Canine Annexin V-Fluorescein Apoptosis Assay Kit SDS; Doc# F18-9139-3-A; Effective: 06/03/2016; Supersedes: None; Page 1 of 6

TECHNOLOGIES

SAFETY DATA SHEET (SDS) according to Regulation (EC) No. 830/2015 amending 1907/2006

1.1	on 1: Identification of the substance/mixture and of th Product identifier:	Canine Annexin V-Fluorescein Apoptosis Assay Kit
1.1a	Other means of identification:	
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1.1b	Alternative product name(s)/ synonyms:	Canine Annexin V Kit; Canine Annexin Kit
1.1c	Product number/Catalog #(s): Internal identification:	9139 Canine Annexin Kit
l.1d I.2	Relevant identified uses of the substance or	For research use only. Not for use in diagnostic procedures.
	mixture and uses advised against:	For research use only. Not for use in diagnostic procedures.
.2a	Brief description of what the substance or mixture is	Flow cytometry-based assay used to measure phosphatidylserine
	intended to do:	translocation and plasma membrane integrity in whole cells.
.3	Details of the supplier of the SDS:	
.3a	Name:	ImmunoChemistry Technologies, LLC (ICT)
1.3b	Address:	9401 James Avenue South, Suite 155
1.3c	City, State, Zip, Country	Bloomington, MN 55431-2500 USA
1.3d	Phone number:	1-800-829-3194 and 952-888-8788
1.3e	Fax number:	952-888-8988
I.3f I.3g	Website: Email:	www.immunochemistry.com help@immunochemistry.com
1.3y 1.3h	Contact person at ICT:	Quality Documentation Department
1.311 1.4	Emergency telephone number:	ICT: 1-800-829-3194 (USA & Canada) or 952-888-8788 world wide;
		ICT hours are 9 am-5 pm central time USA, Monday through Friday (excluding holidays). Chemtrec 24-hour access within USA and Canada: 1-800-424-9300 or +1 703-527-3887. Collect calls accepted
Pootio	on 2: Hazards identification	
5ectio	Classification of the substance or mixture:	
2.1a	Product is a:	Nixture (multi-component kit consisting of 4 mixtures).
2.1b	Classification according to (EC) No. 1272/2008 {CLP}:	Does not meet the criteria for classification.
2.1c	The most important adverse physiochemical, human	Refer to Sections 9-12.
	health, and environmental effects:	
2.2	Label elements:	None
2.2a	GHS label elements, including precautionary	
	statements:	
2.2b	Contains:	
2.2c	Labeling in accordance with (EC) No. 1272/2008:	None.
2.2d	Hazard Pictograms (Hazard Symbols):	None.
2.2e 2.2f	Signal word: Hazard statements:	None.
2.21 2.2g	Precautionary statements:	None.
2.2y 2.2h	Supplementary precaution statements:	None.
2.211 2.3	Other hazards:	No additional information available.
2.3a	Does the chemical meet the criteria for PBT or vPvB?	Not applicable.
2.3b	Other hazards which do not result in classification:	Propidium Iodide (PI) contains a low concentration of Phenanthridinium, 3,8-diamino-5-[3-(diethylmethylammonio)propyl]-6 phenyl-, diiodide (CAS 25535-16-4) which is below the threshold for reporting. PI is a suspected mutagen at high concentrations. Prolonged skin contact may cause redness and irritation. Because of the small quantity of product, the health hazard is small.
Sectio 3.1	on 3: Composition/information on ingredients Substance:	Itom is a mixture therefore Section 2.1 is not applicable; see Section
3.2	Mixture: The chemical identity and concentration or concentration ranges of all ingredients which are hazardous and are present above their cut-off levels:	Item is a mixture therefore Section 3.1 is not applicable; see Section 3.2. Item is a multi-component kit consisting of the following 4 mixtures: Canine Annexin V-Fluorescein, Catalog #6642 Annexin Reconstitution Buffer, 1X, Catalog #6639 Annexin Binding Buffer, 10X, Catalog #6640 Propidium Iodide, 250 μg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	3.2a Chemical identity:	No ingredients identified for reporting in this section.

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	on 4: First aid measures	If any and an any and and and the first of the first of the
4.1	Description of first aid measures:	If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person
4.1a	Inhalation:	Remove to fresh air and keep at rest in a comfortable position for
4.1a		breathing. If not breathing, give artificial respiration. Get medical attention if any discomfort continues.
4.1b	Skin contact:	Wash skin thoroughly with soap and water for several minutes;
		continue to rinse for at least 15 minutes. Remove any contaminated clothing and shoes and wash thoroughly before reuse. Get medical
	_	attention if any discomfort continues.
4.1c	Eye contact:	Promptly wash eyes with plenty of water while lifting the eyelids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
4.1d	Ingestion:	NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medica
		attention if any discomfort continues.
4.2	Most important symptoms and effects, both acute and delayed:	PI is a suspected mutagen at high concentrations. Prolonged skin contact may cause redness and irritation. Because of the small quantity of product, the health hazard is small.
4.2a	Inhalation:	May cause coughing or mild irritation.
4.2a 4.2b	Skin contact:	Prolonged skin contact may cause redness and mild irritation.
4.2c	Eye contact:	May cause temporary eye irritation.
4.2d	Ingestion:	May cause discomfort if swallowed.
4.3	Indication of any immediate medical attention and special treatment needed:	No specific first aid measures noted, but first aid may still be required in case of accidental exposure, inhalation, or ingestion of this product. If in doubt, get medical attention promptly!
4.3a	Notes to physician/first responder:	Treat symptomatically. Refer to Sections 5-8 for advice on personal protective equipment.
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	on 5: Firefighting measures	
5.1	Extinguishing media:	This product is not flammable. Use fire-extinguishing media appropriate for the surrounding materials.
5.1a 5.1b	Suitable extinguishing media: Unsuitable extinguishing media:	Water spray, foam, dry powder, or carbon dioxide. None known.
5.2	Special hazards arising from the substance or mixture:	This product is not flammable. Product is not explosive. No dangerous reactions known under normal conditions of use.
5.2a	Hazardous combustion products:	None under normal conditions.
5.2b	Unusual fire & explosion hazards:	No unusual fire or explosion hazards noted.
5.2c	Protective measures in fire:	Use protective equipment appropriate for surrounding materials.
5.3	Advice for firefighters:	
5.3a	Special firefighting procedures:	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
5.3b	Special protective equipment and precautions for	Wear full protective clothing, including self-contained breathing
	firefighters:	apparatus, if necessary. The product presents no special fire hazards in normal use. Keep away from heat, hot surfaces, sparks, open
		flames and other ignition sources. No smoking.
Sectio	on 6: Accidental release measures	
6.1	Personal precautions, protective equipment, and emergency procedures:	
6.1a	General release measures:	No specific emergency measures are required other than good laboratory hygiene and safety practices for small spills. Wear suitable protective clothing, gloves and eye or face protection. Consult
6.1b	Advice for non-emergency personnel; personal precautions, protective equipment and emergency procedures:	professional emergency personnel if concerned (see Section 8). No specific emergency measures are required other than good laboratory hygiene and safety practices. Wear suitable protective clothing/gloves/eye/face protection to avoid contact with skin, eyes, and personal clothing; use an approved supplied-air respirator, in cas of emergency (also refer to Section 8). Remove all sources of ignition Ensure adequate ventilation and control dust/mist. Avoid breathing vapors, mist, or gas. Evacuate personnel to safe areas. Wear suitable protective clothing, gloves and eye or face protection to prevent any contamination. Consult professional emergency personnel if

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6.1c	Advice for emergency responders; personal	Wear suitable protective clothing, gloves and eye or face protection to
	precautions, protective equipment and emergency	avoid contact; use an approved supplied-air respirator, in case of
6.0	procedures:	emergency (also refer to Section 8).
6.2	Environmental precautions:	Do not allow to enter drains, sewers, or watercourses.
6.3	Methods and materials for containment and clean up:	Contain any spills with dikes or absorbent materials to prevent
	clean up:	migration and entry into sewers or water sources. Place in a suitable
		container for disposal in accordance with local waste regulations (see
		Section 13). Wash spill area thoroughly with plenty of soap and water.
		Avoid contact with skin or inhalation of spillage, dust, or vapor.
6.4	Reference to other sections:	Refer to Sections 8 and 13 for additional information.
Sactio	n 7: Handling and storage	
7.1	Precautions for safe handling:	Do not handle until all safety precautions have been read and
	r recoultons for sale nanoling.	understood. Avoid creation of aerosol/mist/dust. Avoid inhalation of vapors/mist/dust. Prevent contact with skin and eyes. Use appropriate personal protection equipment (PPE). Thoroughly wash hands and contaminated areas with water and soap before leaving the work site.
7.1a	Prevent handling of incompatible substances or	Keep away from sources of ignition.Avoid contact with strong acids and strong oxidizers.
7 4 4	mixtures:	De net est driek, en en else in wordt en en Misch han de effension
7.1b	Advice on general occupational hygiene:	Do not eat, drink, or smoke in work areas. Wash hands after use.
		Remove contaminated clothing and protective equipment before
		entering eating areas. Good personal hygiene is necessary. Follow
7.2	Conditions for safe storage, including any	good laboratory hygiene and safety practices. Refer to product label. Store in cool place. Keep container tightly
1.2	incompatibilities:	closed in a dry and well-ventilated place. Containers which are opened
	incompationnes.	must be carefully resealed and kept upright to prevent leakage. Avoid
		spills and release into the environment; keep away from watercourses.
7.3	Specific end use(s):	For research use only. Not for use in diagnostic procedures.
1.0		
Sectio	n 8: Exposure controls/personal protection	
8.1	Control parameters:	
8.1a	Occupational exposure limits, such as chemical	None.
	identity, standard, TWA-8 hours (time weighted	
	average), STEL-15 minutes (short term exposure	
	limit), etc.: WEL = Workplace Exposure Limit. Sk =	
	can be absorbed through skin.	
8.1b	Appropriate engineering controls:	
8.1c	Individual protection measures, such as personal	Wear suitable protective gloves. Wear protective goggles. Wear lab
	protective equipment:	coat with full coverage clothing.
8.1d	Safety symbols:	
8.2	Exposure controls:	
8.2a	Process conditions:	Provide eyewash station.
8.2b	Engineering controls:	Ensure that eyewash stations and safety showers are proximal to the
		workstation location.
8.2c	Ventilation controls:	Provide adequate ventilation.
8.2d	Reference to other sections:	Refer to Section 5 for additional information.
8.2e	Eye/face protection:	Wear approved chemical safety goggles where eye exposure is
		reasonably probable or face shield if risk of splashing.
8.2f	Skin protection:	Wear apron or protective clothing in case of contact.
8.2g	Hand protection:	Use suitable protective gloves if risk of skin contact.
8.2h	Respiratory equipment:	Respiratory protection is not required.
8.2i	Other protection:	Wear appropriate clothing to avoid skin contact.
8.2j	Hygiene measures:	DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift
		and before eating, smoking, and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to
		prevent drying of skin. When using do not eat, drink, or smoke. Wash
0.06	Thormal hazards:	promptly with soap and water if skin becomes contaminated
8.2k 8.2l	Thermal hazards: Environmental exposure controls:	None known under normal conditions of use. Not determined.
0.21		
Sectio	n 9: Physical and chemical properties	
9.1	Information on basic physical and chemical properties:	•
9.1a	Appearance (physical state, color, etc.):	Annexin V-Fluorescein is a lyophilized powder; other kit components

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9.1b	Odor:	No characteristic odor.
9.1c	Odor threshold:	Not determined.
9.1d	pH:	Annexin Reconstitution Buffer, 1X, pH = 7.2-7.6
		Annexin Binding Buffer, 10X, pH = 7.2-7.6
		Propidium lodide, $pH = 4.5-6.5$
9.1e	Melting point/freezing point (°C):	Not determined.
9.1f	Initial boiling point and boiling range:	Not determined.
9.1g	Flash point (°C):	Not applicable.
9.1h	Evaporation rate:	Not determined.
9.1i	Flammability (solid, gas):	Not applicable.
9.1j	Upper/lower flammability or explosive limits:	Not applicable.
9.1k	Vapor pressure:	Not determined.
9.11	Vapor density (Air =1):	Not determined.
9.1m	Relative density:	Not determined.
9.1n	Solubility(ies):	All kit components are soluble in water.
9.10	Partition coefficient (N-octanol/water):	Not determined.
9.1p	Auto-ignition temperature (°C):	Not determined.
9.1q	Decomposition temperature (°C):	Not determined.
9.1r	Viscosity:	Not determined.
9.1s	Explosive properties:	Not determined.
9.1t	Oxidizing properties:	Not determined.
9.2	Other information:	None.
9.2a	Other physical or chemical parameters:	None.
	10: Stability and reactivity	
10.1	Reactivity:	No data available.
10.2	Chemical stability:	Stable under normal temperature conditions.
10.3	Possibility of hazardous reactions:	Hazardous polymerization: no data available.
10.4	Conditions to avoid:	To avoid product degradation, avoid exposure to high temperatures or
		direct sunlight or light.
10.5	Incompatible materials:	Strong oxidizing substances.
10.6	Hazardous decomposition products:	None under normal conditions.
	11: Toxicological information	
11.1	Information on toxicological effects:	
11.1a	Name:	Item is a multi-component kit consisting of the following 4 mixtures:
		Canine Annexin V-Fluorescein, Catalog #6642
		Annexin Reconstitution Buffer, 1X, Catalog #6639
		Annexin Binding Buffer, 10X, Catalog #6640
		Propidium Iodide, 250 µg/mL, Catalog #638
		Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels
		Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard
11.15	Acuto toxicity:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
11.1b	Acute toxicity:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined.
11.1c	Skin corrosion/irritation:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined.
11.1c 11.1d	Skin corrosion/irritation: Serious eye damage/irritation:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. Not determined.
11.1c 11.1d 11.1e	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. Not determined. Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. Not determined. Not determined. Not determined. Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. Not determined. Not determined. Not determined. Not determined. Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1h	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. Not determined. Not determined. Not determined. Not determined. Not determined. Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j 11.1k	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j 11.1k 11.1k	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1i 11.1k 11.1k 11.1l 11.1m	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. May enter by skin and/or eye contact; inhalation of vapors/mist/dust.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j 11.1k 11.1k	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. May enter by skin and/or eye contact; inhalation of vapors/mist/dust. May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1i 11.1k 11.1k 11.1l 11.1m 11.1m	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. May enter by skin and/or eye contact; inhalation of vapors/mist/dust. May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j 11.1k 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Skin contact:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. May enter by skin and/or eye contact; inhalation of vapors/mist/dust. May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j 11.1k 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l 11.1ln 11.1n 11.1n 11.1p	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Skin contact: Eye contact:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j 11.1k 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Skin contact: Eye contact: Symptoms related to the physical, chemical and	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. May enter by skin and/or eye contact; inhalation of vapors/mist/dust. May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j 11.1k 11.1k 11.1n	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j 11.1k 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l 11.1l 11.1ln 11.1n 11.1n 11.1p	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j 11.1k 11.1k 11.1n 11.1n	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure:	 Propidium lodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Nos pecific symptoms noted. Not determined. Not determined. Not determined. Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1j 11.1k 11.1k 11.1n	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. Not determined. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1i 11.1k 11.1k 11.1n 11.1k 11.1n 11.1n 11.1n 11.1n 11.1n 11.1n 11.1n 11.1s	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates):	 Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1i 11.1k 11.1k 11.1n 11.1k 11.1n 11.1n 11.1n 11.1n 11.1n 11.1n 11.1n 11.1s 11.1t	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not determined. Not determined.
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1i 11.1k 11.1k 11.1n 11.1k 11.1n 11.1n 11.1n 11.1n 11.1n 11.1n 11.1s 11.1s 11.1t 11.1t	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects: Absence of specific data:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. Not determined. Not determined. Not determined. Not determined. Not d
11.1c 11.1d 11.1e 11.1f 11.1g 11.1h 11.1i 11.1i 11.1k 11.1k 11.1n 11.1k 11.1n 11.1n 11.1n 11.1n 11.1n 11.1n 11.1n 11.1s 11.1t	Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: STOT-single exposure: STOT-repeated exposure: Aspiration hazard: Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Ingestion: Inhalation: Skin contact: Eye contact: Symptoms related to the physical, chemical and toxicological characteristics: Delayed and immediate effects as well as chronic effects from short and long term exposure: Numerical measures of toxicity (such as acute toxicity estimates): Interactive effects:	Propidium Iodide, 250 µg/mL, Catalog #638 None of the components contain hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Not determined. May cause discomfort if swallowed. In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Liquid may irritate skin. Spray and vapor in the eyes may cause irritation and smarting. No specific symptoms noted. Not determined. Not determined. Not determined. Not determined.

Canine Annexin V-Fluorescein Apoptosis Assay Kit SDS; Doc# F18-9139-3-A; Effective: 06/03/2016; Supersedes: None; Page 5 of 6 Classification by National Toxicity Program (NTP): 11.1x Not classified. Classification by International Agency for Research Not classified. 11.1y on Cancer (IARC): 11.1z Classification by OSHA 13: Not classified. 11.1ab Other information: Propidium lodide is a suspected mutagen at high concentrations. Prolonged skin contact may cause redness and irritation. Because of the small quantity of product, the health hazard is small. Section 12: Ecological information 12.1 **Toxicity:** 12.1a Propidium Iodide. Name: Ecotoxicity (aquatic and terrestrial, where available): Not determined. 12.1b Persistence and degradability: There are no data on the degradability of this product. 12.2 12.3 **Bioaccumulative potential:** There are no data available on bioaccumulation. 12.4 Mobility in soil: The product is soluble in water. 12.5 Results of PBT and vPvB assessment: Not determined. No data available. 12.6 Other adverse effects: Section 13: Disposal considerations Waste treatment methods: When handling waste, consideration should be made to the safety 13.1 precautions applying to handling of the product. 13.1a Description of waste residues and information on Dispose of waste and residues in accordance with local authority their safe handling and methods of disposal, requirements. For the safety of persons conducting disposal, recycling including the disposal of any contaminated or reclamation activities, please refer to the information in Section 8 packaging: (exposure controls and personal protection) of the SDS. Section 14: Transport information Not applicable. 14.1 **UN number:** 14.2 UN proper shipping name: Not applicable. Transport hazard class(es): 14.3 Not applicable. 14.4 Packing group: Not applicable. Environmental hazards: 14.5 14.5a Is it environmentally dangerous according to UN No. Model Regulations (IMDG Code, ADR, RID, and ADN)?: 14.5b Is it a marine pollutant according to the IMDG No. code?: Special precautions for user: 14.6 None known. Not applicable. 14.7 Transport in bulk according to Annex II of MARPOL and the IBC code: 14.7a Other information: The product is not considered a dangerous good for transport. Classification for other modes of transport: 14.7b Contact supplier. Section 15: Regulatory information Safety, health and environmental 15.1 regulations/legislation specific for the substance or mixture: 15.1a Regional safety, health and environmental . regulations specific for the product in question: USA SARA Components (such as 302/311/313): 15.1b Not listed. 15.1c USA Massachusetts Right to Know: Not listed. USA Pennsylvania Right to Know: 15.1d Not listed. USA New Jersey Right to Know: 15.1e Not listed. USA California Prop. 65 Components: 15.1f Not listed. EU Regulation 1907/2006 {REACH}: 15.1g 15.1h Annex XIV substances subject to authorization: Not listed. 15.1i Substances of very high concern: Not listed. 15.1j Approved code of practice: Classification and labeling of substances and preparations dangerous for supply. Safety data sheets for substances and preparations. 15.1k Guidance notes: Workplace exposure limits EH40. (EC) No. 1272/2008 on the classification, labelling and packaging of 15.1I EU legislation references: substances and mixtures {CLP Regulation}. EC 830/2015. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 15.2 Chemical safety assessment: Not required.

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15.2a	Other re	egulatory information:	None.
Section	16: Oth	er information	
16.1		nformation:	
16.1a	Date of	revision:	06/03/2016
16.1b		mber and revision:	F18-9139-3-A
16.1c		edes SDS number and revision:	None.
16.1d	_	is made to the previous version of the SDS:	No previous versions. SDS formatted to comply with EC 1272/2008 CLP regulations, EC 830/2015.
16.1e	the SDS	end to abbreviations and acronyms used in S:	ACGIH American Conference of Governmental Industrial Hygienists. ADN European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway. ADR The European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS Chemical Abstracts Service. CLP Classification, Labelling and Packaging. EC European Commission. EC50 Half maximal effective concentration. EH40 Resource containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations. EINECS European Inventory of Existing Commercial chemical Substances. ELINCS European Inventory of Existing Commercial chemical Substances. ELINCS European List of Notified Chemical Substances. EU European Union. GHS Globally Harmonized System of Classification and Labelling of Chemicals. H Statement. GHS Hazard statement. IATA International Air Transport Association. IBC Intermediate Bulk Container. IC50 Half maximal inhibitory concentration. IMDG International Maritime Dangerous Goods. LC50 Median lethal concentration. LD50 Median lethal dose. LogPow logarithm of the octanol/water partiion coefficient. MARPOL 73/78 International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. OEL Occupational Safety and Health Administration (USA). PBT Persistent, Bioaccumulative, and Toxic. RID The Regulations concerning the International Carriage of Dangerous Goods by Rail. SARA Superfund Amendments and Reauthorization Act. SCBA Self-Contained Breathing Apparatus. SDS Safety Data Sheet. STOT-SE Specific Target Organ Toxicity - Repeated Exposure. UN United Nations. USA United States of America. vPvB very Persistent very Bioaccumulative. All statements were written out in full.
DISCLA	stateme	ents not written out in full elsewhere: This information relates only to the specif in combination with any other materials o knowledge and belief, accurate and reliab	fic material designated and may not be valid for such material used r in any process. Such information is, to the best of the company's le as of the date indicated. However, no warranty guarantee or
		representation is made to its accuracy, re himself as to the suitability of such inform	liability, or completeness. It is the user's responsibility to satisfy nation for his own particular use.
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