

SAFETY DATA SHEET



1. Identification

Product identifier	HM5 Reagent Pack
Other means of identification	
Synonyms	HM5 Reagent Pack solutions: Lyse, Lyse 2, Diluent, Rinse.
Recommended use	Veterinary product used as diagnostic aid.
Recommended restrictions	Not for human use

Manufacturer/Importer/Supplier/Distributor information

Supplier (USA):	Abaxis, Inc. (now part of Zoetis) 3240 Whipple Road, Union City, CA 94587
Phone number:	+1-510-675-6500
Customer support:	+1-800-822-2947 (abaxis@abaxis.com)
Supplier (EU):	ABAXIS Europe GmbH (now part of Zoetis) Bunsenstr. 9-11, 64347 Griesheim, Germany
Phone number:	+49 6155 780 21 0
Customer support:	+49 6155 780 21 0 (abaxis@abaxis.de)
Website:	www.abaxis.com (Abaxis is now part of Zoetis)
Company (USA):	Zoetis Inc. 10 Sylvan Way, Parsippany, New Jersey 07054
Rocky Mountain Poison & Drug Center:	1-866-531-8896
Product and technical support:	1-800-366-5288
Emergency phone numbers:	United States CHEMTREC 24 hours: 1-800-424-9300 International CHEMTREC 24 hours: +1-703-527-3887
Company (EU):	Zoetis Belgium S.A. Mercuriusstraat 20, 1930 Zaventem, Belgium
Emergency phone number:	International CHEMTREC 24 hours: +1-703-527-3887
Website:	www.zoetis.com

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

Direct contact with eyes may cause temporary irritation.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Stabilized saline solutions, in water.		Mixture	100
Isopropyl alcohol		67-63-0	<2*

*Only present in Lyse solution.

Composition comments

In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been withheld as a trade secret.

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Eye contact

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

Ingestion

Rinse mouth. Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation, redness, or discomfort.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information

IF exposed or concerned: Get medical advice/attention. For personal protection, see section 8 of the SDS. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Ensure adequate ventilation. Avoid contact with eyes, skin, and clothing. Wear appropriate protective equipment and clothing during clean-up. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

Ensure adequate ventilation. Wear appropriate protective equipment and clothing during clean-up.

Large Spills: Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Use with adequate ventilation. Wear appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Do not freeze. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Isopropyl alcohol (CAS 67-63-0)	PEL	980 mg/m ³
		400 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Isopropyl alcohol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Isopropyl alcohol (CAS 67-63-0)	STEL	1225 mg/m ³
		500 ppm
	TWA	980 mg/m ³ 400 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Isopropyl alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Control banding approach

Not available.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear suitable protective clothing. Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and laboratory areas.

Respiratory protection

No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Not applicable.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Material name: HM5 Reagent Pack

Version #: 01 Issue date: 09-27-2019

SDS US

3 / 8

Physical state	Liquid.
Form	Liquid.
Color	Colorless.
Odor	Odorless.
Odor threshold	Not available.
pH	7 - 10
Melting point/freezing point	28.4 °F (-2 °C)
Initial boiling point and boiling range	215.6 °F (102 °C)
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	23 hPa @ 20C / 68F
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Miscible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	1.00 g/cm ³ @ 20C / 68F
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Sunlight. Protect from freezing. Keep away from heat, sparks and open flame.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Health injuries are not known or expected under normal use.
Skin contact	Prolonged skin contact may cause temporary irritation.
Isopropyl alcohol	Result: Irritation Species: Rabbit Severity: Mild

Eye contact	Direct contact with eyes may cause temporary irritation.
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Eye contact
Isopropyl alcohol

Result: Irritation
Species: Rabbit
Severity: Severe

Ingestion

Health injuries are not known or expected under normal use.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation, redness, or discomfort.

Information on toxicological effects

Acute toxicity

Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Components

Species

Test Results

Isopropyl alcohol (CAS 67-63-0)

Acute

Dermal

LD50

Rabbit

12800 mg/kg

Inhalation

LC50

Rat

16000 ppm, 8 hours
30 mg/L

Oral

LD50

Mouse

3600 mg/kg

Rat

> 2000 mg/kg

Chronic

Inhalation

NOAEL

Rat

4000 ppm, 20 weeks (Liver, Central nervous system)

Skin corrosion/irritation

Based on available data, the classification criteria are not met. Prolonged skin contact may cause temporary irritation.

Corrosivity

Isopropyl alcohol

Result: Irritation
Species: Rabbit
Severity: Mild

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met. Direct contact with eyes may cause temporary irritation.

Eye Contact

Isopropyl alcohol

Result: Irritation
Species: Rabbit
Severity: Severe

Respiratory or skin sensitization

Respiratory sensitization

Due to partial or complete lack of data the classification is not possible.

Skin sensitization

Due to partial or complete lack of data the classification is not possible. This product is not expected to cause skin sensitization.

Germ cell mutagenicity

Due to partial or complete lack of data the classification is not possible.

Mutagenicity

Isopropyl alcohol

Bacterial Mutagenicity (Ames)
Result: Negative
Species: Salmonella

In Vitro Sister Chromatid Exchange
Result: Negative

Mammalian Cell Mutagenicity
Result: Negative
Species: HGPRT Chinese Hamster Ovary (CHO) cells

Carcinogenicity Due to partial or complete lack of data the classification is not possible. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Due to partial or complete lack of data the classification is not possible.

Developmental effects

Isopropyl alcohol

1200 mg/kg/day Prenatal & Postnatal Development, No effects at maximum dose
Result: NOAEL
Species: Rat
Organ: Oral

7000 ppm Prenatal & Postnatal Development, Maternal toxicity, Fetotoxicity, Embryotoxicity
Result: LOAEL
Species: Rat
Organ: Inhalation

Reproductivity

Isopropyl alcohol

1000 mg/kg/day 2 Generation Reproductive Toxicity, Maternal Toxicity, Fetal mortality
Result: LOAEL
Species: Rat
Organ: Oral

Specific target organ toxicity - single exposure Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

12. Ecological information

Ecotoxicity Environmental properties have not been investigated. Due to partial or complete lack of data the classification for hazardous to the aquatic environment, is not possible. Avoid release to the environment.

Components	Species	Test Results
Isopropyl alcohol (CAS 67-63-0)		
Aquatic		
Fish	LC50 Bluegill (Lepomis macrochirus)	> 1400 mg/l, 96 hours

Persistence and degradability No data available for this product.

Bioaccumulative potential No data available for this product.

Mobility in soil No data available for this product.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information**DOT**

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not established.

15. Regulatory information**US federal regulations**

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Isopropyl alcohol (CAS 67-63-0)

Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Acute toxicity (any route of exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Isopropyl alcohol (CAS 67-63-0)

Low priority

US state regulations**California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Isopropyl alcohol (CAS 67-63-0)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 09-27-2019

Version # 01

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Revision information Product and Company Identification: Synonyms
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties