

Version 2.2 Revision Date: 05-11-2020

Date of last issue: 02-10-2020 Date of first issue: 10-30-2015

SECTION 1. IDENTIFICATION

| Product name | : | KADCYLA(R) Vials 160 mg | | |
|---|------|---|----------------|--|
| Product code | : | RO530-4020/F02 | | |
| Common name(s), synonym(s) of the substance | : | T-DM1 with excipients lyophilized | | |
| Manufacturer or supplier's o | leta | ails | | |
| Company name of supplier | : | Genentech, Inc. | | |
| Address | : | DNA Way 1 94080 South San Francisco CA USA | | |
| Telephone E-mail address Emergency telephone | : | 001-(650) 225-1000 info.sds@roche.com | (800) 424 0200 | |
| Emergency telephone number | • | US Chemtrec phone | (800)-424-9300 | |
| Recommended use of the chemical and restrictions on use | | | | |
| Recommended use | : | Formulated pharmaceutical act | ive substance | |
| Restrictions on use | : | For professional users only. | | |

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

| Acute toxicity (Oral) | : | Category 3 |
|---|---|--|
| Acute toxicity (Inhalation) | : | Category 4 |
| Germ cell mutagenicity | : | Category 1B |
| Reproductive toxicity | : | Category 1B |
| GHS label elements Hazard pictograms | : | |
| Signal Word | : | Danger |
| Hazard Statements | : | H301 Toxic if swallowed. H332 Harmful if inhaled. H340 May cause genetic defects. H360FD May damage fertility. May damage the unborn child. |

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| Precautionary \$ | | Prevention: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been and understood. P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protective face protection. |
| | | Response: P301 + P310 + P330 IF SWALLOWED: Immediately call a |

POISON CENTER/doctor. Rinse mouth. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

| Chemical name | CAS-No. | Concentration (% w/w) |
|-------------------------------------|--------------|-----------------------|
| Trastuzumab emtansine | 1018448-65-1 | 24.4 |
| .alphaD-Glucopyranoside, .betaD- | 57-50-1 | 73.4 |
| fructofuranosyl | | |
| Butanedioic acid, sodium salt (1:2) | 150-90-3 | 2.0 |
| Sorbitan, monododecanoate, | 9005-64-5 | 0.2 |
| poly(oxy-1,2-ethanediyl) derivs. | | |

SECTION 4. FIRST AID MEASURES

| General advice | Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended. |
|----------------|--|
| If inhaled | · Move to fresh air |

If inhaled

Move to fresh air.

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| | | | an after significant exposure. lace in recovery position and seek medical | | |
| In case of skin contac | t : | If on skin, rinse w | vell with water. | | |
| In case of eye contact | : | Remove contact Protect unharmer Keep eye wide o | d eye. | | |
| If swallowed | : | Never give anyth If symptoms pers | or alcoholic beverages. ing by mouth to an unconscious person. ist, call a physician. ediately to hospital. | | |
| Most important sympt and effects, both acut delayed | | Toxic if swallowe Harmful if inhaled May cause genet May damage fert | 1. | | |
| Notes to physician | | | The first aid procedure should be established in consultation with the doctor responsible for industrial medicine. | | |
| SECTION 5. FIRE-FIGHTING MEASURES | | | | | |
| Suitable extinguishing | media : | | g measures that are appropriate to local nd the surrounding environment. | | |
| Unsuitable extinguish media | ng : | High volume wate | er jet | | |
| Specific hazards durir fighting | ig fire : | Do not allow run- courses. | off from fire fighting to enter drains or water | | |
| Hazardous combustio products | n : | Carbon oxides Nitrogen oxides (| NOx) | | |
| Further information | : | must not be disch Fire residues and | ated fire extinguishing water separately. This harged into drains. I contaminated fire extinguishing water must accordance with local regulations. | | |
| Special protective equ for fire-fighters | ipment : | Wear self-contair necessary. | ned breathing apparatus for firefighting if | | |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, | : | Prevent any exposure |
|--------------------------|---|------------------------------------|
| protective equipment and | | Use personal protective equipment. |
| emergency procedures | | Avoid dust formation. |
| | | Avoid breathing dust. |



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| | | Ensure adequate | ventilation. |
| Environment | tal precautions : | Prevent further le | rom entering drains. akage or spillage if safe to do so. taminates rivers and lakes or drains inform ities. |
| | d materials for : and cleaning up | | ed surfaces with sodium hydroxide solution, I/L to 1 mol/L, and rinse with water |
| | | Keep in suitable, | closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

| Advice on protection against : fire and explosion | Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. |
|--|--|
| Advice on safe handling | Avoid formation of respirable particles. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. |
| Conditions for safe storage | Prevent unauthorized access. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards. |
| Further information on storage conditions | See label, package insert or internal guidelines |
| Storage temperature | 2 °C to 8 °C Do not freeze. Protect against light. |
| Further information on storage stability | Keep in a dry place. |
| Packaging material | Suitable material: Vials, glass |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

| | S-No. Value type Control Basis |
|--|--------------------------------|
|--|--------------------------------|

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| | | (Form of exposure) | parameters / Permissible concentration | | |
|---|------------------------------------|---|--|---|--|
| .alphaD- Glucopyranoside, .betaD- fructofuranosyl | 57-50-1 | TWA | 10 mg/m3 | ACGIH | |
| | | TWA (Respirable) | 5 mg/m3 | NIOSH REL | |
| | | TWA (total) | 10 mg/m3 | NIOSH REL | |
| | | TWA (total dust) | 15 mg/m3 | OSHA Z-1 | |
| | | TWA (respirable fraction) | 5 mg/m3 | OSHA Z-1 | |
| | | TWA (Total dust) | 15 mg/m3 | OSHA P0 | |
| | | TWA (respirable dust fraction) | 5 mg/m3 | OSHA P0 | |
| Trastuzumab emtansine | 1018448-65 1 | 5- IOEL | 0.0003 mg/m3 | Roche Industrial Hygiene Committee (RIHC) | |
| Engineering measures | : No data av | vailable | | | |
| Personal protective equipn Respiratory protection | | filter. | formation use resp | irator with an | |
| Hand protection | | | | | |
| Material | : Gloves | | | | |
| Remarks | | | gloves to prevent sk | in contact. | |
| Eye protection | : Eye wash | Replace torn or punctured gloves promptly. Eye wash bottle with pure water Tightly fitting safety goggles | | | |
| Skin and body protection | Choose bo | Dust impervious protective suit Choose body protection according to the amount and concentration of the dangerous substance at the work place. | | | |
| Protective measures | : Instruction | of employees mar | ndatory | | |
| Hygiene measures | When usin When usin Wash han | Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product. | | | |

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | powder, sterile, (lyophilized) |
|---|---|--------------------------------|
| Color | : | off-white |
| Odor | : | Not applicable |
| Odor Threshold | : | Not applicable |
| рН | : | Not applicable |
| Melting point/range | : | No data available |
| Boiling point/boiling range | : | No data available |
| Flash point | : | No data available |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Self-ignition | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative vapor density | : | Not applicable |
| Relative density | : | No data available |
| Solubility(ies) Water solubility | : | soluble |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n- octanol/water | : | No data available |
| Autoignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity Viscosity, dynamic | : | Not applicable |
| Viscosity, kinematic | : | Not applicable |
| Explosive properties | : | No data available |

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SECTION 10. STABILITY AND REACTIVITY

| Reactivity | : | No dangerous reaction known under conditions of normal use. |
|------------------------------------|---|--|
| Chemical stability | : | Stable under normal conditions. Proteins are temperature-sensitive; the thermal denaturation has an impact on quality but does not affect Plant and Process Safety; during decomposition no flammable gas, no organic peroxide and no oxidising substances are created |
| Possibility of hazardous reactions | : | No decomposition if stored and applied as directed. Dust may form explosive mixture in air. |
| Conditions to avoid | : | Heat. Exposure to light. Exposure to moisture. |
| Incompatible materials | : | No data available |
| Hazardous decomposition products | : | No data available |

SECTION 11. TOXICOLOGICAL INFORMATION

| Acute toxicity | | |
|--|-------|---|
| Toxic if swallowed. Harmful if inhaled. | | |
| Product: | | |
| Acute oral toxicity | : | Acute toxicity estimate: 113.81 mg/kg Method: Expert judgment |
| Acute inhalation toxicity | : | Acute toxicity estimate: 1.14 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Expert judgment |
| <u>Components:</u> | | |
| .alphaD-Glucopyranoside | , .be | etaD-fructofuranosyl: |
| Acute oral toxicity | : | LD50 Oral (Rat): 29,700 mg/kg |
| | | LD50 Oral (Mouse): 14,000 mg/kg |
| Acute inhalation toxicity | : | Acute toxicity estimate: > 30 mg/l Test atmosphere: dust/mist Method: Expert judgment |
| Acute dermal toxicity | : | Acute toxicity estimate: > 5,001 mg/kg Method: Expert judgment |
| Trastuzumab emtansine: | | |
| Acute oral toxicity | : | Acute toxicity estimate (Mouse): 27.77 mg/kg Method: Expert judgment |

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| | | Method: OEC | estimate (Mouse): 0.5 mg/kg D Test Guideline 423 given in analogy to the following substances: P3 |
| Acute inhalation | n toxicity : | Exposure tim | nere: dust/mist |
| | | Exposure tim Test atmosph | nere: dust/mist given in analogy to the following substances: |
| Acute toxicity (administration) | other routes of : | HNSTD (Higl monkey): 30 Application R | |
| | | HNSTD (Higl Application R | nest Non-Severely Toxic Dose) (Rat): 20 mg/kg coute: i.v. |
| Skin corrosior | n/irritation | | |

Skin corrosion/irritation

Not classified based on available information.

Components:

Trastuzumab emtansine:

| Result | : | Irritating to skin. |
|---------|---|---------------------|
| Remarks | : | Expert judgment |

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

May cause genetic defects.

Product:

| Germ cell mutagenicity - | : | In vivo tests showed mutagenic effects |
|--------------------------|---|--|
| Assessment | | |

Components:

Trastuzumab emtansine:

Genotoxicity in vitro

: Method: OECD Test Guideline 471

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| | | • | |
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| | | Result: r The valu DM1 | egative e is given in analogy to the following substances: |
| Genotoxicity in | vivo | : Method: Result: p | Mutagenicity (micronucleus test) |
| | | | e is given in analogy to the following substances: |
| Germ cell muta Assessment | agenicity - | : In vivo te | ests showed mutagenic effects |
| Carcinogenici | • | able informatio | n |
| <u>Components:</u> | | | |
| .alphaD-Gluo | onvranosido | beta -D-fruc | tofuranosyl |
| Remarks | opyranosiae, | | dient of this product present at levels greater that |
| | | equal to | 0.1% is identified as probable, possible or confirr arcinogen by IARC. |
| Trastuzumab | emtansine: | | |
| Carcinogenicity Assessment | / - | : Limited e | evidence of a carcinogenic effect. |
| IARC | | | ot present at levels greater than or equal to 0.1% sible or confirmed human carcinogen by IARC. |
| OSHA | | | uct present at levels greater than or equal to 0.1% carcinogens. |
| NTP | | | ct present at levels greater than or equal to 0.1% ticipated carcinogen by NTP. |
| Reproductive | toxicity | | |
| May damage fe | ertility. May dar | mage the unb | orn child. |
| Product: | | | |
| Reproductive to Assessment | oxicity - | | ed human reproductive toxicant, May damage fer nage the unborn child. |
| Components: | | | |
| Trastuzumab | emtansine: | | |
| | oxicity - | · Drocumo | ed human reproductive toxicant, May damage ferf |

Not classified based on available information.

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Components:

.alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl: Assessment The substance or mixture is not classified as specific target 1 organ toxicant, single exposure. Trastuzumab emtansine: Target Organs Nervous system, Reproductive organs, Bone marrow : Assessment May cause damage to organs. : Remarks : i.v. **STOT-repeated exposure** Not classified based on available information. Components: .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl: Assessment The substance or mixture is not classified as specific target : organ toxicant, repeated exposure. Trastuzumab emtansine: Target Organs Nervous system, Reproductive organs, Bone marrow : Assessment May cause damage to organs through prolonged or repeated : exposure. Remarks : i.v. Repeated dose toxicity Components: Trastuzumab emtansine: Species cynomolgus monkey 10 mg/kg 2 Application Route : i.v. Exposure time 9 Weeks 5 Number of exposures 3 : Remarks Subacute toxicity 1 Aspiration toxicity Not classified based on available information. Components: .alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl: No data available

Further information

Components:

.alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl:

Remarks : Health injuries are not known or expected under normal use.

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Trastuzumab emtansine:

Remarks : Globular proteins are generally well biodegradable The value is given in analogy to the following substances: Trastuzumab

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

.alpha.-D-Glucopyranoside, .beta.-D-fructofuranosyl:

| Toxicity to fish | : | LC50: > 100 mg/l |
|------------------|---|---------------------|
| - | | Exposure time: 96 h |

Ecotoxicology Assessment

| Acute aquatic toxicity | : | This product has no known ecotoxicological effects. |
|-----------------------------|---|---|
| Chronic aquatic toxicity | : | This product has no known ecotoxicological effects. |
| Toxicity Data on Soil | : | Not expected to adsorb on soil. |
| Other organisms relevant to | : | No data available |

the environment

Trastuzumab emtansine:

| Toxicity to fish : | LC50 (Poecilia reticulata (guppy)): > 100 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes Remarks: nominal concentration |
|---|---|
| | NOEC (Poecilia reticulata (guppy)): < 100 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes Remarks: nominal concentration |
| Toxicity to daphnia and other : aquatic invertebrates | EC50 (Daphnia magna (Water flea)): > 100 mg/l End point: Immobilization Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes Remarks: nominal concentration |
| | NOEC (Daphnia magna (Water flea)): 100 mg/l End point: Immobilization Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes Remarks: nominal concentration |

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| Toxicity to algae/aquati plants | Exposure Method: (GLP: yes Remarks EyC50 (D mg/l Exposure Method: (GLP: yes | : nominal concentration Desmodesmus subspicatus (green algae)): ca. 100 : time: 72 h DECD Test Guideline 201 |
| Toxicity to microorganis | Exposure Test Type Method: (GLP: yes Remarks (activated | Barely inhibitory on aerobic bacterial reproduction |
| Persistence and degra | adability | |
| Components: | | |
| Trastuzumab emtansi Biodegradability | : Concentr Theoretic Result: N Biodegra Exposure | ation: 1,000 mg/l al oxygen demand ot readily biodegradable. dation: 84 % time: 28 d DECD Test Guideline 301F |
| Bioaccumulative pote | ential | |
| Components: | | |
| .alphaD-Glucopyran | oside, .betaD-fruct | ofuranosyl: |
| Partition coefficient: n- octanol/water | : log Pow: | -3.67 |
| Trastuzumab emtansi | ine: | |
| Partition coefficient: n- octanol/water | : Remarks | : No data available |
| Mobility in soil No data available | | |
| Other adverse effects | i | |
| <u>Product:</u> Ozone-Depletion Poter | ntial : Regulatic | n: 40 CFR Protection of Environment; Part 82 |
| | | 0/47 |

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Protection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS

| Disposal methods | | |
|------------------------|---|--|
| Waste from residues | : | Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. |
| Contaminated packaging | : | Empty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. |

SECTION 14. TRANSPORT INFORMATION

International Regulations

| UNRTDG UN number Proper shipping name Class Packing group Labels | : | UN 3249 MEDICINE, SOLID, TOXIC, N.O.S. 6.1 III 6.1 |
|---|---|--|
| IATA-DGR UN/ID No. Proper shipping name Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passenger aircraft) | | UN 3249 Medicine, solid, toxic, n.o.s. 6.1 III 677 670 |
| IMDG-Code UN number Proper shipping name Class Packing group Labels EmS Code Marine pollutant | : | UN 3249 MEDICINE, SOLID, TOXIC, N.O.S. 6.1 III 6.1 F-A, S-A no |

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

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Domestic regulation

| 49 CFR UN/ID/NA number Proper shipping name | : | UN 3249 Medicine, solid, toxic, n.o.s. |
|--|-------|--|
| Class Packing group Labels ERG Code Marine pollutant | : : : | 6.1 III Division 6.1 - Toxic substances 151 no |

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

| Components | CAS-No. | Component TPQ (lbs) |
|----------------------|---|---------------------|
| SARA 311/312 Hazards | : Acute toxicity (any r Germ cell mutageni Reproductive toxicit | city |

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

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| US State Regula | ations | | |
| Massachusetts | Right To Know | | |
| Maine Chemicals of High Concern | | | |
| Vermont Chemicals of High Concern | | | |
| Washington Ch | Washington Chemicals of High Concern | | |
| The ingredients DSL | | in the following inventories: contains the following components that are not dian DSL nor NDSL. | |
| | Trastuzumat | emtansine | |
| AICS | : Not in compl | iance with the inventory | |
| NZIoC | : Not in compl | iance with the inventory | |
| ENCS | : Not in compl | iance with the inventory | |
| ISHL | : Not in compl | iance with the inventory | |
| KECI | : Not in compl | iance with the inventory | |
| PICCS | : Not in compl | iance with the inventory | |
| IECSC | : Not in compl | iance with the inventory | |
| TCSI | : Not in compl | iance with the inventory | |
| TSCA | : Not On TSC/ | A Inventory | |

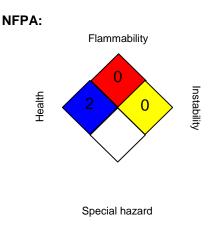
TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

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Full text of other abbreviations

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HMIS® IV:

| HEALTH | * | 2 |
|-----------------|---|---|
| FLAMMABILITY | | 0 |
| PHYSICAL HAZARD | | 0 |

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

| | 5113 | |
|-----------------|------|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| NIOSH REL | : | USA. NIOSH Recommended Exposure Limits |
| OSHA P0 | : | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - |
| | | 1910.1000 |
| OSHA Z-1 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-1 |
| | | Limits for Air Contaminants |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| NIOSH REL / TWA | : | Time-weighted average concentration for up to a 10-hour |
| | | workday during a 40-hour workweek |
| OSHA P0 / TWA | : | 8-hour time weighted average |
| OSHA Z-1 / TWA | : | 8-hour time weighted average |
| | | |

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG -International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL -Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL -International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program: NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Cooperation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT -Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals

KADCYLA(R) Vials 160 mg

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and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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