

SAFETY DATA SHEET

In accordance with 29 C.F.R. 1910.1200 and GHS Rev. 5

SUBERCLEAR® CLEARING SOLUTION

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name SUBERCLEAR® (Specimen) Clearing Solution
Product Number(s) HHI004.1-7
Synonyms A solution for clearing microscopy specimens.
Brand Hempstead Halide®

The product is a mixture. See Section 3.

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

Identified uses Laboratory chemicals

Uses advised against Not for food, drug, pesticide or biocidal product use.

1.3 Details of the supplier of the safety data sheet

Company	Hempstead Halide Inc Heidenheimer-Marine Building 305 21 st Street Galveston, TX 77550 USA	Hempstead Allied Ltd Leda House 20 Station Road Cambridge CB1 2JD GB
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Telephone (+1) 409-572-2505 (+44) (0) 1223 663178

Emergency Telephone Number

Inside the USA: (+1) 800-222-1222 (AAPCC)

Outside the USA: (+44) (0)845-46-47 (NHS Direct)

2. HAZARD IDENTIFICATION

2.1 Classification of the mixture

This chemical mixture is considered hazardous under the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Classification in accordance with 29 CFR 1910 (Category 3)

Respiratory system, H335

Acute toxicity, Oral (Category 4) H302

Skin irritation (Category 2) H315

Eye irritation (Category 2A) H318, H319

Specific target organ toxicity – single exposure (Category 3), Respiratory system H335

For the full text of H-Statements referred to in this Section, see Section 16

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statements:

H302	Harmful if swallowed.
H315	Causes skins irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statements:

P261	Avoid breathing dust/fumes/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED, call a POISON CENTER or doctor if you feel unwell.
P302+P352	IF ON SKIN, wash with plenty of soap and water.
P304+P340	IF INHALED, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor if you feel unwell.
P321	Specific treatment (see supplemental first aid instructions on this label).
P330	Rinse mouth.
P332+P313	If skin irritation occurs, get medical advice/attention.
P337+P313	If eye irritation persists, get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P370-P378	In case of fire, use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403-P233	Store in a well-ventilated place. Keep container tightly closed.
P403-P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none

3. COMPOSITION/INFORMATON ON INGREDIENTS

COMPONENT	SYNONYMS	CAS-NO	EC-NO	CONCENTRATION w/w
Chloral anhydrous	Trichloroacetaldehyde	75-87-6	200-911-5	60.0%
Lactic Acid	2-Hydroxypropanoic acid	50-21-5	200-018-0	36.8%
Water deionized	Distilled water	7732-18-5	231-791-2	3.2%

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the physician in attendance. Move away from the affected area.

If inhaled

Move person into fresh air. If not breathing, give artificial respiration and consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (*see* Section 2.2) and/or in Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the mixture

No data available.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see Section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage. Collect with absorbent materials and place spilled product and all materials used in a container for disposal according to local regulations (see Section 13).

6.4 Reference to other sections

For disposal see Section 13.

7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition. No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see Section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage 4-20° C.

7.3 Specific end use(s)

Apart for the uses mentioned in Section 1.2, no other specific uses are stipulated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters****Components and workplace control parameters**

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the workday.

Personal protective equipment

Eye/face protection

Face shield and safety glass. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EC).

Skin protection

Handle with chemical-resistant gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Wear a complete suit protective against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirator and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EC).

Control of environment exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	Colorless, mobile, oily liquid
b) Odor	Pungent and irritating
c) Odor threshold	No data available
d) pH	7.93
e) Melting point/freezing point	Melting point/range: -18 °C (-1 °F)
f) Initial boiling point and boiling point range	122 °C (252 °F)
g) Flash point	75 °C (167 °F) – closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available

k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	1.53 g/ml at 20 °C (68 °F)
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reaction

No data available

10.4 Conditions to avoid

Heat, flames and sparks

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: carbon oxides, hydrogen chloride gas.

Other decomposition products: no data available.

In the event of fire *see* Section 5.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD₅₀ – 480 mg/Kg (rat, oral)

Remarks

Behavioral: somnolence (general depressed activity) and ataxia.

LC Inhalation – 4 hours – 440 mg/L (rat)

Remarks

Sense organs and special senses (ear, eye, nose and taste) Eye - ptosis. Lungs, thorax or respiration – Dyspnea. Dermal – Psoriasis, desiccating.

LD₅₀ Intraperitoneal – 600ml/Kg (mouse)

Skin corrosion/irritation**Serious eye damage/eye irritation**

No data available

Respiratory or skin sensitization

No data available

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP or EPA classification.

IARC: 2A – Group 2A: Probably carcinogenic to humans (Trichloroacetaldehyde).

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity – single exposure

Inhalation – May cause respiratory irritation.

Specific target organ toxicity – repeated exposure

No data available

Aspiration hazard

No data available

Additional information

RTECS – Not available

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Do not allow this product to be released into the environment. Abide with all applicable government regulations as to the disposition and disposal of this product.

12.1 Toxicity

Toxicity to fish: LC₅₀ – *Leuciscus idus melanotus* (orfe) – 1,720 mg/L – 48 h
Toxicity to daphnia: EC₅₀ – *Daphnia magna* (daphnia) – 112mg/l – 48 h

12.2 Persistence and degradability

No data available

12.3 Bio-accumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment is not required and not conducted.

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORTATION INFORMATION**DOT (US)**

UN number: 2075 Class: 6.1 Packing group: II
Proper shipping name: Chloral, anhydrous, stabilized
Reportable Quantity (RQ): 5,000 lbs.
Poison Inhalation Hazard: No

IMDG

UN Number: 2075 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: CHLORAL, ANHYDROUS, STABILIZED

IATA

UN number: 2075 Class: 6.1 Packing group: II
 Proper Shipping name: Chloral, anhydrous, stabilized

15. REGULATORY INFORMATION**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

Massachusetts Right to Know Components

Hoyer's Mounting Medium

CAS No. 75-87-6

CAS No. 50-21-5

Revision Date 04-24-1993

Pennsylvania Right to Know Components

Hoyer's Mounting Medium

CAS No. 75-87-6

CAS No. 50-21-5

Revision Date 04-24-1993

New Jersey Right to Know Components

Hoyer's Mounting Medium

CAS No. 75-87-6

CAS No. 50-21-5

Revision Date 04-24-1993

California Prop. 65 Components

Hoyer's Mounting Medium

CAS No. 75-87-6

CAS No. 50-21-5

Revision Date 12-20-2013

WARNING: This product contains a chemical known to the State of California to cause cancer.

16. OTHER INFORMATION**Full Text of H-Statements referred to under Sections 2 and 3**

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
H227	Combustible liquid
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage

H319 Causes serious eye irritation
H335 May cause respiratory irritation

HMIS Rating

Health Hazard: 2
Chronic Health Hazard: 0
Flammability: 2
Physical Hazard: 0

NFPA

Health Hazard: 2
Fire Hazard: 2
Reactivity Hazard: 0

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