Boehringer Ingelheim

SAFETY DATA SHEET

1. Identification

Product identifier Equi-Jec® 6

Other means of identification

Product code APHIS Code - 4855.24, Family Code - 362

Recommended use Vaccine for parenteral use in horses.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Boehringer Ingelheim Vetmedica, Inc. Manufacturer

Address 2621 North Belt Hwy

St. Joseph, MO 64506-2002

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or **Transportation emergency**

Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

Medical Emergency

(24HR):

(866)638-2226

(800) 821-7467 Non-Emergency calls:

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Sensitization, skin Category 1

> Carcinogenicity Category 1

OSHA defined hazards Not classified.

Label elements



Signal word

Hazard statement May cause cancer. May cause an allergic skin reaction.

Precautionary statement

Prevention Avoid breathing mist or vapor. Contaminated work clothing must not be allowed out of the

workplace. Wear protective gloves. Obtain special instructions before use. Do not handle until all

safety precautions have been read and understood.

If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Response

Wash contaminated clothing before reuse. If exposed or concerned: Get medical advice/attention.

Storage Store away from incompatible materials. Do not freeze. Store at 35-46°F (2-8°C). Store locked

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name CAS number Amphotericin B* 1397-89-3 Proprietary

SDS US Equi-Jec® 6

939809 Issue date: 05-September-2017 Version #: 02 Revision date: 12-February-2018

Eastern encephalomyelitis virus - killed virus	NA	Proprietary
Equine Herpes virus, subtype 1 (EHV - 1) killed virus	NA	Proprietary
Equine Influenza A/ Equi-2/Ohio - killed virus	NA	Proprietary
Equine Influenza A/Equi-2/ Kentucky - killed virus	N/A	Proprietary
Equine Influenza A/Equi-2/New Market - killed virus	NA	Proprietary
Formaldehyde*	50-00-0	≤ 0.74 g/L
Gentamicin*		Proprietary
Tetanus toxoid - inactivated Clostridium tetani	NA	Proprietary
West Nile Virus - killed virus	N/A	Proprietary
Western encephalomyelitis virus - killed virus	NA	Proprietary

Composition comments

4. First-aid measures

Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders. Seek medical attention and take along these instructions.

Eye contact

Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Most important Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

symptoms/effects, acute and delayed

May cause an allergic skin reaction. Dermatitis. Rash. Ingestion of a large quantity may cause vomiting, nausea, dizziness, drowsiness and other systemic effects.

Indication of immediate

medical attention and special treatment needed

Not for human use. For use in animals only. Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. Persons developing anaphylactic (life threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). None known.

media Specific hazards arising from

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

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

Specific methods General fire hazards

the chemical

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

No unusual fire or explosion hazards noted.

Equi-Jec® 6 SDS US

^{*} Used to inactivate bacterin and subsequently removed from solution. Concentration represents maximum remaining amount by percent weight which is below USDA allowable limits.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk, Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. 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. For waste disposal, see section 13 of the SDS.

Environmental precautions

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

7. Handling and storage

Precautions for safe handling

Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store away from foodstuffs. Do not freeze. Shake well before using. Store at 2-8°C (35-46°F). Store away from incompatible materials, see Section 10 of the SDS.

8. Exposure controls/personal protection

Occupational exposure limits

Components	Туре	Value	
Formaldehyde* (CAS 50-00-0)	STEL	2 ppm	
·	TWA	0.75 ppm	
US. ACGIH Threshold Limit Val	ues		
Components	Туре	Value	
Formaldehyde* (CAS 50-00-0)	STEL	0.3 ppm	
,	TWA	0.1 ppm	
US. NIOSH: Pocket Guide to Ch	nemical Hazards		
Components	Туре	Value	
Formaldehyde* (CAS 50-00-0)	Ceiling	0.1 ppm	
•	TWA	0.016 ppm	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

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

Individual protection measures, such as personal protective equipment

Eye/face protection None required for consumer use. In laboratory, medical or industrial settings, safety glasses with

side shields are recommended. The use of goggles or full face protection may be required depending on the industrial exposure setting. Contact a health and safety professional for specific information.

Skin protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove Hand protection

supplier.

Skin protection

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Wear

protective gloves.

Equi-Jec® 6 SDS US

None required for consumer use. Respirators may be required for certain laboratory and Respiratory protection

manufacturing tasks if engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (where exposure limits have not been established). Workplace risk assessments should be completed before specifying and implementing respirator usage. All respirators must conform to specifications for efficiency and performance. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 29 CFR 1910.134. Respirator type: Air-purifying respirator with an appropriate, air-purifying filter, cartridge or canister. Contact a

health and safety professional or manufacturer for specific information.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Liquid. Physical state

Form Killed virus, inactivated bacterin toxoid and adjuvant in an injectable solution. Packaged in

high-density polyethylene 2 mL syringes and 15 mL bottles.

Clear to slightly pink. Color Odor No data available. **Odor threshold** Not available. Not available. Ηq Not available. Melting point/freezing point Not available. Initial boiling point and boiling

range

Not available. Flash point Not available. **Evaporation rate**

Flammability (solid, gas) Will burn if involved in a fire.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Vapor pressure Not available. Vapor density Not available. Relative density Not available.

Solubility(ies)

Not available. Solubility (water) **Partition coefficient** Not available.

(n-octanol/water)

Auto-ignition temperature Not available. **Decomposition temperature** Not available. Not available. Viscosity

Other information

Explosive properties Not explosive. Not oxidizing. Oxidizing properties

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Excessive heat. Keep from freezing.

Incompatible materials Strong oxidizing agents.

Equi-Jec® 6 SDS US 939809 Version #: 02 Revision date: 12-February-2018 Issue date: 05-September-2017

Hazardous decomposition

products

Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation No adverse effects due to inhalation are expected.

Skin contact May cause an allergic skin reaction.

Eye contactDirect contact with eyes may cause temporary irritation. **Ingestion**Low hazard for usual handling by trained personnel.

Symptoms related to the physical, chemical and toxicological characteristics

May cause an allergic skin reaction. Dermatitis. Rash. Ingestion of a large quantity may cause

vomiting, nausea, dizziness, drowsiness and other systemic effects.

Information on toxicological effects

Acute toxicity May cause an allergic skin reaction.

Components Species Test Results

Formaldehyde* (CAS 50-00-0)

<u>Acute</u>

Dermal

LD50 Rat 270 mg/kg

Inhalation

LC50 Rat 0.578 mg/l, 4 hours

Oral

LD50 Rat 100 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

ACGIH sensitization

FORMALDEHYDE (CAS 50-00-0)

Dermal sensitization

Respiratory sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Contains a component that is listed as an IARC 1 (Known Human Carcinogen), a NTP Known

Carcinogen and an ACGIH A2 (Suspected Human Carcinogen). In vaccines, the chronic exposure

potential is negligible.

IARC Monographs. Overall Evaluation of Carcinogenicity

Formaldehyde* (CAS 50-00-0) 1 Carcinogenic to humans.

NTP Report on Carcinogens

Formaldehyde* (CAS 50-00-0) Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Formaldehyde* (CAS 50-00-0) Cancer

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

No data available.

Specific target organ toxicity -

repeated exposure

No data available.

Aspiration hazard Not an aspiration hazard.

Chronic effects Possible hyper sensitization (development of abnormal sensitivity).

12. Ecological information

EcotoxicityThe product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Equi-Jec® 6 SDS US

Components Species Test Results

Formaldehyde* (CAS 50-00-0)

Aquatic

Crustacea EC50 Water flea (Daphnia pulex) 4.3 - 7.8 mg/l, 48 hours

Fish LC50 Striped bass (Morone saxatilis) 10.302 - 16.743 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Formaldehyde* (CAS 50-00-0) 0.35

Mobility in soil Diluent and end-product expected to be slightly to moderately mobile in soil.

Other adverse effects

This product contains one or more substances identified as hazardous air pollutants (HAPs) per

the US Federal Clean Air Act (see section 15).

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

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

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

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

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

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

emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulationsThis product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

One or more components are not listed on TSCA.

Therefore, it can only be used for TSCA exempt purposes such as R&D or veterinary use. FEDERAL LAW RESTRICTS THIS DRUG TO USE BY OR ON ORDER OF LICENSED

VETERINARIANS.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Formaldehyde* (CAS 50-00-0) Listed.

SARA 304 Emergency release notification

Formaldehyde* (CAS 50-00-0) 100 LBS OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Formaldehyde* (CAS 50-00-0) Cancer

Skin sensitization Respiratory sensitization

Eye irritation Skin irritation

respiratory tract irritation

Acute toxicity Flammability

Equi-Jec® 6 SDS US

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical n	ame	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)

Formaldehyde* 50-00-0 100 500

SARA 311/312 Hazardous

chemical

Classified hazard Respiratory or skin sensitization

Yes

categories Carcinogenicity

SARA 313 (TRI reporting)

Chemical nameCAS number% by wt.Formaldehyde*50-00-0 $\leq 0.74 \text{ g/L}$

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Formaldehyde* (CAS 50-00-0)

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

Formaldehyde* (CAS 50-00-0)

Safe Drinking Water Act Not regulated. (SDWA)

(021111)

US state regulations

US. Massachusetts RTK - Substance List

Formaldehyde* (CAS 50-00-0)

US. New Jersey Worker and Community Right-to-Know Act

Formaldehyde* (CAS 50-00-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Formaldehyde* (CAS 50-00-0)

US. Rhode Island RTK

Formaldehyde* (CAS 50-00-0)

California Proposition 65



WARNING: California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This product can expose you to Formaldehyde*, which is known to the State of California to cause cancer. For

more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Formaldehyde* (CAS 50-00-0) Listed: January 1, 1988

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

Formaldehyde* (CAS 50-00-0)

International Inventories

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

Equi-Jec® 6 SDS US

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

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

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

Issue date05-September-2017Revision date12-February-2018

Version # 02

Further information HMIS® is a registered trade and service mark of the American Coatings Association (ACA).

HMIS® ratings Health: 2* Flammability: 0

Physical hazard: 0

NFPA ratings



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Equi-Jec® 6 SDS US

939809 Version #: 02 Revision date: 12-February-2018 Issue date: 05-September-2017