



## MATERIAL SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION OF PRODUCT AND COMPANY

<b>Pfizer Inc</b>	<b>Emergency telephone</b>	1-866-531-8896
<b>Pfizer Animal Health</b>	<b>Hours of operation</b>	24 Hours
<b>235 East 42nd Street</b>	<b>Telephone</b>	1-800-366-5288
<b>New York, NY 10017</b>		

<b>Trade names</b>	<b>BOVI-SHIELD BRSV</b>
<b>Product name</b>	<b>BOVISHIELD BRSV (BOVINE RESPIRATORY SYNCYTIAL VIRUS VACCINE, MODIFIED LIVE VIRUS)</b>
<b>Therapeutic use</b>	Veterinary Vaccine
<b>Description</b>	Lyophilised powder

### SECTION 2 - COMPOSITION

<u>Ingredient</u>	<u>CAS Number</u>	<u>Amount</u>
Appropriate cell substrates	Not assigned	Proprietary
Short chain peptide	Not assigned	<30%
Sucrose*	57-50-1	<40%
Gelatin	9000-70-8	<30%
Gentamicin*	1403-66-3	<0.1%
Bovine Respiratory Syncytial Virus	Not assigned	Proprietary
Penicillin*	1406-05-9	<0.1%
Streptomycin*	57-92-1	<0.1%

\*Hazardous

Note: Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety.

### SECTION 3 - HAZARDS IDENTIFICATION

<b>Signal word</b>	<b>WARNING!</b>
<b>Statements of hazard</b>	<b>MAY CAUSE ALLERGIC REACTION IN PENICILLIN-SENSITIVE INDIVIDUALS.</b>
<b>Eye effects</b>	None known; however, direct contact with any foreign material may cause eye irritation.
<b>Skin effects</b>	Contains trace quantities of penicillin which can cause allergic reactions in susceptible individuals.
<b>Inhalation effects</b>	Repeated exposure to dust or mist may produce allergic reactions. An Occupational Exposure Limit has been established for one or more of the ingredients (see Section 8).

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### SECTION 3 - HAZARDS IDENTIFICATION ... continued

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<b>Ingestion effects</b>	Toxicity following ingestion is not expected. Ingestion should be avoided.
<b>NOTE:</b>	This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

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### SECTION 4 - FIRST AID MEASURES

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<b>Skin</b>	IN CASE OF ACCIDENTAL INNOCULATION, CONSULT THE EMERGENCY CONTACT LISTED IN SECTION 1. In case of direct skin contact, remove contaminated clothing and flush exposed area with large amounts of water. Obtain medical assistance.
<b>Eyes</b>	Immediately flush eyes with water for at least 15 minutes. If irritation occurs or persists, get medical attention.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
<b>Ingestion</b>	In the event of swallowing this material, seek medical assistance.
<b>Note to physician</b>	The viruses contained in this vaccine are generally not considered to cause disease in humans.

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### SECTION 5 - FIRE FIGHTING MEASURES

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<b>General hazard</b>	This material is not expected to support combustion. Toxic or corrosive gases are expected during a fire or heating of this material.
<b>Fire fighting instructions</b>	Wear approved positive pressure, self-contained breathing apparatus and full protective turn out gear. Move containers from fire area if possible without increased personal risk. Dike area if possible to contain water for later disposal.
<b>Extinguishing media</b>	Use carbon dioxide, dry chemical, or water spray.
<b>Flash point</b>	Expected to be >55°C
<b>Hazardous combustion products</b>	Toxic or corrosive gases are expected in fires involving this mixture.

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### SECTION 6 - ACCIDENTAL RELEASE MEASURES

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<b>General</b>	Review Sections 3, 8 and 12 before proceeding with clean up.
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## SECTION 6 - ACCIDENTAL RELEASE MEASURES ... continued

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<b>Small spill</b>	Sweep spilled material into an approved container for disposal keeping dust generation to a minimum. Prevent discharge to drains. Clean spill area thoroughly.
<b>Large spill</b>	Contain the source of the spill or leak if it is safe to do so. Sweep spilled material into an approved container for disposal keeping dust generation to a minimum. Clean spill area thoroughly. Prevent discharge to drains.

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## SECTION 7 - HANDLING AND STORAGE

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<b>General handling</b>	Avoid contact with eyes, skin and clothing. Avoid breathing dust.
<b>Storage conditions</b>	Follow product information storage instructions to maintain efficacy. Do not freeze. No other storage requirements are necessary concerning occupational hazards.

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## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

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<b>Exposure limits</b>			
<u>Compound</u>	<u>Issuer</u>	<u>Type</u>	<u>OEL</u>
Sucrose	OSHA	TWA-8 Hr	5 mg/m <sup>3</sup> (respirable fraction)
	OSHA	TWA-8 Hr	15 mg/m <sup>3</sup> (total dust)
	ACGIH	TWA-8 Hr	10 mg/m <sup>3</sup>
	UK OES	TWA-8 Hr	10 mg/m <sup>3</sup>
<b>Exposure information</b>	The exposure limit(s) listed for solid components are only relevant if dust may be generated.		
<b>Ventilation</b>	Good general ventilation should be sufficient to control airborne levels.		
<b>Respiratory protection</b>	Respirators are not required for normal use of this material.		
<b>Eye protection</b>	Wear safety glasses with sideshields if eye contact is possible.		
<b>Skin protection</b>	Individuals with known sensitivity to penicillin should wear long sleeves to avoid skin contact. Wash hands and arms thoroughly after handling this material.		
<b>Hand protection</b>	Wear impervious gloves if skin contact is possible.		

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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<b>Physical form</b>	Powder
<b>Color</b>	No data available
<b>Molecular weight</b>	Mixture
<b>Molecular formula</b>	Mixture

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES** ... continued

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<b>pH</b>	No data available
<b>Boiling point</b>	No data available
<b>Melting point</b>	No data available
<b>Density</b>	No data available
<b>Vapor pressure</b>	No data available
<b>Water solubility</b>	Components are soluble in water
<b>Solvent solubility</b>	No data available

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**SECTION 10 - STABILITY AND REACTIVITY**

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<b>Reactivity</b>	This material is Stable
<b>Conditions to avoid</b>	Avoid freezing and storage at temperatures greater than 7° C.
<b>Incompatibilities</b>	This material can be denatured or inactivated by a variety of organic solvents, salts or heavy metals.
<b>Hazardous decomposition products</b>	None expected under normal conditions.
<b>Hazardous polymerization</b>	Not expected to occur

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**SECTION 11 - TOXICOLOGY INFORMATION**

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<b>Acute toxicity</b>				
<u>Compound</u>	<u>Type</u>	<u>Route</u>	<u>Species</u>	<u>Dosage</u>
Sucrose	LD <sub>50</sub>	Oral	Rat	29,700 mg/kg
<b>Eye</b>	Not determined for this mixture. Not expected to cause eye irritation			
<b>Skin</b>	Not determined for this mixture. Not expected to cause skin irritation.			
<b>Inhalation</b>	Not determined for this mixture.			
<b>Ingestion</b>	Not determined for this mixture. Toxicity is not expected following ingestion.			
<b>Mutagenicity</b>	Not determined for this mixture.			
<b>Sensitization</b>	Sensitization (allergic skin reaction) may occur, based on effects of individual components.			
<b>Subchronic effects</b>	Not determined for this mixture.			

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**SECTION 11 - TOXICOLOGY INFORMATION** ... continued

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<b>Chronic effects/ carcinogenicity</b>	Not determined for this mixture.
<b>Carcinogen status</b>	None of the components of this formulation is listed as a carcinogen by IARC, NTP or OSHA.
<b>Teratogenicity</b>	The effects on developing offspring are not known.
<b>Additional information</b>	This mixture contains a modified live virus vaccine for use in cattle.

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**SECTION 12 - ECOLOGICAL INFORMATION**

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<b>Environmental overview</b>	The environmental characteristics of this mixture have not been fully evaluated. Releases to the environment should be avoided.
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**SECTION 13 - DISPOSAL INFORMATION**

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<b>Disposal procedure</b>	Observe all local and national regulations when disposing of this mixture. For large quantities, dispose of waste on site in a biomedical incinerator if allowed by the incinerator permit. If no on-site incinerator is available, dispose of waste in a licensed biomedical incinerator.
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**SECTION 14 - TRANSPORTATION INFORMATION**

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<b>General shipping instructions</b>	Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.
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**SECTION 15 - REGULATORY INFORMATION**

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<b>EU Classification</b>	Not classified
<b>Canadian WHMIS</b>	This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

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**SECTION 16 - OTHER**

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<b>Disclaimer</b>	<b>Pfizer Inc believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without a warranty of any kind, expressed or implied.</b>
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