



# HEMATOXYLIN SOLUTION MODIFIED ACC. TO GILL III

□□□□□□□□

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## □□ 3: □□□□□ □□ □ □□□

### 3.2. □□□

□□	□□□□	%	Regulation (EC) No.1272/2008 [CLP]□ □□ □□
WATER	CAS □□: 7732-18-5 EC □□: 231-791-2	65 – 75	□□□□ □□
ETHANEDIOL	CAS □□: 107-21-1 EC □□: 203-473-3 EC □□ □□: 603-027-00-1	20 – 30	□□ □□ 4 (□□), H302 □□ □□□□ □□ (□□ □□) 2, H373
ACETIC ACID GLACIAL	CAS □□: 64-19-7 EC □□: 200-580-7 EC □□ □□: 607-002-00-6	3 – 5	□□□ □□ 3, H226 □□ □□□ 1A, H314
ALUMINIUM SULPHATE OCTADECALHYDRATE	CAS □□: 7784-31-8	2 – 5	□ □□□ 1, H318
HEMATOXYLIN STAIN	CAS □□: 517-28-2 EC □□: 208-237-3	0.5 – 1	□ □□□ 2, H319
SODIUM IODATE	CAS □□: 7681-55-2 EC □□: 231-672-5	0.01 – 0.05	□□□ □□ 2, H272 □□ □□ 4 (□□), H302 □□□ □□□ 1, H334 □□ □□□ 1, H317

□□(H) □□ □ EUH □□ □□: 16□ □□.

## □□ 4: □□□□□□

### 4.1. □□□□ □□

- □□ □□ : If you feel unwell, seek medical advice.
- □□ : □□□ □□□ □□ □□□ □□□□ □□ □□□ □□□□ □□□□.
- □□□□ □□ : Wash skin with plenty of water.
- □□□□ □□ : □□□□□ □□ □□ □□□□.
- □□ : □□□□ □□□ □□□□(□□)□ □□□ □□□□.
- First-aid measures for first aider : □□□□ □□□□ □□□ □□ □□ □□□ □□□□ □□□□.

### 4.2. □□ □ □□□ □□ □□□ □□ □ □□

- □ □□/□□ : None under normal conditions.
- □□ □ □□/□□ : None under normal conditions.
- □□ □ □□/□□ : None under normal conditions.
- □ □□/□□ : None under normal conditions.

### 4.3. □□□□ □□ □ □□ □□ □□ □□ □□

Treat symptomatically.

## □□ 5: □□·□□□ □□□□

### 5.1. □□□ □□□

- □□□ : Water spray. Dry powder. Foam. Carbon dioxide.
- □□□ : Do not use a heavy water stream.

### 5.2. □□□□□□□ □□□ □□ □□□

- □□ : No fire hazard.
- □□ : No direct explosion hazard.
- □ □□□ □□□ □□ : Toxic fumes may be released.

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## 5.3. □□□□□ □□ □□

- □□ : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
- □□ □ □□ : Do not attempt to take action without suitable protective equipment. □□□ □□□□□. Complete protective clothing.

## □□ 6: □□□□□ □□□□□

### 6.1. □□□ □□□□ □□ □□□ □□□□ □ □□□

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- □□□ : Wear recommended personal protective equipment.
- □□ : Ventilate spillage area.
- □□□□ : Do not attempt to take action without suitable protective equipment. □□ □□□ □□□ □□ 8: "□□□□ □ □□□□□"□ □□□□□.
- □□ : Evacuate unnecessary personnel. □□□□ □□□□ □□ □□□□ □□ □□□□.

### 6.2. □□□ □□□□ □□ □□□ □□□□

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### 6.3. □□ □□ □□ □□

- : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
- □□ : Take up liquid spill into absorbent material.
- □□ □□□□ : Dispose of materials or solid residues at an authorized site.

### 6.4. □□ □□ □□

For further information refer to section 13.

## □□ 7: □□ □ □□□□

### 7.1. □□□□□□

- □ □□□□□ □□ □□ : □□□□ □□ □□□□□ □□□ □□□ □□.
- : Ensure good ventilation of the work station. □□ □□□□ □□□□□.
- □□ : □ □□□ □□□ □□□ □□□, □□□□ □□□□ □□□□. Always wash hands after handling the product.

### 7.2. □□□□ □□□ □□□ □□□ □□ □□

- □□ : Keep in a cool, well-ventilated place away from heat.
- □□ : □□□□ □□□□ □□□□□ □□□□.
- : Store always product in container of same material as original container.

### 7.3. □□ □□ □□

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## □□ 8: □□□□ □ □□□□□

### 8.1. □□ □□ □□

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ETHANEDIOL (107-21-1)	
EU - □□ □□□ □□ □□□ (IOEL)	
□□ □□	Ethylene glycol
IOEL TWA	20 ppm
IOEL STEL	104 mg/m <sup>3</sup>
	40 ppm
□□	Skin
□□ □□	COMMISSION DIRECTIVE 2000/39/EC
□□ - □□□□□ □□□□, □□□□ □□□□ □ (TRGS 900)	
AGW (OEL TWA)	26 mg/m <sup>3</sup>
	10 ppm
TRGS 900 □□ □□	2(I)
□□	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); EU - Europäische Union (Von der EU wurde ein Luftgrenzwert festgelegt: Abweichungen bei Wert und Spitzenbegrenzung sind möglich); H - hautresorptiv; Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden; 11 - Summe aus Dampf und Aerosolen
□□ □□	TRGS900
□□□□ - □□□□□ □□□□, □□□□ □□□□ □	
□□ □□	Etilenoglicol
OEL C	100 ppm H (Apenas aerosol)
□□	A4 (Agente não classificável como carcinogénico no Homem)
□□ □□	Norma Portuguesa NP 1796:2014
□□□ - □□□□□ □□□□, □□□□ □□□□ □	
□□ □□	Etilenglicol
VLA-ED (OEL TWA)	52 mg/m <sup>3</sup>
	20 ppm
VLA-EC (OEL STEL)	104 mg/m <sup>3</sup>
	40 ppm
□□	Vía dérmica (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo).
□□ □□	Límites de Exposición Profesional para Agentes Químicos en España 2022. INSHT
□□ - □□□□□ □□□□, □□□□ □□□□ □	
□□ □□	Ethane-1,2-diol
WEL TWA (OEL TWA)	52 mg/m <sup>3</sup> vapour
	10 mg/m <sup>3</sup> particulate
	20 ppm vapour
WEL STEL (OEL STEL)	104 mg/m <sup>3</sup> vapour
	40 ppm vapour

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ETHANEDIOL (107-21-1)	
□□	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
□□ □□	EH40/2005 (Fourth edition, 2020). HSE
□□ - ACGIH - □□□□ □□□□, □□□□ □□□□ □	
□□ □□	Ethylene glycol
ACGIH OEL TWA	25 ppm (V - Vapor fraction)
ACGIH OEL STEL	10 mg/m <sup>3</sup> (I - Inhalable particulate matter, H - Aerosol only)
	50 ppm (V - Vapor fraction)
□□ (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
□□ □□	ACGIH 2022

## 8.2. □□□□

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Ensure good ventilation of the work station.

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Wear recommended personal protective equipment.

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□ □□:

Chemical goggles or safety glasses

### Skin protection

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Wear a mask

□ □□:

Protective gloves

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Wear appropriate mask

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## □□ 9: □□□□□ □□

### 9.1. □□□□ □□□□□ □□□ □□ □□

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: Dark red. Red to purple.

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: Clear liquid.

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: slight characteristic odour.

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□□□□ □□	:	□□□□
□□ □□	:	□□□□
pH	:	2.5 at 20 °C
□□(□□□□)	:	□□□□
□□□□	:	□: Miscible with water
Partition coefficient n-octanol/water (Log Kow)	:	□□□□
□□□□	:	□□□□
50°C□□□□ □□□□	:	□□□□
□□□□	:	1.07 g/cm <sup>3</sup> at 20 °C
□□□□	:	□□□□
20°C□□□□ □□ □□ □□	:	□□□□
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## 9.2. □ □□ □□□□□

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## □□ 10: □□□ □ □□□

### 10.1. □□□

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. □□□ □□□

Stable under normal conditions.

### 10.3. □□ □□□ □□□

No dangerous reactions known under normal conditions of use.

### 10.4. □□□ □ □□

None under recommended storage and handling conditions (see section 7).

### 10.5. □□□ □ □□

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### 10.6. □□□ □□□□ □□□□

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## □□ 11: □□□ □□ □□

### 11.1. □□ (EC) No 1272/2008 □ □□□, □□□ □□□ □□ □□

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□□ □□□ □□ □□□	:	□□□□ □□
		pH: 2.5 at 20 °C

### WATER (7732-18-5)

pH	6 – 8 at 25 °C
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### ACETIC ACID GLACIAL (64-19-7)

pH	2.4 (1.0 M solution)
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## □□ 12: □□□ □□□ □□

### 12.1. □□

□□□ - □□ : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

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### 12.2. □□□ □ □□□

HEMATOXYLIN SOLUTION MODIFIED ACC. TO GILL III	
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WATER (7732-18-5)	
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ACETIC ACID GLACIAL (64-19-7)	
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SODIUM IODATE (7681-55-2)	
□□□ □ □□□	□□ □□ □□
HEMATOXYLIN STAIN (517-28-2)	
□□□ □ □□□	□□ □□ □□
ETHANEDIOL (107-21-1)	
□□□ □ □□□	□□ □□ □□
ALUMINIUM SULPHATE OCTADECALHYDRATE (7784-31-8)	
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### 12.3. □□ □□□

ACETIC ACID GLACIAL (64-19-7)	
Partition coefficient n-octanol/water (Log Pow)	-0.17
ETHANEDIOL (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.36 - Bioaccumulation is not expected.

### 12.4. □□ □□□

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### 12.5. PBT □ vPvB □□ □□

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### 12.6. □□□ □□ □□

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### 12.7. □□ □□ □□

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## □□ 13: □□□ □□□□

### 13.1. □□□ □□□

- □□(□□□) : Disposal must be done according to official regulations.
- □□□ : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- □□ □□ □□ : Disposal must be done according to official regulations.
- /□□ □□ □□□□ : Disposal must be done according to official regulations.
- □□ : Do not re-use empty containers.

## □□ 14: □□□ □□□ □□

ADR / IMDG / IATA / ADN / RID □□ □□

### 14.1. UN □□ □□ ID □□

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### 14.2. UN □□ □□□□

- □□□ (ADR) : Not regulated
- □□□ (IMDG) : Not regulated
- □□□ (IATA) : Not regulated
- □□□ (ADN) : Not regulated
- □□□ (RID) : Not regulated

### 14.3. □□□□□ □□□ □□

**ADR**  
□□□□□ □□□ □□ (ADR) : Not regulated

**IMDG**  
□□□□□ □□□ □□ (IMDG) : Not regulated

**IATA**  
□□□□□ □□□ □□ (IATA) : Not regulated

**ADN**  
□□□□□ □□□ □□ (ADN) : Not regulated

**RID**  
□□□□□ □□□ □□ (RID) : Not regulated

### 14.4. □□□□

- □□ (ADR) : Not regulated
- □□(IMDG) : Not regulated
- □□ (IATA) : Not regulated
- □□(ADN) : Not regulated
- □□(RID) : Not regulated

### 14.5. □□ □□□□

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### 14.6. □□□□ □□ □□ □□□□

□□ □□  
Not regulated

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Not regulated

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Not regulated

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□□ □□ □□  
Not regulated

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Not regulated

## 14.7. □□□□□□(IMO) □□ □□ □□ □□

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## □□ 15: □□ □□□□

### 15.1. □□, □□ □□□□ □□□□ □□□□ □□ □□ □□ □□/□□

EU □□

**REACH** □□□ XVII (□□ □□)

REACH □□□ XVII □□□ □□ □□ □□ (□□ □□)

**REACH** □□□ XIV (□□ □□)

REACH □□□ XIV (□□ □□) □□□ □□ □□ □□

**REACH** □□ □□ □□ (SVHC)

REACH □□ □□□ □□□ □□ □□ □□

**PIC** □□ (□□□□□□)

PIC □□(□□ □□□□ □□□□ □□ □□ EU 649/2012 ) □□□ □□ □□ □□

**POP** □□ (□□□ □□ □□□□)

POP □□□ □□□ □□ □□ □□(□□□ □□ □□□□□ □□ □□ EC 2019/1021)

**Ozone Regulation (2024/590)**

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

□□□□ □□(428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

□□ □□□□ □□ (2019/1148)

□□□ □□□□ □□(□□ □□□□□ □□ □□□ □□ □□ EU 2019/1148 ) □□□ □□ □□ □□

□□ □□□□ □□ (273/2004)

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RG 84	

□□

VOC ordinance (ChemVOCFarbV) :

WGK : WGK 3, □□ □□ □□□ (AwSV, □□□ 1□ □□ □□).

□□ □□ □□(12. BImSchV) : □□ □□ □□(12. BImSchV) □□ □□ □□

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SZW-lijst van kankerverwekkende stoffen : □□ □□ □□□

SZW-lijst van mutagene stoffen : □□ □□ □□□

SZW-lijst van reprotoxische stoffen – Borstvoeding : □□ □□ □□□

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : □□ □□ □□□

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SZW-lijst van reprotoxische stoffen – Ontwikkeling : □□ □□ □□□

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## 15.2. □□ □□ □□□□ □□

No chemical safety assessment has been carried out

## □□ 16: □ □□ □□□□

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ACGIH	American Conference of Government 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
BLV	□□ □□ □
BOD	Biochemical oxygen demand (BOD)
CAS □□	□□□□ □□ □□ □□(CAS)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	□□□ □□ □□□
CSA	□□ □□ □□□ □□
DMEL	Derived Minimal Effect level
DNEL	□□ □□□ □□
EC □□	□□ □□□ □□
EC50	Median effective concentration
ED	□□□ □□□□
EN	□□ □□
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development

# HEMATOXYLIN SOLUTION MODIFIED ACC. TO GILL III

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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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OEL	□□□ □□ □□
OSHA	Occupational Safety & Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	□□ □□□ □□
PPE	□□ □□□
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	□□□□□□□□
STP	Sewage treatment plant
TF	□□□ □□
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
COV	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	□□ □□ □□□

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H226	□□□ □□ □ □□.
H272	□□□ □□□□ □; □□□.
H302	□□□ □□□.
H314	□□□ □□ □□□ □ □□□ □□□.
H317	□□□□□ □□ □□□ □□□ □ □□.
H318	□□ □□ □□□ □□□.
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H334	□□ □ □□□□□ □□, □□ □□ □□ □□□ □ □□.
H373	□□□ □□ □□ □□□□ □□□ □□□ □ □□.

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