Contact causes severe irritation with redness and swelling of the conjunctiva.
<b>Symptoms/Injuries After Ingestion</b>	: Ingestion may cause adverse effects.
<b>Chronic Symptoms</b>	: Repeated and prolonged exposure may cause an allergic skin reaction.

**11.2. Information On Other Hazards**

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to humans as it does not meet the criteria set out in section A of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

**SECTION 12: ECOLOGICAL INFORMATION****12.1. Toxicity**

<b>Hazardous To The Aquatic Environment, Short-Term (Acute)</b>	: Not classified (Based on available data, the classification criteria are not met)
<b>Hazardous To The Aquatic Environment, Long-Term (Chronic)</b>	: Harmful to aquatic life with long lasting effects.

**Citric acid (77-92-9)**

<b>LC50 - Fish [1]</b>	1516 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
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**12.2. Persistence and Degradability****Ovadine**

<b>Persistence and Degradability</b>	May cause long-term adverse effects in the environment.
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**Citric acid (77-92-9)**

<b>Persistence and Degradability</b>	Readily biodegradable in water.
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## 12.3. Bioaccumulative Potential

<b>Ovadine</b>	
<b>Bioaccumulative Potential</b>	Not established.
<b>Citric acid (77-92-9)</b>	
<b>Partition coefficient n-octanol/water (Log Pow)</b>	-1,72 (at 20 °C)

## 12.4. Mobility in Soil

No additional information available

## 12.5. Results of PBT and vPvB Assessment

Does not contain any PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XVIII

## 12.6. Endocrine Disrupting Properties

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

## 12.7. Other Adverse Effects

**Other Information** : Prevent entry to sewers and public waters.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste Treatment Methods

- Product/Packaging Disposal Recommendations** : Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.
- Ecology - Waste Materials** : This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued. In accordance with ADR / RID / IMDG / IATA / ADN

<b>14.1. UN Number or ID Number</b>
Not regulated for transport
<b>14.2. UN Proper Shipping Name</b>
Not regulated for transport
<b>14.3. Transport Hazard Class(Es)</b>
Not regulated for transport
<b>14.4. Packing Group</b>
Not regulated for transport
<b>14.5. Environmental Hazards</b>
Not regulated for transport

## 14.6. Special Precautions For User

No additional information 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

##### 15.1.1.1. REACH Annex XVII Information

Contains no REACH substances with Annex XVII restrictions

##### 15.1.1.2. REACH Candidate List Information

Contains no substance on the REACH candidate list

##### 15.1.1.3. POP (2019/1021) - Persistent Organic Pollutants Information

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

##### 15.1.1.4. PIC Regulation EU (649/2012) - Export and Import of Hazardous Chemicals Information

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

##### 15.1.1.5. REACH Annex XIV Information

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Contains no REACH Annex XIV substances

### 15.1.1.6. Substances Depleting the Ozone layer (1005/2009) Information

No additional information available

### 15.1.1.7. EC Inventory Information

#### Citric acid (77-92-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

### 15.1.1.8. Other Information

No additional information available

### 15.1.2. National Regulations

No additional information available

### 15.1.3. International Inventory Lists

#### 2-Pyrrolidinone, 1-ethenyl-, homopolymer, compound with iodine (25655-41-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on the Canadian DSL (Domestic Substances List)  
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on KECL/KECI (Korean Existing Chemicals Inventory)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on the NCI (Vietnam - National Chemicals Inventory)

#### Citric acid (77-92-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active  
Listed on the Canadian DSL (Domestic Substances List)  
Listed on the Canadian IDL (Ingredient Disclosure List)  
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on KECL/KECI (Korean Existing Chemicals Inventory)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on the NCI (Vietnam - National Chemicals Inventory)

## 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

## SECTION 16: OTHER INFORMATION

**Date of Preparation or Latest Revision** : 12/05/2023

**Data Sources** : Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.

**Other Information** : According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

### Full Text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

### Classification and Procedure Used to Derive the Classification for Mixtures According to Regulation (EC) 1272/2008 [CLP]:

Skin Irrit. 2	Calculation method
Eye Irrit. 2	Calculation method
Skin Sens. 1	Calculation method
Aquatic Chronic 3	Calculation method

### Indication of Changes

No additional information available

### Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists  
 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  
 ATE - Acute Toxicity Estimate  
 BCF - Bioconcentration Factor  
 BEI - Biological Exposure Indices (BEI)  
 BOD – Biochemical Oxygen Demand  
 CAS No. - Chemical Abstracts Service Number  
 CLP – Classification, Labeling and Packaging Regulation (EC) No 1272/2008  
 COD – Chemical Oxygen Demand  
 EC – European Community  
 EC50 - Median Effective Concentration  
 EEC – European Economic Community  
 EINECS – European Inventory of Existing Commercial Chemical Substances  
 EmS-No. (Fire) - IMDG Emergency Schedule Fire  
 EmS-No. (Spillage) - IMDG Emergency Schedule Spillage  
 EU – European Union  
 ErC50 - EC50 in Terms of Reduction Growth Rate  
 GHS – Globally Harmonized System of Classification and Labeling of Chemicals  
 IARC - International Agency for Research on Cancer  
 IATA - International Air Transport Association  
 IBC Code - International Bulk Chemical Code  
 IMDG - International Maritime Dangerous Goods  
 IPRV - Ilgalaikio Poveikio Ribinis Dydis  
 IOELV – Indicative Occupational Exposure Limit Value  
 LC50 - Median Lethal Concentration  
 LD50 - Median Lethal Dose  
 LOAEL - Lowest Observed Adverse Effect Level  
 LOEC - Lowest-Observed-Effect Concentration  
 Log Koc - Soil Organic Carbon-water Partitioning Coefficient  
 Log Kow - Octanol/water Partition Coefficient  
 Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water  
 MAK – Maximum Workplace Concentration/Maximum Permissible Concentration  
 MARPOL - International Convention for the Prevention of Pollution

NDS - Najwyższe Dopuszczalne Stezenie  
 NDSCh - Najwyższe Dopuszczalne Stezenie Chwilowe  
 NDSP - Najwyższe Dopuszczalne Stezenie Pulapowe  
 NOAEL - No-Observed Adverse Effect Level  
 NOEC - No-Observed Effect Concentration  
 NRD - Nevirsytinas Ribinis Dydis  
 NTP – National Toxicology Program  
 OEL - Occupational Exposure Limits  
 PBT - Persistent, Bioaccumulative and Toxic  
 PEL - Permissible Exposure Limit  
 pH – Potential Hydrogen  
 REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals  
 RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail  
 SADT - Self Accelerating Decomposition Temperature  
 SDS - Safety Data Sheet  
 STEL - Short Term Exposure Limit  
 STOT - Specific Target Organ Toxicity  
 TA-Luft - Technische Anleitung zur Reinhaltung der Luft  
 TEL TRK – Technical Guidance Concentrations  
 ThOD – Theoretical Oxygen Demand  
 TLM - Median Tolerance Limit  
 TLV - Threshold Limit Value  
 TPRD - Trumpalaikio Poveikio Ribinis Dydis  
 TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von Gefahrstoffen in ortsbeweglichen Behältern  
 TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine  
 TRGS 900 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte  
 TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte  
 TSCA - Toxic Substances Control Act  
 TWA - Time Weighted Average  
 VOC – Volatile Organic Compounds  
 VLA-EC - Valor Límite Ambiental Exposición de Corta Duración  
 VLA-ED - Valor Límite Ambiental Exposición Diaria  
 VLE – Valeur Limite D'exposition  
 VME – Valeur Limite De Moyenne Exposition  
 vPvB - Very Persistent and Very Bioaccumulative  
 WEL – Workplace Exposure Limit  
 WGK - Wassergefährdungsklasse

### Limit Value Legal Basis\*

\*Includes the below and any related regulations/provisions, and subsequent amendments

**EU - 2019/1831 EU in accor. with 98/24/EC** - Directive 2019/1831/EU of October 24, 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 2000/39/EC.  
**EU - 2019/1243/EU, and 98/24/EC** - Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work and amendment Regulation (EU) 2019/1243.  
**Austria - BGBl. II Nr. 254/2018** - Ordinance on Limit Values for Workplace Substances and on Carcinogens from the Federal Ministry of Economics and Labour, Published in 2003, Appendix 1: Substance List, Published through: Ministry of Economics and Labour of the Republic of Austria amended through the Government Gazette II (BGBl. II) No 119/2004) & BGBl. II No. 242/2006, BGBl. II No. 243/2007, lastly changed through BGBl. I Nr. 51/2011), BGBl. II Nr. 186/2015, BGBl. II Nr. 288/2017 amended by BGBl. II Nr. 254/2018.  
**Austria - BLV BGBl. II Nr. 254/2018** - Ordinance on health monitoring at the workplace 2008, published through BGBl. II Nr. 224/2007 by Austria Minister for Labor and Social Affairs, Lastly changed through BGBl. II Nr. 254/2018  
**Belgium - Royal Decree 21/01/2020** - Royal decree amending title 1 relating to chemical agents in Book VI of the code of well-being at work, with regard to the list of limit values of exposure to chemical agents and title 2 relating to carcinogens, mutagens and reprotoxics of Book VI of the code of well-being

**Greece - PWHSE** - Occupational Exposure Limits - Protection of workers' health and safety from exposure to certain chemical substances during the workday, (latest amendment 82/2018) and Occupation Exposure Limits - Protection of workers' health and safety from exposure to certain carcinogenic and mutagenic chemical substances (latest amendment 26/2020), and Presidential Decree 212/2006 - Protection of workers that are exposed to asbestos.  
**Hungary - Decree 05/2020** - 5/2020. (II. 6.) ITM decree on the protection of the health and safety of workers from the risks related to chemical agents  
**Ireland - 2020 COP** - 2020 Code of Practice for the Chemical Agents Regulations, Schedule 1  
**Italy - Decree 81** - Title IX, Annex XLIII and XXXVIII, Professional Exposure Limits and Annex XXXIX Mandatory Biological Limit Values and Health Monitoring, Article 1, Law 123 of August 3, 2007, Legislative Decree 81 of April 9, 2008, Last amended: January 2020  
**Italy - IMDFN1** - Ministerial Decree of August 20, 1999 Final Note (1)  
**Latvia - Reg. No. 325** - Cabinet of Ministers Regulation No. 325 - Labour Protection Requirements when Coming in Contact with Chemical Substances at Workplaces, Amended by Cabinet of Ministers Regulation No. 92, 163, 407 and No. 11.  
**Lithuania - HN 23:2011** - Lithuanian Hygiene Standard HN 23:2011 Occupational Exposure Limit Values, Amended by Order V-695/A1-272.

# Ovadine

## Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878



at work (1)

### **Bulgaria - Reg. No. 13/10 -**

Regulation No. 13 of December 30, 2003 on the Protection of Workers from Hazards Related to Exposure to Chemical Agents at Work Labor Code, Annex No.1 Limit values of chemical agents in the air of the working environment, and Annex No 2 Biological limit values of chemical agents and their metabolites (bio markers of exposure) or bio markers of effect Amended by: 71/2006, 67/2007, 2/2012, 46/2015, 73/2018, 5/2020), and Regulation No.10 of September 26, 2003 on the Protection of Workers from the Risks Associated with Exposure to Carcinogens and Mutagens at Work Annex No.1 Occupational Exposure Limits, Amended by: 8/2004, 46/2015, 5/2020

**Croatia - OG No. 91/2018 -** Regulation on the Protection of Workers from Exposure to Hazardous Chemicals at Work, the Limit Values of Exposure and the Biological Limit Values. Official Gazette No. 91 of October 12, 2018

**Cyprus - KDP 16/2019 -** Government of Cyprus Cabinet of Ministers Regulation 268/2001 - Safety and Health in the Working Environment (Chemical Substances) Article 38, As amended by Regulation 16/2019 and Cabinet of Ministers Regulation 153/2001 - Safety and Health in the Working Environment (Chemical Substances-Carcinogens), as amended by Regulation 493/2004 - Safety and Health in the Working Environment (Chemical Substances - Carcinogens) AND Law 47(I) 2000 - Occupational Health and Safety (Asbestos), as amended by Decree 316/2006.

**Czech Republic - Reg. 41/2020 -** Regulation 41/2020 amending Regulation 361/2007 of Coll. establishing Occupation Exposure Limits as amended  
**Czech Republic - Decree No. 107/2013 -** Decree No. 107/2013 Coll., amending Decree No. 432/2003 Coll., laying down the conditions for the application of the work into categories, limit values for the parameters of biological exposure tests, collection of biological material conditions for the implementation of biological exposure tests and requirements for reporting work with asbestos and biological agents

**Denmark - BEK No. 698 of 28/05/2020 -** Order on Limit Values for Substances and Materials, The Statutory Order No. 507 of May 17, 2011, Appendix 1 - Limits for air pollution, etc. and Appendix 3 - Biological Exposure Values, Amended by: No. 986 of October 11, 2012, No. 655 of May 31, 2018, No. 1458 December 13, 2019, No. 698 of May 28, 2020

**Estonia - Regulation No. 105 -** Health and Safety Requirements for the Use of Dangerous Chemicals and Materials Containing Them and Occupational Exposure Limits to Chemical Agents  
Government of the Republic, Regulation No. 105 of 20 March 2001, Amended 17 October 2019, and 17 January, 2020.

**Finland - HTP-ARVOT 2020 -** Concentrations Known to be Hazardous, 654/2020 OEL values 2020 Publications of Ministry of Social Affairs and Health 2020:24 Annexes1, 2 and 3.

**France - INRS ED 984 -** Occupational Exposure Limit Values to Chemical Agents in France Published 2016 by the INRS National Institute of Research and Safety Health and safety of work, revised, updated by: Decree 2016-344, JORF No 0119, and Decree 2019-1487.

**France - Decree 2009-1570 -** Decree 2009-1570 of December 15, 2009, relative to the control of chemical risk on workplaces.

**Germany - TRGS 900 -** Occupational Exposure Limits, Technical Rules for Dangerous Substances, latest amendment March, 2020

**Germany - TRGS 903 -** Biological Threshold Limits (BGW-Values), Technical Rules for Dangerous Substances, latest amendment March, 2020

**Gibraltar - LN. 2018/131 -** Factories (Control of Chemical Agents at Work) Regulations 2003 LN. 2003/035, amended by LN. 2008/035, LN. 2008/050, LN. 2012/021, LN. 2015/143, LN. 2018/181.

EU GHS SDS (2020/878)

**Luxembourg - A-N 684 -** Grand-Ducal Regulation of 20 July 2018 amending the Grand-Ducal Regulation of 14 November 2016 concerning the protection of the safety and health of employees against the risks associated with chemical agents in the workplace. Official journal of the Grand-Duke of Luxembourg, A-N°684 of 2018

**Malta - MOSHAA Ch. 424 -** Malta Occupational Health and Safety Authority Act: Chapter 424 as amended by: Legal Notice 353, 53, 198, and 57.

**Netherlands- OWCRLV -** Occupational Working Conditions Regulation, Limit Values for substances harmful to health, Annex XVIII, Updated from August 1, 2020.

**Norway - FOR-2020-04-060695 -** Regulations concerning action and limit values for physical and chemical agents in the working environment and classified biological agents, FOR-2011-12-06-1358, Updated by: FOR-2020-04-06-695, FOR-2020-03-23-402, FOR-2018-12-20-2186, FOR-2018-08-21-1255, FOR-2017-12-20-2353.

**Poland - Dz. U. 2020 Nr. 61 -** Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the Highest Allowable Concentrations and Intensities of Factors Harmful to Health in the Work Environment Dz.U. 2018 Nr. 1286 of June 12, 2018, Annex 1 - List of values of the highest permissible chemical concentrations and dust factors harmful to health in the work environment, amended by: Dz. U. 2020 Nr. 61.

**Portugal - Portuguese Norm NP 1796:2014 -** Occupational exposure limits and biological exposure indices to chemical agents. Table 1 - Occupational exposure limits and biological exposure indices to chemical agents (OELs), Law Decree 35/2020.

**Romania - Gov. Dec. No 1.218 -** Governmental Decision No. 1.218 from 06/09/2006 on the minimum health and safety requirements for protection of workers from the risks related to exposure to chemical agents, Annex No. 1 Mandatory National Occupational Exposure Limit Values for Chemical Agents. Amended by Decision no. 157, 584, 359, and 1.

**Slovakia - Gov. Decree 33/2018 -** Government Decree of Slovak Republic 33/2018 on January 17, 2018 amending Government Decree of Slovak Republic 355/2006 about protection of health of employees when working with chemical agents

**Slovenia - No. 79/19 -** Regulation for protection of workers against risks related to carcinogenic or mutagenic substances exposure. Annex III - Classification and binding levels of carcinogenic or mutagenic substances for occupational exposure. The Official Journal of the Republic of Slovenia, No. 101/2005. Amended by 38/15, 79/19. Regulation for protection of workers against risks related to exposure to chemical substances at the workplace. Republic of Slovenia, No. 100/2001. Annex I - List of Binding Occupational Exposure Limit Values. Amended by 39/05, 53/07, 102/10, 38/15, 78/18, 78/19

**Spain - AFS 2018:1 -** NATIONAL INSTITUTE FOR HEALTH AND SAFETY AT WORK. Occupational exposure limits for chemical agents in Spain. Tables 1 and 3. Latest edition Feb. 2019

**Sweden - AFS 2018:1 -** Statute Book of the Swedish Work Environment Authority, AFS 2018:1

The Swedish Work Environment Authority's Ordinance and General Guidance on Hygienic Limit Values

**Switzerland - OLVSNAIF -** Occupational Limit Values 2020 Swiss National Accident Insurance Fund. List of Biological Limit Values (BAT-Werte) and List of MAK Values.

*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.*