

SAFETY DATA SHEET

1 IDENTIFICATION

GHS Product Identifier

VetScan HemaClean Kit, 6 Tubes (3 ml each totaling 18 ml liquid volume per package)

Other means of identification

Abaxis PN: 790-1513

Recommended use of the chemical and restriction on use

A cleaning agent for use with the Abaxis HM5 VetScan analyzer.

Product Usage Information: VetScan HemaClean is provided in capped tubes of 3 milliliters of total liquid volume. As the amount of chemical is very small, the risk is substantially reduced. We have indicated the same in the shaded sections of this document.

Supplier's details

Company Information:	Abaxis, Inc.	ABAXIS Europe GmbH
company mormation.	ADAXIS, IIIC.	ABAXIS LUIOPE GIIIBII
	3240 Whipple Road	Bunsenstr. 9-11
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customer support.		
	abaxis@abaxis.com	abaxis@abaxis.de
Emergency phone number	+1-800-822-2947 (US)	+49 6155 780 21 0 (EU)

This number is available only during business hours (9:00am to 5:00pm UTC)

2 HAZARD(S) IDENTIFICATION

RISKS ASSOCIATED WITH CHEMICAL COMPOUND	ASSOCIATED RISKS AT THIS VOLUME
Classification of the substance or mixture: liquid	Classification of the substance or mixture: liquid
mixture, active chlorine <10%	mixture, active chlorine <10%

GHS Classification in accordance with 29 CFR 1910,1200 (OSHA HCS)	GHS Classification in accordance with 29 CFR 1910,1200 (OSHA HCS)
 Health Hazards Skin Corrosion/Irritation Category 1B Serious Eye Damage/Irritation Category 1 	 Health Hazards Skin Corrosion/Irritation Category 1B Serious Eye Damage/Irritation Category 1
Physical Hazards Decomposes on heating, and on interaction with acids; this causes toxic or corrosive gases.	Physical Hazards May decompose on heating and on interaction with acids which could cause corrosive gases.
Corrosive to Metals Category 1 For the full text of the H-Statements mentioned in this Section, see Section 16.	Corrosive to Metals Category 1 For the full text of the H-Statements mentioned in this Section, see Section 16.
GHS label elements DANGER	GHS label elements WARNING
H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.	H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.
May be corrosive to metals Causes severe skin burns and eye damage Keep only in original container. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower. IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Dispose of contents/container to in accordance with all federal, provincial, and/or local regulations	May be corrosive to metals Causes severe skin burns and eye damage Wash hands thoroughly after handling. IF ON SKIN: Rinse SKIN with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Description	CAS Number	EINECS Number	%	Note at provided volume
Sodium Hypochlorite	7681-52-9	Number	0 - 9.00	Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318
Other non-hazardous ingredients			0-91.00	Not applicable

4 FIRST-AID MEASURES

RISKS ASSOCIATED WITH CHEMICAL COMPOUND	ASSOCIATED RISKS AT THIS VOLUME
Inhalation	Inhalation
Can release corrosive chlorine gas. Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure. Seek immediate medical attention.	Move to fresh air. If breathing is affected, seek medical attention.
	Skin Contact/Absorption
	Immediately flush with lukewarm, gently flowing water for at least 15 minutes. Seek medical or first aid attention.
Skin Contact / Absorption	Eye Contact
Immediately flush with lukewarm, gently flowing water for at least 30 minutes. Under running water, remove contaminated clothing, shoes and leather goods. Seek immediate medical attention. Completely decontaminate clothing, shoes and leather goods before reuse, or discard.	Immediately flush eye(s) with lukewarm, gently flowing water for 30 minutes while forcibly holding the eyelids open to ensure complete irrigation of the eye tissue. If a contact lens is present, remove only if easy to do so. Seek immediate medical attention.
Eye Contact	Ingestion
-	Rinse mouth thoroughly with water. Do NOT induce
Immediately flush eye(s) with lukewarm, gently flowing water for 30 minutes while forcibly holding the eyelids open to ensure complete irrigation of the eye tissue. If a contact lens is present, remove only if easy to do so. Seek immediate medical attention.	vomiting Drink 240 to 300 mL (8 to 10 oz.) of water. Repeat rinse and drinking of water. Seek immediate medical attention
Ingestion	
NEVER give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 240 to 300 mL (8 to 10 oz.) of water to dilute material in stomach. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Rinse mouth and repeat administration of water. Quickly transport victim to an emergency care facility.	
Additional Information	
Provide general supportive measures (comfort, warmth, rest). Consult a doctor and/or the nearest Poison Control Center for all exposures except minor instances of inhalation or skin contact.	
Most important symptoms/effects, acute and delayed	

When ingested or inhaled, nausea and vomiting, these symptoms may be delayed. When in contact with skin or eyes; acute pain and burns or blisters will occur.

5 FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Sodium hypochlorite solutions do not burn. Extinguish fire using extinguishing agents suitable for the surrounding fire and not contraindicated for use with sodium hypochlorite. Cool exposed containers with water.

Unsuitable Extinguishing Media

DO NOT use dry chemical fire extinguishing agents containing ammonium compounds (such as some A:B:C agents), since an explosive compound can be formed.

Specific hazards arising from the chemical

Sodium hypochlorite decomposes when heated, giving off corrosive chlorine and hydrogen chloride. Solutions decompose when exposed to sunlight, giving off oxygen gas. However, the amount of oxygen produced is not sufficient to cause combustion. Explosive decomposition may occur under fire conditions and closed containers may rupture violently due to a rapid decomposition, if exposed to fire or excessive heat for a sufficient period of time.

Special protective actions for fire-fighters

Wear NIOSH-approved self-contained breathing apparatus and protective clothing. The decomposition products of sodium hypochlorite, such as chlorine and hydrogen chloride are extremely hazardous to health. Do not enter without wearing specialized protective equipment suitable for the situation. Firefighter's normal protective equipment. (Bunker Gear) will not provide adequate protection.

6 ACCIDENTAL RELEASE MEASURES

RISKS ASSOCIATED WITH CHEMICAL COMPOUND	ASSOCIATED RISKS AT THIS VOLUME
Personal Precautions	Personal Precautions
Wear appropriate personal protective equipment.	Wear appropriate personal protective equipment.
Ventilate area. Only enter area with PPE. Stop or	
reduce leak if safe to do so.	Environmental Precautions
	None required
Environmental Precautions	
Prevent material from entering sewers or confined	Methods for Containment and Clean Up
spaces. Notify local health and wildlife officials. Notify operators of nearby water intakes.	Flush area with water.
Methods for Containment and Clean Up	
SMALL SPILLS: Clean up spill with non-reactive	
absorbent and place in suitable, covered, labelled	
containers. Flush area with water. Contaminated	
absorbent material may pose the same hazards as	
the spilled product. Small spills of sodium	
hypochlorite solutions can be broken down by	
covering it with a reducing agent such as sodium thiosulfate, sodium meta-bisulfite, or a ferrous salt.	

With the sulfite or ferrous salt, add some dilute (2 M) sulfuric acid to speed up the reaction. Transfer the mixture into large containers of water and neutralize with soda ash (sodium carbonate).	
LARGE SPILLS: Contact fire and emergency services and supplier for advice.	

7 HANDLING AND STORAGE

RISKS ASSOCIATED WITH CHEMICAL COMPOUND	ASSOCIATED RISKS AT THIS VOLUME
Precautions for safe handling	Precautions for safe handling
This material is a CORROSIVE liquid. Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure. Avoid generating mists. Prevent the release of mists into the workplace air. Inspect containers for damage or leaks before handling. Label containers. Never add water to a corrosive. Always add corrosives to water. When mixing with water, stir small amounts in slowly. Use cold water to prevent excessive heat generation. Never return contaminated material to its original container. Have suitable emergency equipment for fires, spills and leaks readily available. Conditions for safe storage, including any incompatibilities Store in a cool, dry, well-ventilated area, out of direct sunlight and away from heat sources. Strong solutions (greater than 10% available chlorine) may slowly give off chlorine during storage, especially when warm (above 18°C). Vent caps may be required to prevent a build-up of pressure that could cause containers to burst. Always store in original labelled container. Keep containers tightly closed when not in use and when empty. Empty containers may contain hazardous residues. Protect label and keep it visible. Incompatibilities Primary amines, aromatic amines, ammonium salts, phenylacetonitril, ammonia, urea, phenylacetonitrile, acids, metals, reducing agents, ethyleneimine, methanol, formic acid, furfuraldehyde, ethandiol, sodium ethylenedioaminetetracetate solution, sodium hydroxide solution.	This material is a CORROSIVE liquid. Wash thoroughly after handling. Conditions for safe storage, including any incompatibilities Store in a cool, dry, well-ventilated area, out of direct sunlight and away from heat sources. Keep containers tightly closed when not in use and when empty. Incompatibilities Primary amines, aromatic amines, ammonium salts, phenylacetonitril, ammonia, urea, phenylacetonitrile, acids, metals, reducing agents, ethyleneimine, methanol, formic acid, furfuraldehyde, ethandiol, sodium ethylenedioaminetetracetate solution, sodium hydroxide solution.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

RISKS ASSOCIATED WITH CHEMICAL COMPOUND	ASSOCIATED RISKS AT THIS VOLUME
CONTROL PARAMETERS	CONTROL PARAMETERS
Exposure Limit(s)	
Component Regulation Type of Listing Value	Exposure Limit(s) Component Regulation Type of Listing Value
Sodium hypochlorite AIHA WEEL-STEL 2mg/m ₃ (15 min)	N/A
Chlorine ACGIH TLV-TWA 0.5 ppm	
APPROPRIATE ENGINEERING CONTROLS Ventilation Requirements	APPROPRIATE ENGINEERING CONTROLS Ventilation Requirements
Mechanical ventilation (dilution or local exhaust),	N/A
process or personnel enclosure and control of process conditions must be provided in accordance	Other
with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air	N/A
removed by exhaust systems.	INDIVIDUAL PROTECTION MEASURES
Other	Personal protective equipment Eyes/Face
Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.	Contact lenses should never be worn; they may contribute to severe eye injury.
INDIVIDUAL PROTECTION MEASURES Personal protective equipment Eyes/Face	Hand Protection Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times.
Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is	Skin and Body Protection
handled. Contact lenses should never be worn; they may contribute to severe eye injury.	N/A
Hand Protection	Respiratory Protection
Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse. Skin and Body Protection	No specific guidelines are available.
Body suite, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.	

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical State Liquid **Color** Clear, greenish-yellow solution.

Odor Strong chlorine odor Odor Threshold Not Available

Properties

pH 11-13

Melting Point/Freezing Point -15°C (12% solution)

Initial Boiling Point and Boiling Range

Slowly decomposes above 40°C

Flash Point Not Applicable

Evaporation Rate Not available;

Flammability Non-Flammable

Upper Flammable Limit Not Applicable

Lower Flammable Limit Not Applicable

Vapor Pressure (mm Hg, 20oC) Does not form a vapor

Vapor Density (Air=1) Not Available

Relative Density Not Available

Solubility(ies) Completely soluble in water

Partition Coefficient: noctanol/water

Log POW = -3.42 (estimated)

Auto-ignition Temperature Not Applicable

Decomposition Temperature Slowly decomposes above 40°C

Viscosity Not Available

Explosive Properties Pressure buildup in containers could result in an explosion when heated or in contact with acidic fumes. Vigorous reaction with oxidizable organic materials may result in a fire.

Specific Gravity (Water=1) 1.1-1.2

% Volatiles by Volume Not Available

Formula NaOCI

Molecular Weight 74.44 g/mol

10 STABILITY AND REACTIVITY

Reactivity

Sodium hypochlorite solution gives off oxygen when heated or when exposed to sunlight. However, the amount is small and will not cause or contribute to combustion. The solutions are, therefore, not considered to be oxidizing agents.

Chemical Stability:

EHS-0062 Rev. A

Sodium hypochlorite solutions decompose slowly at normal temperatures releasing low concentrations of corrosive chlorine gas.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Thermal Decomposition: Will decompose when burned

Conditions to avoid

Heat, sunlight, acidic conditions, the presence of metals and other impurities.

Primary amines, aromatic amines, ammonium salts, phenylacetonitril, ammonia, urea, phenylacetonitrile, acids, metals, reducing agents, ethyleneimine, methanol, formic acid, furfuraldehyde, ethandiol, sodium ethylenedioaminetetracetate solution, sodium hydroxide solution.

Incompatible materials

Chlorine, sodium chlorate.

11 TOXICOLOGICAL INFORMATION

RISKS ASSOCIATED WITH CHEMICAL COMPOUND	ASSOCIATED RISKS AT THIS VOLUME
Toxicological (health) effects	Toxicological (health) effects
Acute Toxicity	
	Acute Toxicity – N/A
Component Oral LD50 Dermal LD50 Inhalation	
	Chronic Toxicity – Carcinogenicity
Sodium Hypochlorite (20%) 44.5 g/kg (rat) > 50 g/kg (rabbit) > 26.25 g/m ₃ (rat, 4hr)	Component IARC
g/kg (rabbit) > 20.25 g/m3 (rat, 4m)	Sodium Hypochlorite Group 3: Not classifiable as to
Chronic Toxicity – Carcinogenicity	its carcinogenicity to humans. [hypochlorite salts]
Component IARC	Symptoms related to the physical,
Sodium Hypochlorite Group 3: Not classifiable as to	chemical and toxicological characteristics
its carcinogenicity to humans. [hypochlorite salts]	Skin Corrosion/Irritation
Symptoms related to the physical,	Very dilute solutions have caused negligible
chemical and toxicological characteristics	irritation
Skin Corrosion/Irritation	
Very dilute solutions have caused negligible	Ingestion
irritation, while more concentrated solutions have caused acute corrosive injury to skin. Prolonged	N/A
exposure may lead to permanent scarring of skin.	
	Inhalation
Ingestion	
	N/A
Acute exposure may lead to burning of the mouth	
and throat, abdominal cramps, nausea, vomiting, diarrhea, shock. May lead to convulsions, coma,	Serious Eye Damage/Irritation
and even death.	Very dilute solutions have caused no irritation.
Inhalation	Respiratory or Skin Sensitization
Irritant of the nose and throat, causing coughing,	
difficulty breathing, and pulmonary edema.	Negative results (0/20 guinea pigs sensitized) have
Serious Eye Damage/Irritation	been obtained for 8% sodium hypochlorite solution
	in a skin sensitization test.

Very dilute solutions have caused no irritation. Acute exposure of more concentrated solutions have caused corrosive injury, which did not heal within 21 days.	Delayed and immediate effects and also chronic effects from short and long term exposure Germ Cell Mutagenicity The available information does not suggest that
Respiratory or Skin Sensitization	sodium hypochlorite is mutagenic.
Negative results (0/20 guinea pigs sensitized) have been obtained for 8% sodium hypochlorite solution in a skin sensitization test. Insufficient details are available to evaluate a report of a positive result	Reproductive Toxicity There is insufficient information available to draw conclusions.
(positive reactions in 2/10 animals) obtained using 6% sodium hypochlorite (pH 11.2) with the guinea pig ear swelling test for non-immunological contact urticaria.	STOT-Single Exposure N/A STOT-Repeated Exposure N/A Aspiration Hazard N/A Synergistic Materials N/A
Delayed and immediate effects and also chronic effects from short and long term exposure	
Germ Cell Mutagenicity The available information does not suggest that sodium hypochlorite is mutagenic.	
Reproductive Toxicity There is insufficient information available to draw conclusions.	
STOT-Single Exposure May cause respiratory irritation. STOT-Repeated Exposure Not Available Aspiration Hazard Prolonged or repeated overexposure causes lung damage. Synergistic Materials Not Available	

12 ECOLOGICAL INFORMATION

TOXICITY

Toxicity to Algae EC₅₀(Red algae, 96hr): 46mg/L

Toxicity to Fish LC₅₀(Salmo gairdneri, 48hr): 0.07mg/L

Toxicity to Daphnia and Other Aquatic Invertebrates $LC_{50}(Daphnia magna, 48hr): 0.032mg/L$

PERSISTENCE AND DEGRADABILITY

Not Available

BIO-ACCUMULATIVE POTENTIAL

No evidence to support any rating.

OTHER ADVERSE EFFECTS

Not Available

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Waste Treatment Methods: Check regional waste requirements

Waste Treatment Options: Treatment options approved by local authorities

Sewage Disposal Options: Check with local authorities before discharge to the sewer

Other Disposal Recommendations: Dispose of according to local, state, and national regulatory requirements.

U.S. Waste Classification: Non-RCRA Waste

California Waste Codes: N/A

14 TRANSPORT INFORMATION

RISKS ASSOCIATED WITH CHEMICAL COMPOUND	ASSOCIATED RISKS AT THIS VOLUME
DOT: GROUND.	DOT: Not restricted.
TDG:	TDG:
UN Number: UN 3082 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Hazard Class: 9 Packaging Group: III Description: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III, MARINE POLLUTANT	No restrictions for road or rail
ICAO:	ICAO:
UN Number: UN 3082 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Hazard Class: 9 Packaging Group: III Description: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III	Not restricted per Special Provision A197 – "These substances when transported in single or combination packages containing a net quantity or having a net mass of 5 L or less for liquids are not subject to any other provisions of these Regulations providing the packaging meets the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8."
IATA:	IATA:

UN Number: UN 3082	Not restricted per Special Provision A197 – "These
Proper Shipping Name: ENVIRONMENTALLY	substances when transported in single or
HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	combination packages containing a net quantity or
Hazard Class: 9	having a net mass of 5 L or less for liquids are
Packaging Group: III	not subject to any other provisions of these
Description: UN 3082, ENVIRONMENTALLY	Regulations providing the packaging meets the
HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM	general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and
HYPOCHLORITE), 9, III	5.0.2.8."
IMDG/IMO:	IMDG/IMO:
UN Number: UN 3082	Not restricted per Special Provision A197 – "These
Proper Shipping Name: ENVIRONMENTALLY	substances when transported in single or
HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	combination packages containing a net quantity or
Hazard Class: 9	having a net mass of 5 L or less for liquids are
Packaging Group: III	not subject to any other provisions of these
Description: UN 3082, ENVIRONMENTALLY	Regulations providing the packaging meets the
HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM	general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and
HYPOCHLORITE), 9, III, MARINE POLLUTANT	5.0.2.8."

15 REGULATORY INFORMATION

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

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

Acute Health Hazard

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Sodium hypochlorite 7681-52-9	Х	х	Х	Х	
Sodium chlorate 7775-09-9	Х	х	Х		

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.

EU Regulations: This material safety data sheet conforms to Regulation (EC) No 1272/2008, 1907/ 2006, and other requirements established by the European Union

National Regulations: Germany: Water Hazard Class I

Chemical Safety Assessment: A Chemical Safety Assessment has not been completed for this product

Canada WHMIS Hazard Class E - Corrosive material



16 OTHER INFORMATION

HMIS Rating Health Hazard: 3 Flammability: 0 Physical Hazard: 0

Physical Hazard: 0 Personal Protection: B

NFPA Rating Health hazard: 3 Fire Hazard: 0 Reactivity Hazard: 0

Full text of H-Statements referred to under sections 2 and 3.

- Eye Dam. Serious eye damage
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- Skin Corr. Skin corrosion

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Abaxis shall not be held liable for any damage resulting from handling or from contact with the above product.

Date of Preparation: July 16, 2018