

## SAFETY DATA SHEET

### SECTION 1 : IDENTIFICATION

**Product Name:** **Doxy 100 and 200**  
**Manufacturer Name:** Fresenius Kabi USA, LLC  
**Address:** Three Corporate Drive  
 Lake Zurich, Illinois 60047  
**General Phone Number:** (847) 550-2300  
**Customer Service Phone Number:** (888) 386-1300  
**Health Issues Information:** (800) 551-7176  
**SDS Creation Date:** January 08, 2009  
**SDS Revision Date:** June 01, 2015  
**(M)SDS Format:**

### SECTION 2 : HAZARD(S) IDENTIFICATION

GHS Pictograms:



**Signal Word:** DANGER.

**GHS Class:** Respiratory sensitisation. Category 1.  
 Reproductive toxicity. Category 1A.  
 Eye Irritation. Category 2.  
 Skin Irritation. Category 2.  
 Skin Sensitization. Category 1.  
 Reproductive toxicity. Effects on or via lactation.

**Hazard Statements:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 May damage fertility or the unborn child.  
 Causes serious eye irritation.  
 Causes skin irritation.  
 May cause an allergic skin reaction.  
 May cause harm to breast-fed children.

**Precautionary Statements:** Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Do not breathe dust/fume/gas/mist/vapours/spray.  
 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 Avoid contact during pregnancy and while nursing.  
 Wash hands thoroughly after handling.  
 Do not eat, drink or smoke when using this product.  
 Contaminated work clothing should not be allowed out of the workplace.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 In case of inadequate ventilation wear respiratory protection.  
 IF ON SKIN: Wash with plenty of water.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 IF exposed or concerned: Get medical advice/attention.  
 Specific treatment (see ... on this label).  
 If skin irritation occurs: Get medical advice/attention.  
 If skin irritation or rash occurs: Get medical advice/attention.  
 If eye irritation persists: Get medical advice/attention.  
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.  
 Take off contaminated clothing and wash it before reuse.  
 Store locked up.  
 Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

**Emergency Overview:** This product is intended for therapeutic use only when prescribed by a physician. Potential adverse reactions from prescribed doses and overdoses are described in the package insert.

**Route of Exposure:** Inhalation Ingestion Eye contact Skin Absorption. Injection.

**Potential Health Effects:**

**Eye:** Contact with eyes may cause irritation.

**Skin:** May cause skin irritation.

**Inhalation:** May cause irritation of respiratory tract.

**Ingestion:** May cause irritation.

**Signs/Symptoms:** Possible adverse reactions include: anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (in the anogenital region), maculopapular and erythematous rashes, exfoliative dermatitis, urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, hemolytic anemia, thrombocytopenia, neutropenia, and eosinophilia. Occupational exposure has not been fully investigated.

**Aggravation of Pre-Existing Conditions:** Accidental Exposure: Hypersensitivity to any of the tetracyclines.

### SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Doxycycline	24390-14-5	100 mg and 200 mg vials	
Ascorbic Acid	50-81-7	480 mg and 960 mg per vial	
Mannitol	69-65-8	300 mg and 600 mg per vial	

### SECTION 4 : FIRST AID MEASURES

<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
<b>Skin Contact:</b>	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
<b>Ingestion:</b>	If conscious, flush mouth out with water immediately. Call a physician or poison control center immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
<b>Other First Aid:</b>	For Adverse Event Information, please call (800) 551-7176.

### SECTION 5 : FIRE FIGHTING MEASURES

<b>Flash Point:</b>	Not established.
<b>Flash Point Method:</b>	Not established.
<b>Auto Ignition Temperature:</b>	Not established.
<b>Lower Flammable/Explosive Limit:</b>	Not established.
<b>Upper Flammable/Explosive Limit:</b>	Not established.
<b>Fire Fighting Instructions:</b>	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
<b>Extinguishing Media:</b>	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Protective Equipment:</b>	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Hazardous Combustion Byproducts:</b>	Thermal decomposition products may include smoke and toxic fumes. Oxides of carbon, oxides of nitrogen and other organic substances may be formed. Other undetermined low molecular weight hydrocarbon compounds may be released in small quantities depending upon specific conditions of combustion.

### SECTION 6 : ACCIDENTAL RELEASE MEASURES

<b>Personnel Precautions:</b>	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Avoid personal contact and breathing dust. Use proper personal protective equipment as listed in section 8.
<b>Environmental Precautions:</b>	Avoid runoff into storm sewers, ditches, and waterways.
<b>Methods for containment:</b>	This material will settle out of the air.
<b>Methods for cleanup:</b>	Use an industrial vacuum cleaner with a high efficiency filter to clean up dust. Avoid dust generation.

### SECTION 7 : HANDLING and STORAGE

<b>Handling:</b>	When handling pharmaceutical products, avoid all contact and inhalation of vapor, mists and/or fumes. Use with adequate ventilation. Use only in accordance with directions.
<b>Storage:</b>	Store at controlled room temperature 15 to 30°C (59 to 86°F). Protect from light.
<b>Work Practices:</b>	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
<b>Hygiene Practices:</b>	Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling dust, vapor or mist.

### SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

<b>Engineering Controls:</b>	General ventilation is sufficient if this product is being used in a controlled medical setting (clinic,
------------------------------	--

hospital, medical office) for its sole intended parenteral (injection) purpose. Otherwise, use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls including use of a biosafety cabinet / fume hood to control airborne levels below recommended exposure limits.

<b>Eye/Face Protection:</b>	Chemical splash goggles. Wear a face shield also when splash hazard exist.
<b>Skin Protection Description:</b>	Protective laboratory coat, apron, or disposable garment recommended.
<b>Hand Protection Description:</b>	Wear appropriate protective gloves. Consult glove manufacturer's data for permeability data. Nitrile rubber or natural rubber gloves are recommended.
<b>Respiratory Protection:</b>	No personal respiratory protective equipment is normally required when this product is being used/administered by a licensed healthcare practitioner (i.e. an end-user such as a clinician / doctor / nurse) for its sole intended parenteral (injection) purpose in a controlled medical setting. The need for respiratory protection will vary according to the airborne concentrations and environmental conditions. A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances. Consult the NIOSH web site ( <a href="http://www.cdc.gov/niosh/npptl/topics/respirators/">http://www.cdc.gov/niosh/npptl/topics/respirators/</a> ) for a list of respirator types and approved suppliers.
<b>Other Protective:</b>	Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

## EXPOSURE GUIDELINES

### SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

<b>Physical State:</b>	Lyophilized powder.
<b>Color:</b>	Yellow
<b>Odor:</b>	Slight.
<b>Boiling Point:</b>	Not established.
<b>Melting Point:</b>	Not established.
<b>Solubility:</b>	Soluble. in water.
<b>Vapor Density:</b>	Not established.
<b>Vapor Pressure:</b>	Not established.
<b>Percent Volatile:</b>	Not established.
<b>pH:</b>	1.8 - 3.3
<b>Molecular Formula:</b>	Mixture
<b>Molecular Weight:</b>	1025.89
<b>Flash Point:</b>	Not established.
<b>Flash Point Method:</b>	Not established.
<b>Auto Ignition Temperature:</b>	Not established.

### SECTION 10 : STABILITY and REACTIVITY

<b>Chemical Stability:</b>	Stable under normal temperatures and pressures.
<b>Hazardous Polymerization:</b>	Not reported.
<b>Conditions to Avoid:</b>	Exposure to light and excessive heat above 30 °C may cause decomposition.

### SECTION 11 : TOXICOLOGICAL INFORMATION

#### Doxycycline :

<b>Acute Toxicity:</b>	Acute Toxicity: LD50 IV Mouse: 241 mg/kg LD50 IP Mouse: 410 mg/kg LD50 IV Rat: 228 mg/kg LD50 IP Rat: 228 mg/kg LD50 IV Dog: > 100 mg/kg
<b>Skin:</b>	IMMEDIATE EFFECTS: Skin irritation may occur.
<b>Chronic Effects:</b>	Hypersensitivity reactions ranging from mild to severe may occur.
<b>Doxycycline :</b>	
<b>Ingestion:</b>	LD50 Oral Mouse: 1870 mg/kg LD50 Oral Rat: > 2 gm/kg LD50 Oral Dog: > 500 mg/kg
<b>Other Toxicological Information:</b>	LD50 IV Mouse: 241 mg/kg LD50 IP Mouse: 410 mg/kg LD50 IV Rat: 228 mg/kg LD50 IP Rat: 228 mg/kg LD50 IV Dog: > 100 mg/kg

#### Ascorbic Acid :

<b>RTECS Number:</b>	CI7650000
<b>Skin:</b>	Administration onto the skin - Mouse TDLo: 50 mg/kg [Immunological Including Allergic - Increase in

cellular immune response]  
Administration onto the skin - Mouse TDLo: 500 mg/kg/10D (Intermittent) [Biochemical - Metabolism (Intermediary) - Effect on inflammation or mediation of inflammation]  
Administration onto the skin - Mouse TDLo: 120 gm/kg/30D (Intermittent) [Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - Other oxidoreductases]

**Ingestion:** Oral - Rat LD50: 11900 mg/kg [Sense Organs and Special Senses (Eye) - Lacrimation Behavioral - Somnolence (general depressed activity) Gastrointestinal - Hypermotility, diarrhea]  
Oral - Mouse LD50: 3367 mg/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Rat LD50: 11.9 gm/kg [Behavioral - Muscle contraction or spasticity Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Body temperature decrease]

**Other Toxicological Information:** Intravenous. - Rat LD50: >4 gm/kg [Behavioral - altered sleep time (including change in righting reflex) Behavioral - somnolence (general depressed activity)]  
Intravenous. - Mouse LD50: 518 mg/kg [Details of toxic effects not reported other than lethal dose value]  
Intravenous. - Mouse TDLo: 800 mg/kg [Reproductive - Specific Developmental Abnormalities - Central Nervous System Reproductive - Specific Developmental Abnormalities - musculoskeletal system]  
Subcutaneous - Rat LD50: >10 gm/kg [Details of toxic effects not reported other than lethal dose value]  
Intraperitoneal. - Mouse LD50: 643 mg/kg [Details of toxic effects not reported other than lethal dose value]  
Intraperitoneal. - Mouse TDLo: 90 mg/kg [Behavioral - rigidity (including catalepsy)]  
Intraperitoneal. - Mouse Micronucleus test: 4500 mg/kg/3D (continuous)  
Intraperitoneal. - Mouse Cytogenetic analysis: 1600 mg/kg  
Intraperitoneal. - Mouse Sister chromatid exchange: 1600 mg/kg  
Intraperitoneal. - Mouse TDLo: 6680 mg/kg [Reproductive - Effects on Embryo or Fetus - fetal death]

**Mannitol:**

**RTECS Number:** OP2060000

**Ingestion:** Oral - Rat LD50: 13500 mg/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Mouse LD50: 22 gm/kg [Behavioral - Somnolence (general depressed activity); Gastrointestinal - Ulceration or bleeding from small intestine]

**Other Toxicological Information:** Intravenous. - Rat LD50: 9690 mg/kg [Details of toxic effects not reported other than lethal dose value]  
Intravenous. - Mouse LD50: 7470 mg/kg [Details of toxic effects not reported other than lethal dose value]  
Intraperitoneal. - Mouse LD50: 14 gm/kg [Details of toxic effects not reported other than lethal dose value]

**SECTION 12 : ECOLOGICAL INFORMATION**

**Ecotoxicity:** No ecotoxicity data was found for the product.

**Environmental Stability:** No environmental information found for this product.

**SECTION 13 : DISPOSAL CONSIDERATIONS**

**Waste Disposal:** Dispose of in accordance with Local, State, Federal and Provincial regulations.

**SECTION 14 : TRANSPORT INFORMATION**

**DOT Shipping Name:** Not Regulated.

**DOT UN Number:** Not Regulated.

**SECTION 15 : REGULATORY INFORMATION**

**Doxycycline:**

**California PROP 65:** Listed: developmental.

**Canada DSL:** Listed

**Ascorbic Acid:**

**TSCA Inventory Status:** Listed

**EINECS Number:** 200-066-2

**Canada DSL:** Listed

**Mannitol:**

**TSCA Inventory Status:** Listed

**EINECS Number:** 200-711-8

**Canada DSL:** Listed

**SECTION 16 : ADDITIONAL INFORMATION**

**HMIS Ratings:**

**HMIS Health Hazard:** 1

**HMIS Fire Hazard:** 1

**HMIS Reactivity:** 1

HMIS Personal Protection: X

SDS Creation Date: January 08, 2009

SDS Revision Date: June 01, 2015

SDS Format:

Disclaimer:

The information contained herein pertains to this material. It is the responsibility of each individual party to determine for themselves the proper means of handling and using these materials based on their purpose and intended use. Fresenius-Kabi assumes no liability resulting from the use of or reliance upon the information contained in this material safety data sheet. This material safety data sheet does not constitute the guaranty or specifications of the product.

Copyright© 1996-2015 Actio Corporation. All Rights Reserved.