

Date Printed 02.02.2022 Version number 1 Revision Date 02.02.2022

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

· 1.1 Product identifier

· Trade name: Histo Clear 2

· Article number: AGR1353

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

No further relevant information available.

· **Application of the substance / the preparation:** No further information available.

· 1.3 Details of the supplier of the safety data sheet

· Supplier.

Agar Scientific Ltd Parsonage Lane Stansted CM24 8GF United Kingdom sales@agarscientific.com Tel: +44 (0) 1279 813 519

· Further information obtainable from: Technical Support

• 1.4 Emergency telephone number: 24 hours: +44 (0)1856 407333

#### **SECTION 2: Hazards identification**

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



Flam. Liq. 3 H226 Flammable liquid and vapour.



health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H336 May cause drowsiness or dizziness.

· 2.2 Label elements

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

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

Hazard pictograms









GHS02 GHS07 GHS08 GHS09

· Signal word Danger

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#### · Hazard-determining components of labelling:

Aliphatic Hydrocarbons

d-limonene

#### · Hazard statements

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways. H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

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

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water [or shower].

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

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

international regulations.

#### · 2.3 Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

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

- · 3.2 Chemical characterisation: Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
	Aliphatic Hydrocarbons	80.0%
EINECS: 265-150-3	♦ Asp. Tox. 1, H304	
	d-limonene	20.0%
EINECS: 227-813-5	Flam. Liq. 3, H226; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Skin Sens. 1, H317	

#### · Additional information:

For the wording of the listed hazard phrases refer to section 16. Total aromatic content contained in this product is less than 0.1%

#### **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation:

Supply fresh air.

No adverse effects are anticipated from inhalation.

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

## After skin contact:

Wash with water and soap and rinse thoroughly.

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

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· After eye contact:

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Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

#### After swallowing:

Do not induce vomiting. If swallowed and the person is conscious, immediately give large amounts of water. Get medical attention.

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

Aliphatic Hydrocarbons: Headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

d-limonene: May include dizziness, headaches, and nasal irritation.

Ingestion

Aliphatic Hydrocarbons: Minimal toxicity by ingestion. d-limonene: May include nausea, vomiting, and headache.

Aliphatic Hydrocarbons: Dermatitis may occur with frequent or prolonged contact.

d-limonene: May include drying and redness (dermatitis) of the skin.

Aliphatic Hydrocarbons: Product is only slightly irritating to eye tissue, non injurious.

d-limonene: May include redness, itching, and watering of the eyes.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- · Suitable extinguishing agents: Dry powder, foam, carbon dioxide. (Water may be ineffective.)
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products: Thermal decomposition products may include carbon monoxide, carbon dioxide, and hydrocarbons.

Hazardous Decomposition Products: None

Hazardous Polymerisation: Will not occur under normal conditions of use.

- 5.3 Advice for firefighters
- **Protective equipment:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## **SECTION 6: Accidental release measures**

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

Wear protective gloves and glasses.

Wear appropriate protective equipment as specified in Section 8.

**6.2 Environmental precautions:** 

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

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

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

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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Eliminate source of ignition. Ventilate area. Cover with absorbent material (soda ash) to confine spill and sweep or shovel into container. Close container tightly. Avoid breathing vapors.

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 disposal information.

#### **SECTION 7: Handling and storage**

#### · 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Transfer methods should avoid static sparks. Use explosion proof ventilation.

Wear appropriate protective equipment as specified in Section 8.

#### Information about fire - and explosion protection:

The dried resin is combustible, similar to wood. Burning dry resin emits dense, black smoke. As latex, material is not combustible.

Protect against electrostatic charges.

#### · 7.2 Conditions for safe storage, including any incompatibilities

Keep in a tightly closed container, stored in a cooled, dry, ventilated area away from sources of heat or ignition. Protect from physical damage. Isolate from incompatible materials.

#### Incompatibles:

Aliphatic Hydrocarbons: Strong oxidising agents.

d-limonene: Avoid contact with strong acids, alkalis, or oxidising agents.

- · Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

#### **SECTION 8: Exposure controls/personal protection**

#### · 8.1 Control parameters

Component: Aliphatic Hydrocarbons

ACGIH Threshold Limit Value (TLV): 300 ppm

OSHA Permissable Exposure Limit (PEL): None established

Component: d-limonene

ACGIH Threshold Limit Value (TLV): None established

OSHA Permissable Exposure Limit (PEL): None established

- Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information: The lists valid during the making were used as basis.

#### · 8.2 Exposure controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

#### · Personal protective equipment:

#### General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

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Avoid contact with the skin.

Avoid contact with the eyes and skin.

#### · Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

If the exposure limit is exceeded, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · Material of gloves

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

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

· Eye protection:



Tightly sealed goggles

· Body protection: Clean body covering clothing.

## **SECTION 9: Physical and chemical properties**

- 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form:
Colour:
Colour:
Colourless
Characteristic
Odour threshold:
Not determined.

PH-value:
Not determined.

· Change in condition

Melting point/freezing point: -55 °C Initial boiling point and boiling range: 172 °C

· Flash point: 40 °C

· Flammability (solid, gas): Combustible.

· Ignition temperature: 292 °C

· **Decomposition temperature:** Not determined.

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Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	1.2 Vol %
Upper:	9.6 Vol %
· Vapour pressure at 20 °C:	2 hPa
Density at 20 °C:	0.75 g/cm³
Relative density at 15.5 °C	0.75 g/cm <sup>3</sup>
Vapour density	4.94 (air=1)
Evaporation rate	Not determined.
Solubility in / Miscibility with	
water at 25 °C:	<0.01 %
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	20.0 %
VOC (EC)	20.00 %
Solids content:	0.0 %
9.2 Other information	No further relevant information available.

#### **SECTION 10: Stability and reactivity**

- · 10.1 Reactivity Oxidisable liquid and vapor. Avoid ignition sources, oxidisers and strong acids.
- 10.2 Chemical stability Stable under normal conditions of use.
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · 10.3 Possibility of hazardous reactions Will not occur under normal conditions of use.
- · 10.4 Conditions to avoid Heat, sources of ignition.
- · 10.5 Incompatible materials:

Aliphatic Hydrocarbons: Strong oxidizing agents.

d-limonene: Avoid contact with strong acids, alkalis, or oxidizing agents.

• 10.6 Hazardous decomposition products: No dangerous decomposition products known.

#### **SECTION 11: Toxicological information**

#### · 11.1 Information on toxicological effects

Routes of Entry

Aliphatic Hydrocarbons: Inhalation or by skin contact.

d-limonene: May be absorbed through the skin, by inhalation, or by ingestion.

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

# CD/LC50 values relevant for classification: 64742-48-9 Aliphatic Hydrocarbons Oral LD50 >5,000 mg/kg (rat) Dermal LD50 >3,000 mg/kg (rab)

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#### 5989-27-5 d-limonene

Oral LD50 4,400 mg/kg (rat)

- · Specific symptoms in biological assay:
- Skin corrosion/irritation

Causes skin irritation.

Aliphatic Hydrocarbons: Low order or toxicity. Frequent or prolonged contact may irritate and cause dermatitis. Skin contact may aggravate an existing dermatitis condition.

d-limonene: Repeated or prolonged contact can cause redness, irritation, and scaling of the skin (dermatitis). Normal care and personal hygiene should prevent skin effects.

· Serious eye damage/irritation

Aliphatic Hydrocarbons: Slightly irritating but does not injure eye tissue.

d-limonene: Eye irritation may occur with exposure to concentrated vapors or contact with product.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Other information (about experimental toxicology):

Potential Health Effects

#### Inhalation

Aliphatic Hydrocarbons: High vapor/aerosol concentrations (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

d-limonene: Inhalation can cause nose, throat, and respiratory tract irritation. Prolonged exposure to high vapor or mist concentrations may cause dizziness, headaches, and nasal irritation.

#### Ingestion

Aliphatic Hydrocarbons: Minimal toxicity by ingestion, though small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

d-limonene: Ingestion may cause vomiting, headache, and other medical problems.

#### Carcinogenicity

Aliphatic Hydrocarbons: Not listed by NTP, IARC, or OSHA.

d-limonene: None of the components of this material are listed by NTP, OSHA, ACGIH, or IARC as a carcinogen or a suspected carcinogen.

- Additional toxicological information:
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- 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

May cause drowsiness or dizziness.

- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard

May be fatal if swallowed and enters airways.

#### **SECTION 12: Ecological information**

#### · 12.1 Toxicity

COMPONENT: Aliphatic Hydrocarbons

**Aquatic Toxicity** 

Vertebrates: LC50 (fathead minnow): 8.2 mg/L

Invertebrates: 48-hour EL50 to Daphnia (calculated) 4.5 mg/l

Algae: 72 -hour EL50 for Selenastrum capricornutum (Pseudokirchnerella subcapitata): 3.1 mg/L

Microorganisms: 72-hr LL50 value for Tetrahymena pyriformis: 15.41 mg/L

Terrestial Environment Toxicity

Birds: No data

Arthropods: PNEC soil: 0.4 - 20.8 mg/kg soil Plants: PNEC soil: 0.4 - 20.8 mg/kg soil

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Microorganisms: PNEC soil: 0.4 - 20.8 mg/kg soil

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COMPONENT: d-limonene Aquatic Toxicity

Vertebrates: LC50 (96hr fathead minnod): 720ug/L Invertebrates: EC50 (48hrs, Daphnia) 0.36mg/L

Algae: EC50 (72hrs) 8mg/L

Microorganisms: EC50 (3hr) 209mg/L Terrestial Environment Toxicity

Birds: No Data Arthropods: No Data Plants: No Data

Microorganisms: No Data

· Aquatic toxicity: No further relevant information available.

· 12.2 Persistence and degradability

Aliphatic Hydrocarbons: biodegraded 77% after 28 days (readily biodegradable).

d-limonene: Readily biodegradable.

12.3 Bioaccumulative potential
Aliphatic Hydrocarbons: No Data.

d-limonene: BCF is 1022 L/kg (calculated).

· 12.4 Mobility in soil

Aliphatic Hydrocarbons: calculated log Koc ~2. d-limonene: Koc of d-limonene (predicted): 1984 L/kg.

Ecotoxical effects: Remark: Toxic for fish

· Additional ecological information:

· General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

#### **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal.

Recommendation: Dispose of packaging as product.

#### **SECTION 14: Transport information**

- · 14.1 UN-Number
- · ADR, IMDG, IATA UN1268
- · 14.2 UN proper shipping name
- · ADR 1268 PETROLEUM PRODUCTS, N.O.S. mixture, ENVIRONMENTALLY HAZARDOUS

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(Contd. of page 8) ·IMDG PETROLEUM PRODUCTS, N.O.S. mixture, MARINE POLLUTANT ·IATA PETROLEUM PRODUCTS, N.O.S. mixture · 14.3 Transport hazard class(es) · ADR, IMDG · Class 3 Flammable liquids. · Label ·IATA · Class 3 Flammable liquids. · Label 3 · 14.4 Packing group · ADR, IMDG, IATA Ш · 14.5 Environmental hazards: Product contains environmentally hazardous substances: d-limonene · Marine pollutant: Yes Symbol (fish and tree) · Special marking (ADR): Symbol (fish and tree) Warning: Flammable liquids. · 14.6 Special precautions for user · Hazard identification number (Kemler code): 30 · EMS Number: F-E,S-E Stowage Category · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. · Transport/Additional information: · ADR · Limited quantities (LQ) 5L Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 · Transport category Tunnel restriction code D/E · Limited quantities (LQ) 5L · Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

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· UN "Model Regulation": UN 1268 PETROLEUM PRODUCTS, N.O.S.

MIXTURE, 3, III, ENVIRONMENTALLY HAZARDOUS

HAZAKDOUS

#### **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Labelling according to Regulation (EC) No 1272/2008
- · Hazard statements

Risks

Aliphatic Hydrocarbons:

R: 10-65-66-53

Flammable. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking. May cause long-term adverse effects in the aquatic environment.

d-limonene: R: 10-38-43-50/53

Flammable. Irritating to skin. May cause sensitization by skin contact. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

#### **Dangers**

Aliphatic Hydrocarbons:

H226 - Flammable liquid and vapor.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H336 - May cause drowsiness or dizziness.

H411 - Toxic to aquatic life with long lasting effects.

d-limonene:

H226 - Flammable liquid and vapor.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H410 - Very toxic to aquatic life with long lasting effects.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- Seveso category

E2 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

This information is based on our present knowledge and should assist the user with the safe handling of this material when properly applied. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Relevant phrases

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Department issuing SDS: Sales department

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· Contact:

sales@agarscientific.com Tel: +44 (0) 1279 813 519

## 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

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) VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids - Category 3 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

Asp. Tox. 1: Aspiration hazard - Category 1

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 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

\* Data compared to the previous version altered.