SAFETY DATA SHEETS

This SDS packet was issued with item: 078390947

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078390517



MATERIAL SAFETY DATA SHEET

IDENTITY Scour Bos 4 - Killed Virus			I	Product	# 248, 249		
Section I					,		
Manufacturer's Name		-	cy Telephone Number	ſ			
Novartis Animal Health, US, Inc.			4-3424				
Address (Number, Street, City, State, and Zip Code)			e Number for Informa 3-3386	ation			
1447 140th Street	D	ate Prej	pared February 10, 20	000	Revised Da	te: Februa	ary 15, 2009
Larchwood, IA 51241-9778	Si	ignature	e of Preparer (optional)			
Section II - Hazardous Ingredients/Identity Inf							
Hazardous Components (Specific Chemical Identity; Co	ommon	Name	(s)) OSHA PEL	ACGIH TLV	Other lin Recomn		% (optional)
Thimerosal (merthiolate)			0.01 m	ng of Hg	/ m ³		<u><</u> 0.03
Thimerosal is an organomercury compound.							
Section III - Physical/Chemical Characteristics	5						
Boiling Point	NA		Specific Gravity ($H_2O = 1$)		NA
Vapor Pressure (mm Hg.)	NA		Melting Point				NA
Vapor Density (AIR = 1)	NA		Evaporation Rate (Butyl Acetate =	1)			NA
Solubility in Water			(Buty) Hootato = 1	- /			
Yes Appearance and Odor							
Opaque liquid							
Section IV - Fire and Explosion Hazard Data							
Flash Point (Method Used)		Flam	mable Limits	LE	L	UEL	
NA			NA		NA		NA
Extinguishing Media				•		· ·	
Dry chemical or carbo							
Special Fire Fighting Procedures Wear protective for the surrounding fire.	cloth	ing an	d a self contained	breathin	ng apparatus	as app	ropriate
Unusual Fire and Explosion Hazards None							

Scour Bos 4 – Killed Virus

Section V - Reactivity	7 Data			
Stability	Unstable		Conditions to Ave	id Thimerosal will decompose with heat.
	Stable	X		
Incompatibility (Material	s to Avoid) None	e		
Hazardous Decompositio	n or Byproducts Merce	ury, carb	on monoxide, or	carbon dioxide
Hazardous Polymerization	May Occur		Conditions to Ave	id None
	Will Not Occur	Х		
Section VI - Health H	lazard Data			
Route(s) of Entry:	Inhalation?		Skin?	Ingestion?
	Yes			Yes Yes
Health Hazards (Acute an		of alvin or	n avia agenta at Tl	impression toxic compound
The product may be	irritating in the case of	of skin of	reye contact. If	nimerosal is a toxic compound.
Carcinogenicity:	NPT? No	0	IARC Monograph	s? No OSHA Regulated? No
				with plenty of water. If the product is
<u> </u>			a physician. In c	ase of accidental injection, wash the
puncture site and see	e a physician immedia	ately.		
		1.77		
	ions for Safe Handling			
Steps to Be Taken in Case Material Is Released or Spilled Clean up the spill with absorbent material, and afterwards, wash the site thoroughly with water.				
Clean up the spin w		, and are	erwarus, wasir ui	e she uloloughly with water.
Waste Disposal Method Dispose in accordance with all applicable federal, state and local environmental regulations.				
Dispose in accordan	ce with an applicable	Tederal,	state and local e	invironmental regulations.
Precautions to Be Taken	in Handling and Storing (25%)	4- 450 E)	V th t	ainer closed when stored, and shake well
before using.	uct $(2^{\circ} to 7^{\circ} C) \{35^{\circ}\}$	$1045^{\circ}F$. Keep the cont	amer closed when stored, and snake well
•	A			
Other Precautions N/	A			
Section VIII - Contro				
Respiratory Protection (Specify Type) An approved cartridge respirator for large spills				
		spills		
Ventilation	Local Exhaust No	V		Special NA
Drata di sa Cl	Mechanical (General)	Yes		Other NA
Protective Gloves	yl or nitrile		Eye Protect	Goggles
Other Protective Clothing				0025103
- mer risteeuve cisuing	N N	A		
Work/Hygienic Practices				
		ns to prev	vent accidental in	njections.

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Scour Bos 4 - Killed Virus

Section IX - Regulatory Information

Component: Thimerosal

Mercury and mercury compounds are subject to CWA, SDWA, CAA, RCRA, CERCLA, SARA (Secs. 312 and 313), DOT and 29 CFR 1910.1200 regulations.

This Material Safety Data Sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. Accordingly, no guarantee expressed or implied is made by Novartis Animal Vaccines, Inc. as to the results to be obtained based upon your use of the information, nor does Novartis Animal Vaccines, Inc. assume any liability arising out of your use of the information.

SAFETY DATA SHEET



1. Identification

Product identifier	Scour Bos 4 Killed Virus
Other means of identification	
Item Code	ZD6300, AV6300
Recommended use	Veterinary Vaccine
Recommended restrictions	None known.
Manufacturer/Importer/Supplier	/Distributor information
Company Name	Elanco Animal Health
	2500 Innovation Way
	Greenfield, IN 46140
	US
Phone:	1-877-Elanco1 (1-877-352-6261)
Email:	lilly_msds@lilly.com
Emergency Telephone Numbers:	Elanco Product Technical Support / Human or Animal Exposure Reporting: 1-888-545-5973
Transportation Emergency Telephone:	CHEMTREC: 1-800-424-9300 (Outside U.S. 1-703-527-3887)
2. Hazard(s) identification	
Physical hazards	Not classified.
Health 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	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.
Hazard(s) not otherwise classified (HNOC)	Accidental injection may cause local swelling, irritation or necrosis at the injection site. Get medical attention immediately. See also section 4.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Mineral Oil Adjuvant		Mixture	55.6
Thimerosal		54-64-8	<= 0.01
Composition comments	* Mineral Oil Adjuvant contains up to 92% Lig Remaining components of this product are no below reportable levels.		
4. First-aid measures			
Inhalation	Move to fresh air. Call a physician if symptom	ns develop or persist.	

Material name: Scour Bos 4 Killed Virus

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Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Accidental injection may cause local swelling, irritation or necrosis at the injection site.
Indication of immediate medical attention and special	In case of accidental self-injection of oil emulsion vaccines, get medical attention immediately.
treatment needed	SEEK IMMEDIATE MEDICAL TREATMENT at nearest Hospital Emergency Room even if only a very small amount is injected, as failure to treat may result in the mineral oil adjuvant causing sterile abscess and/or loss of affected finger or thumb. If pain persists for more than 12 hours after medical examination, seek additional medical advice.
	To the Doctor: This product contains mineral oil. Accidental injection with this oil-based product, even in small quantities, can cause intense swelling which may, for example, result in ischaemic necrosis and the loss of a digit. Expert PROMPT, surgical attention is required and may necessitate early incision and irrigation of the injected area, especially where there is involvement of finger pulp or tendon.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	
Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not available.
Specific hazards arising from the chemical	Not applicable.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment.
General fire hazards	No unusual fire or explosion hazards noted.
6. Accidental release meas	sures
Personal precautions, protective equipment and	Not available.

protective equipment and emergency procedures	
Methods and materials for	Prevent entry into waterways, sewer, basements or confined areas.
containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	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.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	

Precautions for safe handlingUse a needle guard to help prevent self-injection. Observe good industrial hygiene practices.Conditions for safe storage,
including any incompatibilitiesStore in original tightly closed container.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values Components	Туре	Value	Form
Light Mineral Oil (CAS 8042-47-5)	TWA	5 mg/m3	Inhalable fraction.
Thimerosal (CAS 54-64-8)	STEL TWA	0.03 mg/m3 0.01 mg/m3	

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Components	Туре	Value	Form
Light Mineral Oil (CAS 8042-47-5)	PEL	5 mg/m3	Mist.
US. OSHA Table Z-2 (29 CFR	R 1910.1000)		
Components	Туре	Value	
Thimerosal (CAS 54-64-8)	Ceiling	0.04 mg/m3	
	TWA	0.01 mg/m3	
US. NIOSH: Pocket Guide to Components	Chemical Hazards Type	Value	Form
Light Mineral Oil (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Thimerosal (CAS 54-64-8)	STEL	0.03 mg/m3	
	TWA	0.01 mg/m3	
ological limit values	No biological exposure limits noted for th	e ingredient(s).	
posure guidelines			
US - California OELs: Skin d	-		
Thimerosal (CAS 54-64-8 US - Tennessee OELs: Skin	designation	bsorbed through the skin.	
Thimerosal (CAS 54-64-8 US ACGIH Threshold Limit V	Alues: Skin designation	bsorbed through the skin.	
	Chemical Hazards: Skin designation	bsorbed through the skin.	
Thimerosal (CAS 54-64-8) Can be a	bsorbed through the skin.	
propriate engineering ntrols	Ensure adequate ventilation, especially in	n confined areas.	
ntrols	Ensure adequate ventilation, especially in such as personal protective equipment Safety glasses.		
ntrols dividual protection measures,	such as personal protective equipment		
ntrols dividual protection measures, Eye/face protection	such as personal protective equipment		chemical resistant gloves.
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Upper/lower flammability or explosive limits

Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	> 20.5 mm²/s at 40 C (estimated)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
10 Stability and reactivity	,

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	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Thimerosal (CAS 54-64-8)		
<u>Acute</u>		
Oral		
LD50	Rat	75 mg/kg
Skin corrosion/irritation	Based on available data, th	e classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, th	e classification criteria are not met.
Respiratory or skin sensitizatio	n	
Respiratory sensitization	Based on available data, th	e classification criteria are not met.
Skin sensitization	Based on available data, th	e classification criteria are not met.
Germ cell mutagenicity	Based on available data, th	e classification criteria are not met.
Carcinogenicity	Based on available data, th	e classification criteria are not met.
IARC Monographs. Overall	Evaluation of Carcinogenic	ty
Not listed.		
OSHA Specifically Regulate	ed Substances (29 CFR 1910).1001-1050)
Not regulated.		
••	ogram (NTP) Report on Car	cinogens
Not listed.		

Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	No aspiration toxicity classification
Further information	Accidental injection may cause local swelling, irritation or necrosis at the injection site.

12. Ecological information

Ecotoxicity

Components		Species	Test Results	
Thimerosal (CAS 54-64-8)				
Aquatic				
Acute				
Fish	LC50	Bullhead, catfish (Ictalurus sp.)	7.5 mg/l, 24 hours	
Persistence and degradability	No data is	available on the degradability of this prod	luct.	
Bioaccumulative potential	No data a	vailable.		
Mobility in soil	No data a	vailable.		
Other adverse effects	Not availa	ble.		

13. Disposal considerations

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

14. Transport information

Disposal instructions

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations This product is 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) Not listed. SARA 304 Emergency release notification Not regulated.

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Hazard categories

Superfund Amendments and Reauthorization Act of 1986 (SARA)

I	mmediate Hazard - No
I	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Thimerosal (CAS 54-64-8)

Not regulated.)	
Safe Drinking Water Act (SDWA)	Not regulated.		
US state regulations			
US - California Proposition	65 - CRT: Listed date/Developmental toxin		
Thimerosal (CAS 54-64-8	b) Listed: July 1, 1990		
International Inventories			
Country(s) or region	Inventory name	On inventory (yes/no)*	
Canada	Domestic Substances List (DSL)		
Canada	Non-Domestic Substances List (NDSL)	No	
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No	
A "No" indicates that one or more country(s).	nents of this product comply with the inventory requirements adm components of the product are not listed or exempt from listing of uding date of preparation or last revision		
Issue date			
Revision date	09-21-2017		
Version #	02		
Disclaimer	As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.		
	For additional information contact:		

Revision information

0011+1-800-428-4441 Hazard(s) identification: Hazard statement