

Safety Data Sheet
UnoVue Plus Auto Detection System (OSHA)



Safety Data Sheet
UnoVue Plus Auto Detection System (OSHA)

SECTION 1: Identification

1.1 GHS Product identifier

Product name	UnoVue Plus Auto Detection System (OSHA)
Product number	UVP25-Auto, UVP100-AUTO
Brand	Montage UnoVue Plus Auto Detection System

1.2 Other means of identification

Component 1: Tissue Primer, K054
Component 2: Background Blocker, K023
Component 3 (PermaRed Auto Plus Buffer (K 057B))
Component 4 (PermaRed Auto Plus Chromogen (K 057C))

1.3 Recommended use of the chemical and restrictions on use

In Vitro Diagnostic Use

1.4 Supplier's details

Name	Diagnostic Biosystems
Address	6616 Owens Drive Pleasanton CA 94588 USA
Telephone	(888) 896-3350
email	customersupport@dbiosys.com

1.5 Emergency phone number

(925) 484-3350 (9AM-6PM, Monday - Friday, Pacific Standard Time)

SECTION 2: Hazard identification

General hazard statement

For Professional Users Only

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Acute toxicity, inhalation (chapter 3.1), Cat. 5

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- Acute toxicity, oral (C.4.1), Cat. 4
- Eye damage/irritation (C.4.5), Cat. 1
- Skin corrosion/irritation (C.4.4), Cat. 1A
- Sensitization, skin (C.4.7), Cat. 1

2.2 GHS label elements, including precautionary statements

Pictogram



1. Exclamation mark; 2. Corrosion

Signal word

Danger

Hazard statement(s)

H302

Harmful if swallowed

H314

Causes severe skin burns and eye damage

H317

May cause an allergic skin reaction

H318

Causes serious eye damage

Precautionary statement(s)

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

P261

Avoid breathing dust/fume/gas/mist/vapors/spray.

P264

Wash hands thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P272

Contaminated work clothing must not be allowed out of the workplace.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312

IF SWALLOWED: Call a POISON CENTER /doctor if you feel unwell,

P301+P330+P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352

IF ON SKIN: Wash with plenty of water.

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340

IF INHALED: Remove person to fresh air and keep 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.

P310

Immediately call a POISON CENTER/doctor.

P330

Rinse mouth.

P333+P313

If skin irritation or rash occurs: Get medical advice/attention.

P362+P364

Take off contaminated clothing and wash it before reuse.

P363

Wash contaminated clothing before reuse.

P405

Store locked up.

P501

Dispose of contents/container to a licensed disposal company

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Component 1.

1. Methylchloroisothiazolinone

Concentration

4.94 - < 0.1 % (volume)

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Other names / synonyms 3(2H)-Isothiazolone, 5-chloro-2-methyl-; 5-Chloro-2-methyl-2H-isothiazol-3-one; 5-chloro-2-methyl-3(2H)-isothiazolone; Proclin 300

EC no. 247-500-7

CAS no. 26172-55-4

- Acute toxicity, dermal (chapter 3.1), Cat. 3
- Acute toxicity, oral (chapter 3.1), Cat. 3
- Skin corrosion/irritation (chapter 3.2), Cat. 1B
- Sensitization - skin (chapter 3.4), Cat. 1
- Eye damage/irritation (chapter 3.3), Cat. 1
- Hazardous to the aquatic environment, short-term (acute) (chapter 4.1), Cat. 1

2. Hydrogen peroxide

Concentration < 5 % (volume)

Other names / synonyms ALBONE; DIHYDROGEN DIOXIDE; HYDROGEN DIOXIDE; HYDROGEN PEROXIDE; Hydrogen peroxide (H₂O₂); hydrogen peroxide solution; hydrogen peroxide solution; HYDROGEN PEROXIDE SOLUTION; Hydrogen peroxide, and other compounds or mixtures that release hydrogen peroxide, including carbamide peroxide and zinc peroxide; Hydrogenii peroxidum; HYDROGENPEROXIDE; HYDROPEROXIDE; PEROXIDE; SUPEROXOL; T-STUFF

EC no. 231-765-0

CAS no. 7722-84-1

Index no. 008-003-00-9

- Acute toxicity, inhalation (chapter 3.1), Cat. 4
- Acute toxicity, oral (chapter 3.1), Cat. 4
- Oxidizing liquids (chapter 2.13), Cat. 1
- Skin corrosion/irritation (chapter 3.2), Cat. 1A

H271 May cause fire or explosion; strong oxidizer

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H332 Harmful if inhaled

SCLs/M-factors/ATEs Ox. Liq. 1; H271: C ≥ 70 %****

Ox. Liq. 2; H272: 50 % ≤ C < 70 % ****

*

Skin Corr. 1A; H314: C ≥ 70 %

Skin Corr. 1B; H314: 50 % ≤ C < 70 %

Skin Irrit. 2; H315: 35 % ≤ C < 50 %

Eye Dam. 1; H318: 8 % ≤ C < 50 %

Eye Irrit. 2; H319: 5 % ≤ C < 8 %

STOT SE 3; H335; C ≥ 35 %

3. Hydrochloric acid

Concentration < 0.05 % (volume)

Other names / synonyms Acidum hydrochloricum; hydrogen chloride; HYDROGEN CHLORIDE (gas)

EC no. 231-595-7

CAS no. 7647-01-0

Index no. 017-002-01-X

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- Skin corrosion/irritation (chapter 3.2), Cat. 1
- Eye damage/irritation (chapter 3.3), Cat. 1
- Acute toxicity, inhalation (chapter 3.1), Cat. 3

H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
SCLs/M-factors/ATEs	Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 % STOT SE 3; H335: C ≥ 10 %

Component 2.

1. SODIUM AZIDE

Concentration < 0.1 % (weight)

Other names / synonyms	Sodium azide (Na(N ₃))
EC no.	247-852-1
CAS no.	26628-22-8
Index no.	011-004-00-7

- Acute toxicity, dermal (chapter 3.1), Cat. 1
- Acute toxicity, inhalation (chapter 3.1), Cat. 2
- Acute toxicity, oral (chapter 3.1), Cat. 2
- Specific target organ toxicity, repeated exposure (chapter 3.9), Cat. 2
- Hazardous to the aquatic environment, short-term (acute) (chapter 4.1), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic) (chapter 4.1), Cat. 1

Component 3.

1. Methylchloroisothiazolinone

Concentration < 0.1 % (volume)

Other names / synonyms	3(2H)-Isothiazolone, 5-chloro-2-methyl-; 5-Chloro-2-methyl-2H-isothiazol-3-one; 5-chloro-2-methyl-3(2H)-isothiazolone; Proclin 300
EC no.	247-500-7
CAS no.	26172-55-4

- Acute toxicity, dermal (chapter 3.1), Cat. 3
- Acute toxicity, oral (chapter 3.1), Cat. 3
- Skin corrosion/irritation (chapter 3.2), Cat. 1B
- Sensitization - skin (chapter 3.4), Cat. 1
- Eye damage/irritation (chapter 3.3), Cat. 1
- Hazardous to the aquatic environment, short-term (acute) (chapter 4.1), Cat. 1

Component 4.

Hydrochloric Acid

Concentration < 0.05 % (volume)

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Other names / synonyms	Acidum hydrochloricum; hydrogen chloride; HYDROGEN CHLORIDE (gas)
EC no.	231-595-7
CAS no.	7647-01-0
Index no.	017-002-01-X

- Skin corrosion/irritation (chapter 3.2), Cat. 1
- Eye damage/irritation (chapter 3.3), Cat. 1
- Acute toxicity, inhalation (chapter 3.1), Cat. 3

H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
SCLs/M-factors/ATEs	Skin Corr. 1B; H314: $C \geq 25 \%$ Skin Irrit. 2; H315: $10 \% \leq C < 25 \%$ Eye Irrit. 2; H319: $10 \% \leq C < 25 \%$ STOT SE 3; H335: $C \geq 10 \%$

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
In case of skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
If swallowed	Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.
Personal protective equipment for first-aid responders	Ensure adequate ventilation. Use personal protective equipment. For personal protection see section 8.

4.2 Most important symptoms/effects, 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 immediate medical attention and special treatment needed, if necessary

No data available

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SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.

5.2 Specific hazards arising from the chemical

5-chloro-2-methyl-3(2H)-isothiazolone: carbon dioxide, carbon monoxide, hydrogen sulfide, nitrogen oxides, phosgene

SODIUM AZIDE: Sodium oxides

Reaction mass of: 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1): Carbon oxide. Nitrogen oxides.

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

Ensure adequate ventilation. Use personal protective equipment. For personal protection see section 8.

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

6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional ecological information.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

CAS: 26628-22-8 (EC: 247-852-1)

Sodium azide

ACGIH: 0.29 mg/m³ (C); 0.1 ppm (C) hydrazoic acid vapor TLV® inhalation; NIOSH: 0.29 mg/m³ (C); 0.1 ppm (C) hydrazoic acid vapor REL-C inhalation

CAS: 7647-01-0

Hydrochloric acid

ACGIH: 2 ppm (C) TLV® inhalation; NIOSH: 5 ppm, 7 mg/m³ REL-C inhalation; OSHA: 5 ppm, 7 mg/m³ PEL-C inhalation

Hydrogen chloride

Cal/OSHA: (C) 5 ppm PEL inhalation; NIOSH: (C) 5 ppm REL inhalation; OSHA: (C) 7 mg/m³ PEL inhalation

CAS: 7722-84-1

Hydrogen peroxide

ACGIH (USA): 1 ppm TLV® inhalation; Cal/OSHA (USA): 1 ppm PEL inhalation; NIOSH (USA): 1 ppm REL inhalation; OSHA (USA): 1 ppm PEL inhalation; 1.4 mg/m³ PEL inhalation

8.2 Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with 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

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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Thermal hazards

No data available

Control banding approach

No data available.

Environmental exposure controls

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

SECTION 9: Physical and chemical properties and safety characteristics

Physical state	Liquid
Appearance	Variable
Color	Variable
Odor	Odorless
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Vapor pressure	No data available.
Relative vapor density	No data available.
Density and/or relative density	No data available.
Solubility	No data available.
Partition coefficient n-octanol/water (log value)	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Kinematic viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

Particle characteristics

No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None under normal use conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal use conditions.

10.4 Conditions to avoid

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Exposure to moisture.

Avoid storing in direct sunlight and avoid extremes of temperature.

Heat, flames and sparks.

10.5 Incompatible materials

5-chloro-2-methyl-3(2H)-isothiazolone: strong oxidizing agents

Hydrogen peroxide: Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

10.6 Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

Hydrogen peroxide: Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Sodium azide

LD50 Oral - Rat - 27 mg/kg

The ATE (gas inhalation) of the mixture is: 90000 ppmV

The ATE (oral) of the mixture is: 1683.5 mg/kg bw

Skin corrosion/irritation

Sodium azide

LD50 Skin - Rat - 20 mg/kg

Serious eye damage/irritation

Risk of serious damage to eyes.

Respiratory or skin sensitization

Sodium azide

LC50 Inhalation - Rat - 0.054 - 0.52 mg/l - 4 hr

Germ cell mutagenicity

Based on available data, classification data are not met

Carcinogenicity

Result: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

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Reproductive toxicity

Based on available data, classification data are not met

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

No data available.

SECTION 12: Ecological information

Toxicity

5-chloro-2-methyl-3(2H)-isothiazolone

EC50 - Pseudokirchneriella subcapitata (green algae) - 0.11 - 0.16 mg/l - 72 h

5-chloro-2-methyl-3(2H)-isothiazolone

LC50 - Oncorhynchus mykiss (rainbow trout) - 1.6 mg/l - 96 h

Sodium azide

LC50 - Oncorhynchus mykiss (rainbow trout) - 2.96 mg/l - 96 h

Sodium azide

EC50 - Pseudokirchneriella subcapitata (green algae) - 0.348 mg/l - 96 h

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Endocrine disrupting properties

No data available.

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Offer surplus and non-recyclable solutions to a licensed disposal company.

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Packaging disposal

Dispose of as unused product.

Waste treatment

No data available

Sewage disposal

Do not let product enter drains

Other disposal recommendations

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

SECTION 14: Transport information

14.1 UN Number	UN1760
14.2 UN Proper Shipping Name	Corrosive liquids, n.o.s.
14.3 Transport hazard class(es)	8
14.4 Packing group	I

Environmental hazards

Marine pollutant

Special precautions for user

For professional users only.
Should not be released into the environment.

Transport in bulk according to IMO instruments

Not shipped in bulk

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canadian Domestic Substances List (DSL)

Chemical name: 3(2H)-Isothiazolone, 5-chloro-2-methyl-
CAS: 26172-55-4

Chemical name: Hydrogen peroxide (H₂O₂)
CAS: 7722-84-1

Chemical name: Hydrochloric acid
CAS: 7647-01-0

Chemical name: Sodium azide (Na(N₃))
CAS: 26628-22-8

Massachusetts Right To Know Components

Hydrogen peroxide
CAS number: 7722-84-1

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Chemical name: Hydrochloric acid
CAS number: 7647-01-0

Chemical name: Sodium azide (Na(N₃))
CAS number: 26628-22-8

New Jersey Right To Know Components

Water
CAS-number: 7732-18-5
Hydrogen peroxide
CAS number: 7722-84-1

Common name: HYDROGEN CHLORIDE
CAS number: 7647-01-0

Common name: SODIUM AZIDE
CAS number: 26628-22-8

Pennsylvania Right To Know Components

Water
CAS-number: 7732-18-5
Hydrogen peroxide
CAS number: 7722-84-1

Chemical name: Hydrochloric acid
CAS number: 7647-01-0

Chemical name: Sodium azide
CAS number: 26628-22-8

SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302:

Hydrogen peroxide
CAS-Number: 7722-84-1

SARA 311/312 Hazards

Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

Acute Health Hazard

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.

Seveso Directive

Yes. H2 -acute toxic. E1

15.2 Chemical Safety Assessment

The supplier of this product has not conducted any Chemical Safety Assessment

SECTION 16: Other information

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SDS-0021, Rev. E

16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Diagnostic BioSystems be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Diagnostic BioSystems has been advised of the possibility of such damages.