

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name HEMAPROMPT & HEMAPROMPT FG DEVELOPER II (2)

Other means of identification

Product Code(s) 8981
UN-No 1170

Recommended use of the chemical and restrictions on use

Recommended Use Use as a laboratory reagent. Industrial (not for food or food contact use). Laboratory chemicals.

Details of the supplier of the safety data sheet

Manufacturer Address
Aerscher Diagnostics, Inc.
125 Dixon Drive
Chestertown, MD 21620 USA
T 800-474-4072
F 410-778-5197

Emergency telephone number

24 Hour Emergency Number: USA, Canada, Puerto Rico 1-800-474-4072. Outside North American Continent (Call collect) 410-778-2957

2. HAZARDS IDENTIFICATION

| | |
|--|-------------|
| Serious eye damage/eye irritation | Category 2 |
| Germ cell mutagenicity | Category 1B |
| Carcinogenicity | Category 1A |
| Reproductive toxicity | Category 1A |
| Specific target organ toxicity (single exposure) | Category 2 |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Physical hazards Flammable Liquids. | Category 2 |

EMERGENCY OVERVIEW

DANGER

Hazard statements

Causes serious eye irritation. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. May cause damage to organs. Causes damage to organs through prolonged or repeated exposure.
Highly flammable liquid and vapor.



Appearance Clear, colorless

Physical state liquid

Odor Alcohol

Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal

protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep out of the reach of children.

Response IF exposed or concerned: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Drink 1 or 2 glasses of water. Call a physician immediately.

In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store locked up. Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Hazards

May be harmful if swallowed. Toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS*

| Chemical name | CAS No | Weight-% |
|----------------------|---------------|-----------------|
| Methyl alcohol | 67-56-1 | 3-4 |
| Hydrogen peroxide | 7722-84-1 | 7 |
| Ethyl alcohol | 64-17-5 | 65-70 |

4. FIRST AID MEASURES

First Aid Measures

| | |
|--|--|
| General advice | Do not get in eyes, on skin, or on clothing. Consult a physician. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician. |
| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. Consult a physician. |
| Inhalation | Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel. Call a physician immediately. |
| Ingestion | Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Drink 1 or 2 glasses of water. |
| <u>Self-protection of the first aider</u> | Use personal protective equipment. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. |

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Water spray, dry chemical, carbon dioxide (CO₂), or foam.

Specific hazards arising from the chemical

Vapors may travel to source of ignition and flash back.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8. Ensure adequate ventilation. Remove all sources of ignition.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dispose according to federal, state, and local regulations.

Methods for cleaning up After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Separate from acids. Keep away from oxidizing agents. Keep out of the reach of children.

Incompatible Products NITRIC ACID. Strong oxidizing agents. Alkali metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------------|-------------------------------------|--|--|
| Methyl alcohol 67-56-1 | STEL: 250 ppm TWA: 200 ppm S* | TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S* | IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³ |
| Hydrogen peroxide 7722-84-1 | TWA: 1 ppm | TWA: 1 ppm TWA: 1.4 mg/m ³ (vacated) TWA: 1 ppm (vacated) TWA: 1.4 mg/m ³ | IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m ³ |
| Ethyl alcohol 64-17-5 | STEL: 1000 ppm | TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³ | IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³ |

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------|---|
| Eye/Face Protection | Wear safety glasses with side shields (or goggles). If splashes are likely to occur. Face protection shield. |
| Skin and body protection | Nitrile rubber. Gloves & Lab Coat. |
| Respiratory protection | Use only with adequate ventilation. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. |
| Hygiene Measures | Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product. Take off contaminated clothing and wash before reuse. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|--------------------------------|----------------------------|---|---------|
| Physical state | liquid | Odor | Alcohol |
| Appearance | Clear, colorless | | |
| Property | Values | Remarks • Method | |
| pH | | | |
| Melting point / freezing point | No information available | | |
| Boiling point / boiling range | < 100 °C / 212 °F | | |
| Flash point | estimated: 16.1 °C / 61 °F | Cleveland closed cup | |
| Evaporation rate | | | |
| Flammability (solid, gas) | No information available | | |
| Flammability Limit in Air | | | |
| Upper flammability limit: | 19% Ethanol | | |
| Lower flammability limit: | 3.3% Ethanol | | |
| Vapor pressure | ca. 40 mmHg @20°C | | |
| Vapor density | 1.6 | @ 20°C (Air=1) for SDA (3A) Ethyl Alcohol | |
| Specific gravity | No information available | | |
| Water solubility | Soluble | | |
| Solubility in other solvents | No information available | | |
| Partition coefficient | No information available | | |
| Autoignition temperature | No information available | | |
| Decomposition temperature | No information available | | |
| Kinematic viscosity | No information available | | |
| Dynamic viscosity | No information available | | |
| Explosive properties | No information available | | |
| Oxidizing properties | No information available | | |

Other Information

| | |
|------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Density | No information available |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY

| | |
|---------------------------------|--|
| Stability | Stable under normal conditions of use and storage. |
| Hazardous polymerization | Hazardous polymerization does not occur. |
| Conditions to avoid | Heat, flames and sparks. |
| Incompatible materials | NITRIC ACID. Strong oxidizing agents. Alkali metals. |

Hazardous decomposition products Carbon oxides (COx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component identification

| Chemical name | ATEmix (oral) | ATEmix (dermal) | Inhalation LC50 |
|--------------------------------|----------------------|--|---|
| Methyl alcohol 67-56-1 | = 6200 mg/kg (Rat) | = 15800 mg/kg (Rabbit) | = 64000 ppm (Rat) 4 h = 22500 ppm (Rat) 8 h |
| Hydrogen peroxide 7722-84-1 | = 1518 mg/kg (Rat) | = 2000 mg/kg (Rabbit) = 4060 mg/kg (Rat) | = 2 g/m ³ (Rat) 4 h |
| Ethyl alcohol 64-17-5 | = 7060 mg/kg (Rat) | Not Established | = 124.7 mg/L (Rat) 4 h |

Information on toxicological effects

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|--------------------------------|-----------------|-----------------|-----------------|-----------------|
| Methyl alcohol 67-56-1 | Not Established | Not Established | Not Established | Not Established |
| Hydrogen peroxide 7722-84-1 | A3 | Group 3 | Not Established | Not Established |
| Ethyl alcohol 64-17-5 | A3 | Group 1 | Known | X |

NTP (National Toxicology Program)

Known - Known Carcinogen

Chronic toxicity

Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Prolonged skin contact may cause skin irritation and/or dermatitis.

ATEmix (oral) 2,279.00 mg/kg

ATEmix (dermal) 7,502.00 mg/kg

ATEmix (inhalation-dust/mist) 9.60 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical name | Toxicity to Algae | Toxicity to Fish | Daphnia Magna (Water Flea) |
|--------------------------------|--|--|---|
| Methyl alcohol 67-56-1 | Not Established | 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static | Not Established |
| Hydrogen peroxide 7722-84-1 | 2.5: 72 h Chlorella vulgaris mg/L EC50 | 10.0 - 32.0: 96 h Oncorhynchus mykiss mg/L LC50 static 18 - 56: 96 h Lepomis macrochirus mg/L LC50 static 16.4: 96 h Pimephales promelas mg/L LC50 | 18 - 32: 48 h Daphnia magna mg/L EC50 Static 7.7: 24 h Daphnia magna mg/L EC50 |
| Ethyl alcohol 64-17-5 | Not Established | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static | 9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static |

Persistence and degradability

Ethanol: When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into water, this material may evaporate to a moderate extent. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to be readily removed from the atmosphere by dry and wet deposition. When

released into the air, this material is expected to have a half-life between 1 and 10 days. In the atmosphere, methanol will be photo-oxidized relatively quickly; the half-life ranges between 3 and 30 days. In soil, surface or groundwater, rapid biodegradation is expected with the half-life ranging from 1 to 7 days.

Bioaccumulation/Accumulation

No information available.

| Chemical name | Log Pow |
|--------------------------------|-----------------|
| Methyl alcohol 67-56-1 | -0.77 |
| Hydrogen peroxide 7722-84-1 | Not Established |
| Ethyl alcohol 64-17-5 | -0.32 |

13. DISPOSAL CONSIDERATIONS

Disposal Methods Dispose of waste product or used containers according to local regulations.

Contaminated packaging Do not reuse empty containers.

| Chemical name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|--------------------------------|-----------------|-----------------------------------|------------------------|------------------------|
| Methyl alcohol 67-56-1 | Not Established | Included in waste stream: F039 | Not Established | U154 |
| Hydrogen peroxide 7722-84-1 | Not Established | - | Not Established | Not Established |
| Ethyl alcohol 64-17-5 | Not Established | - | Not Established | Not Established |

| Chemical name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|--------------------------------|--------------------------------------|------------------------|------------------------|------------------------|
| Methyl alcohol 67-56-1 | Not Established | Not Established | Not Established | Not Established |
| Hydrogen peroxide 7722-84-1 | Not Established | Not Established | Not Established | Not Established |
| Ethyl alcohol 64-17-5 | Not Established | Not Established | Not Established | Not Established |

| Chemical name | California Hazardous Waste Status |
|--------------------------------|---|
| Methyl alcohol 67-56-1 | Toxic Ignitable |
| Hydrogen peroxide 7722-84-1 | Toxic Corrosive Ignitable Reactive |
| Ethyl alcohol 64-17-5 | Toxic Ignitable |

14. TRANSPORT INFORMATION

DOT

Proper shipping name ETHANOL
UN-No 1170
Hazard Class 3
Packing group II

IATA

UN-No 1170
Proper shipping name ETHANOL

Hazard Class 3
Packing group II

IMDG/IMO

UN-No 1170
Proper shipping name ETHANOL SOLUTION
Hazard Class 3
Packing group II

15. REGULATORY INFORMATION

International Inventories

TSCA Does not comply
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name | SARA 313 - Threshold Values % |
|--------------------------------|-------------------------------|
| Methyl alcohol 67-56-1 | 1.0 |
| Hydrogen peroxide 7722-84-1 | Not Established |
| Ethyl alcohol 64-17-5 | Not Established |

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard Yes
Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|--------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Methyl alcohol 67-56-1 | Not Established | Not Established | Not Established | Not Established |
| Hydrogen peroxide 7722-84-1 | Not Established | Not Established | Not Established | Not Established |
| Ethyl alcohol | Not Established | Not Established | Not Established | Not Established |

| | | | |
|---------|--|--|--|
| 64-17-5 | | | |
|---------|--|--|--|

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical name | Hazardous Substances RQs | CERCLA/SARA RQ | RQ |
|--------------------------------|--------------------------|-----------------|--|
| Methyl alcohol 67-56-1 | 5000 lb | Not Established | RQ 5000 lb final RQ RQ 2270 kg final RQ |
| Hydrogen peroxide 7722-84-1 | - | 1000 lb | - |
| Ethyl alcohol 64-17-5 | - | Not Established | - |

US State Regulations

California Proposition 65

WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

(Ethyl alcohol is only considered a Proposition 65 cancer and developmental hazard when it is ingested as an alcoholic beverage)

| Chemical name | California Proposition 65 |
|--------------------------------|---------------------------|
| Methyl alcohol 67-56-1 | Developmental |
| Hydrogen peroxide 7722-84-1 | Not Established |
| Ethyl alcohol 64-17-5 | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|------------|---------------|--------------|
| Methyl alcohol 67-56-1 | X | X | X |
| Hydrogen peroxide 7722-84-1 | X | X | X |
| Ethyl alcohol 64-17-5 | X | X | X |

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

| Chemical name | CPSC (Consumer Product Safety Commission) - Specially Regulated Substances |
|---------------------------|--|
| Methyl alcohol 67-56-1 | Special labeling, 16 CFR 1500.14 |

16. OTHER INFORMATION

NFPA

Health hazard 2

Flammability 3

Instability 1

Physical and Chemical Hazards N/A



Prepared by

Issuing Date

Revision Date

Reason for revision

Disclaimer

Regulatory Affairs Department

Jul-01-2015

Nov-15-2016

New US GHS format

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated

and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet