SAFETY DATA SHEETS

This SDS packet was issued with item:

078390434

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

078390897 078706097



SAFETY DATA SHEET

1. Identification

Product identifier Fusogard

Other means of identification

Item Code AV6170

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)

Emergency Telephone: Elanco Product Technical Support / Human or Animal Exposure Reporting:

1-888-545-5973

Email: elanco_sds@elanco.com

Transportation Emergency
Telephone: CHEMTREC: 1-800-424-9300
(Outside U.S. 1-703-527-3887)

2. Hazard(s) identification

Physical hazardsNot classified.Health hazardsAspiration hazard

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement

H304 May be fatal if swallowed and enters airways.

Precautionary statement

Prevention Not available.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Category 1

Hazard(s) not otherwise Accidental injection may cause local swelling, irritation or necrosis at the injection site. Get

classified (HNOC) medical attention immediately. See also section 4.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Oil Adjuvant SO3-020		Mixture	20

Material name: Fusogard SDS US

Chemical nameCommon name and synonymsCAS number%Formaldehyde50-00-0< 0.074</td>

Composition comments

* Oil Adjuvant contains up to 62% Light Mineral Oil (CAS 8042-47-5)

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable levels.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

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. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content

doesn't get into the lungs. Never give anything by mouth to a victim who is unconscious or is

having convulsions. Get medical attention.

Most important

symptoms/effects, acute and delayed

Aspiration may cause pulmonary edema and pneumonitis. Accidental injection may cause local swelling, irritation or necrosis at the injection site.

Indication of immediate medical attention and special treatment needed

In case of accidental self-injection of oil emulsion vaccines, get medical attention immediately.

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.

Use fire-extinguishing media appropriate for surrounding materials.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

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Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Not applicable.

Not available.

Wear suitable protective equipment.

General fire hazards No unusual fire or explosion hazards noted.

Not available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

Prevent entry into waterways, sewer, basements or confined areas.

Wipe up with absorbent material (e.g. cloth, fleece).

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 handling Conditions for safe storage, including any incompatibilities Use a needle guard to help prevent self-injection. Observe good industrial hygiene practices.

Store in original tightly closed container.

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8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value	
Formaldehyde (CAS 50-00-0)	STEL	2 ppm	
	TWA	0.75 ppm	
US. ACGIH Threshold Limit Valu	ies		
Components	Туре	Value	
Formaldehyde (CAS 50-00-0)	Ceiling	0.3 ppm	
US. NIOSH: Pocket Guide to Che	emical Hazards		
Components	Туре	Value	
Formaldehyde (CAS 50-00-0)	Ceiling	0.1 ppm	

Biological limit values

Appropriate engineering controls

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

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses.

Skin protection

Use a needle guard to help prevent self-injection. Wear appropriate chemical resistant gloves. Hand protection

Other Wear suitable protective clothing.

Liquid.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

TWA

Thermal hazards Not available.

General hygiene considerations

Physical state

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

0.016 ppm

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Relative density

Form Liquid Opaque Color Odor Not available. **Odor threshold** Not available. Not available. Not available. Melting point/freezing point Not available. Initial boiling point and boiling range Flash point Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available. Not available. Vapor pressure Not available. Vapor density

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Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity < 20.5 mm²/s at 40 C

Other information

Explosive properties Not explosive. **Oxidizing properties** Not oxidizing.

10. Stability and reactivity

ReactivityThe 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 Hazardous polymerization does not occur.

reactions

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition No hazardous decomposition products are known.

products

11. Toxicological information

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components Species Test Results

Formaldehyde (CAS 50-00-0)

Acute Inhalation

LC50 Rat 10500 mg/m³, 4 hours

Oral

LD50 Rat 640 mg/kg

Rabbit: Corrosive. (Formaldehyde)

Skin corrosion/irritation Rabbit: Corrosive. (Formaldehyde)

Based on available data, the classification criteria are not met.

Serious eye damage/eye

irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

ACGIH sensitization

FORMALDEHYDE (CAS 50-00-0)

Dermal sensitization

Respiratory sensitization

Respiratory sensitization Exposure to formaldehyde may cause respiratory sensitization in some individuals or aggravate

pre-existing asthmatic conditions.

Based on available data, the classification criteria are not met.

Skin sensitization May cause an allergic skin reaction. (Formaldehyde)

Based on available data, the classification criteria are not met.

Germ cell mutagenicity Result in genetic toxicity assays (in vitro and in vivo): Mixed results (Formaldehyde)

Based on available data, the classification criteria are not met.

Carcinogenicity May cause cancer. (Formaldehyde)

Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

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

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Formaldehyde (CAS 50-00-0) Cance
US. National Toxicology Program (NTP) Report on Carcinogens

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

Material name: Fusogard SDS US

Reproductive toxicity No effects identified in animal studies. (Formaldehyde)

Based on available data, the classification criteria are not met.

Specific target organ toxicity -

single exposure

May cause respiratory irritation. (Formaldehyde)

Based on available data, the classification criteria are not met.

Specific target organ toxicity -

repeated exposure

No significant target organ toxicity reported. (Formaldehyde)

Based on available data, the classification criteria are not met.

Aspiration hazard May be fatal if swallowed and enters airways. (Mineral oil)

Further information Accidental injection may cause local swelling, irritation or necrosis at the injection site.

12. Ecological information

Ecotoxicity

Components Species Test Results

Formaldehyde (CAS 50-00-0)

Aquatic

Acute

Crustacea EC50 Water flea (Daphnia magna) 29 mg/l, 48 hours
Fish LC50 Fathead minnow (Pimephales promelas) 24.1 mg/l, 96 hours

Chronic

Fish NOEC Medaka, high-eyes (Oryzias latipes) > 48 mg/l, 28 days

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 0.35

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

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

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.

Toxic Substances Control Act (TSCA)

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 1910.1001-1052)

Formaldehyde (CAS 50-00-0) Cancer

Skin sensitization Respiratory sensitization

Eye irritation Skin irritation

Material name: Fusogard SDS US

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 313 (TRI reporting)

Not regulated.

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)

US state regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

California Proposition 65

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)* Canada Domestic Substances List (DSL) Nο Canada Non-Domestic Substances List (NDSL) No United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory No

*A "Yes" indicates that all components of this product comply 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 date 08-01-2017 **Revision date** 03-26-2019

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 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:

Elanco Animal Health 0011+1-877-352-6261 0011+1-800-428-4441

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