

**ERLEADA**

Version 4.1      Revision Date: 2019/01/17      SDS Number: 100000011700      Date of last issue: 2019/01/15  
Date of first issue: 2015/08/18

---

**SECTION 1. IDENTIFICATION**

Product name : ERLEADA  
Substance name : ERLEADA 60 mg film coated tablet  
apalutamide

**Manufacturer or supplier's details**

Company name of supplier : Janssen Pharmaceuticals, Inc.

Address : 1125 Trenton-Harbourton Rd  
Titusville NJ 08560  
US

Telephone : (609) 730-2000

E-mail address Responsible/issuing person : SDSJanssen@its.jnj.com

**Emergency telephone number** : **CHEMTREC US: 1-800-424-9300**  
**CHEMTREC International: +1 703-527-3887**

**Recommended use of the chemical and restrictions on use**

Recommended use : Finished Pharmaceutical Product  
This SDS is only intended for occupational use and not for consumer use (see patient packaging insert for consumer use). This SDS is written to provide environmental, health and safety information for personnel that will be handling this finished pharmaceutical product. For health and safety information during manufacturing of this product we refer to the appropriate SDS for each component.  
This dosage form is exempt from the requirements of the OSHA Hazard Communication Standard (US OSHA Standard 29 CFR Part 1910.1200).

---

**SECTION 2. HAZARDS IDENTIFICATION****GHS classification in accordance with 29 CFR 1910.1200**

Reproductive toxicity : Category 1B

Specific target organ toxicity - repeated exposure : Category 2 (male reproductive organs, Endocrine system, Central nervous system)

Short-term (acute) aquatic hazard : Category 3

Long-term (chronic) aquatic hazard : Category 2

**GHS label elements**

**ERLEADA**

Version	Revision Date:	SDS Number:	Date of last issue:
4.1	2019/01/17	100000011700	2019/01/15
			Date of first issue: 2015/08/18

Medicinal products in the finished state, intended for the final user, are not subject to GHS labeling.

Hazard pictograms :



Signal word : Danger

Hazard statements : H360 May damage fertility or the unborn child.  
H373 May cause damage to organs (male reproductive organs, Endocrine system, Central nervous system) through prolonged or repeated exposure.  
H402 Harmful to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements :

**Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P391 Collect spillage.

**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

Chemical nature : Solid

Substance name : ERLEADA 60 mg film coated tablet

**Hazardous components**

**ERLEADA**

Version 4.1      Revision Date: 2019/01/17      SDS Number: 100000011700      Date of last issue: 2019/01/15  
Date of first issue: 2015/08/18

Chemical name	CAS-No.	Concentration (% w/w)
CELLULOSE	9004-34-6	>= 50 - < 70
APALUTAMIDE	956104-40-8	>= 5 - < 10
DIOXOSILANE	7631-86-9	>= 1 - < 5
TITANDIOXIDE	13463-67-7	>= 0.1 - < 1
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-	25322-68-3	>= 0.1 - < 1
Octadecanoic acid, magnesium salt	557-04-0	>= 0.1 - < 1
Talc (Mg3H2(SiO3)4)	14807-96-6	>= 0.1 - < 1

**SECTION 4. FIRST AID MEASURES**

- If inhaled : If breathed in, move person into fresh air.  
Consult a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off with plenty of water.  
If symptoms persist, call a physician.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,  
for at least 5 minutes.  
Remove contact lenses.  
If eye irritation persists, consult a specialist.
- If swallowed : If swallowed, rinse mouth with water (only if the person is con-  
scious).  
Call a physician immediately.
- Most important symptoms and effects, both acute and delayed : Consult the patient packaging insert for more information  
about this Finished Pharmaceutical Product.  
fractures  
Fatigue  
weight decrease  
Diarrhoea  
Nausea  
Rash  
hypertension  
hot flushes  
joint pain  
Increased blood pressure
- Notes to physician : Treat symptomatically.  
Consult the patient packaging insert for more information  
about this Finished Pharmaceutical Product.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local cir-  
cumstances and the surrounding environment.
- Unsuitable extinguishing media : Water spray jet

**ERLEADA**

Version	Revision Date:	SDS Number:	Date of last issue: 2019/01/15
4.1	2019/01/17	100000011700	Date of first issue: 2015/08/18

---

Specific hazards during fire-fighting : No information available.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : In the event of an accidental release the emergency response team must respond based on a risk assessment and use personal protective equipment as appropriate.  
Avoid dust formation.  
Avoid breathing dust.  
Evacuate personnel to safe areas.

Environmental precautions : Should not be released into the environment.  
Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up : Large spills: Sweep up (intact) or vacuum with HEPA filter (broken or crushed) or via wet cleaning into suitable containers for disposal. Pick up and arrange without creating dust. Keep in properly labelled containers.  
Small spills: Moisten a towel, cover the spill, pick up the spill or use HEPA vacuum.  
Large spills + Small spills: Keep in suitable, closed containers for disposal. Treat recovered material as described in the section "Disposal considerations".

**SECTION 7. HANDLING AND STORAGE**

Advice on protection against fire and explosion : No data available

Advice on safe handling : Do not break, crush or spill this Finished Pharmaceutical Product.  
To avoid thermal decomposition, do not overheat.  
Use personal protective equipment as required.  
Keep away from heat and sources of ignition.  
Avoid inhalation, ingestion and contact with skin and eyes.

Conditions for safe storage : To maintain product quality, do not store in heat or direct sunlight.  
Store in original container.  
Keep containers tightly closed in a dry, cool and well-ventilated place.  
Keep away from heat and sources of ignition.  
Store at room temperature.

Recommended storage temperature : 15 - 25 °C

Version	Revision Date:	SDS Number:	Date of last issue: 2019/01/15
4.1	2019/01/17	100000011700	Date of first issue: 2015/08/18

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
CELLULOSE	9004-34-6	TWA	10 mg/m <sup>3</sup>	ACGIH
		TWA (Respirable)	5 mg/m <sup>3</sup>	NIOSH REL
		TWA (total)	10 mg/m <sup>3</sup>	NIOSH REL
		TWA (total dust)	15 mg/m <sup>3</sup>	OSHA Z-1
		TWA (respirable fraction)	5 mg/m <sup>3</sup>	OSHA Z-1
		TWA (Total dust)	15 mg/m <sup>3</sup>	OSHA P0
		TWA (respirable dust fraction)	5 mg/m <sup>3</sup>	OSHA P0
APALUTAMIDE	956104-40-8	TWA	0.018 mg/m <sup>3</sup>	J&J OEL/PBOEL HHC
		PBOEL-HHC	3 A	J&J OEL/PBOEL HHC
Further information: J&J has a hazard banding notation: PBOEL HHC. This substance is classified by J&J as being PBOEL HHC 3A. This means that the OEL is estimated to be from 5 to 20 µg/m <sup>3</sup> , Notation REPRO: has the potential to have adverse effects on reproduction and fetal development				
DIOXOSILANE	7631-86-9	TWA	10 mg/m <sup>3</sup>	ACGIH
		STEL	0 ppm	ACGIH
		TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA Z-3
		TWA (Dust)	80 mg/m <sup>3</sup> / %SiO <sub>2</sub> (Silica)	OSHA Z-3
		TWA	6 mg/m <sup>3</sup> (Silica)	NIOSH REL
TITANDIOXIDE	13463-67-7	TWA	2.4 mg/m <sup>3</sup>	J&J OEL/PBOEL HHC
		TWA	10 mg/m <sup>3</sup>	ACGIH
		TWA (total dust)	15 mg/m <sup>3</sup>	OSHA Z-1
		TWA (Total dust)	10 mg/m <sup>3</sup>	OSHA P0
		TWA	10 mg/m <sup>3</sup> (Titanium dioxide)	ACGIH
Poly(oxy-1,2-ethanediyl), .alpha.-hydro.-omega.-	25322-68-3	TWA (aerosol)	10 mg/m <sup>3</sup>	US WEEL

**ERLEADA**

Version 4.1      Revision Date: 2019/01/17      SDS Number: 100000011700      Date of last issue: 2019/01/15  
Date of first issue: 2015/08/18

hydroxy- Octadecanoic acid, magnesium salt	557-04-0	TWA (Inhalable fraction)	10 mg/m <sup>3</sup>	ACGIH
		TWA (Respirable fraction)	3 mg/m <sup>3</sup>	ACGIH
Talc (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> )	14807-96-6		2 mg/m <sup>3</sup>	ACGIH
		TWA (Dust)	20 Million particles per cubic foot	OSHA Z-3
		TWA (respirable dust fraction)	2 mg/m <sup>3</sup>	OSHA P0
		TWA (Respirable)	2 mg/m <sup>3</sup>	NIOSH REL
		TWA	0.1 fibres per cubic centimeter	ACGIH
		TWA (Respirable fraction)	2 mg/m <sup>3</sup>	ACGIH

**Engineering measures** : All personal protective equipment should be based on a risk assessment. Consult a Environment Health Safety expert if necessary.  
Engineering controls should be used as the primary means to control possible exposures. Use process enclosures, local exhaust ventilation or other engineering controls to keep exposure levels below recommended exposure limits.  
If this product is processed not in accordance with the prescribed use, contact the Industrial Hygiene / Environment Health Safety Expert to assess the situation.  
Validated Industrial Hygiene Analytical methods are developed to monitor and quantify inhalable exposure to the Active Pharmaceutical Ingredient. For more information contact Maxxam Analytics ([www.maxxamlabs.com](http://www.maxxamlabs.com)) or the Laboratory of Occupational and Environmental Hygiene ([www.lamh.be](http://www.lamh.be)).

**Personal protective equipment**

**Respiratory protection** : Engineering controls should always be the primary method of controlling exposures.  
If respiratory protective equipment is needed for certain activities, the type as well as the corresponding protection factor will depend upon the risk assessment and air concentrations, hazards, physical and warning properties of substances present.  
No personal respiratory protective equipment normally required.

Hand protection

Remarks : Disposable gloves

Eye protection : No special precautions required.

**ERLEADA**

Version 4.1	Revision Date: 2019/01/17	SDS Number: 100000011700	Date of last issue: 2019/01/15 Date of first issue: 2015/08/18
----------------	------------------------------	-----------------------------	-------------------------------------------------------------------

Skin and body protection : No special precautions required.

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : Coated, tablet

Colour : slight, yellow, to, green

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : To avoid thermal decomposition, do not overheat.  
Heat, flames and sparks.  
Exposure to moisture  
Exposure to light.

Incompatible materials : None known.

Hazardous decomposition products : None known.

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

**Components:****APALUTAMIDE:**

Acute oral toxicity : LD50 (Rat, male): > 1,000 mg/kg  
Method: Acute oral toxicity  
GLP: no

LD50 (Mouse, male and female): 500 mg/kg  
Method: Acute oral toxicity  
GLP: no

# SAFETY DATA SHEET

## ERLEADA



Version 4.1      Revision Date: 2019/01/17      SDS Number: 100000011700      Date of last issue: 2019/01/15  
Date of first issue: 2015/08/18

---

LD50 (Rat, female): 250 mg/kg  
Method: Acute oral toxicity  
GLP: no  
Assessment: The component/mixture is moderately toxic after single ingestion.

LD50 (Dog, female): > 20 mg/kg  
Method: Acute oral toxicity  
GLP: no

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Acute toxicity (other routes of administration) : Remarks: No data available

**Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>):**

Acute oral toxicity : Remarks: No data available

**Skin corrosion/irritation**

**Components:**

**APALUTAMIDE:**

Remarks: No data available

**Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>):**

Remarks: slight irritation

**Serious eye damage/eye irritation**

**Components:**

**APALUTAMIDE:**

Remarks: No data available

**Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>):**

Remarks: Mild eye irritation

**Respiratory or skin sensitisation**

**Components:**

**APALUTAMIDE:**

Remarks: No data available



**ERLEADA**

Version 4.1	Revision Date: 2019/01/17	SDS Number: 100000011700	Date of last issue: 2019/01/15 Date of first issue: 2015/08/18
----------------	------------------------------	-----------------------------	-------------------------------------------------------------------

**Germ cell mutagenicity****Components:****APALUTAMIDE:**

Genotoxicity in vitro : Method: Bacterial Reverse Mutation Test OECD 471  
Result: negative  
GLP: yes

: Species: Human lymphocytes  
Method: In vitro Mammalian Chromosome Aberration Test  
OECD 473  
Result: negative  
GLP: yes

Genotoxicity in vivo : Species: Rat  
Method: In vivo Mammalian Erythrocyte Micronucleus Test  
OECD 474  
Result: negative  
GLP: yes

Germ cell mutagenicity - Assessment : No evidence of mutagenicity based on in vitro and in vivo studies and expert judgment.

**Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>):**

Genotoxicity in vitro : Test Type: Ames test  
Result: negative

**Carcinogenicity****Components:****APALUTAMIDE:**

Remarks: No data available

Carcinogenicity - Assessment : No information available.

**IARC**

Group 1: Carcinogenic to humans

Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>) 14807-96-6

Group 2B: Possibly carcinogenic to humans

TITANDIOXIDE 13463-67-7

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP**

Known to be human carcinogen

Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>) 14807-96-6

**ERLEADA**

Version 4.1      Revision Date: 2019/01/17      SDS Number: 100000011700      Date of last issue: 2019/01/15  
Date of first issue: 2015/08/18

---

**Reproductive toxicity****Components:****APALUTAMIDE:**

Effects on fertility : Test Type: Fertility/early embryonic development  
Species: Rat, male  
Application Route: Oral  
Dose: 25 - 150 mg/kg  
General Toxicity - Parent: NOAEL: 25 mg/kg  
GLP: yes  
Remarks: Adverse effects on sexual function and fertility.

Effects on foetal development : Remarks: No data available

Reproductive toxicity - Assessment : Sufficient evidence of reprotoxicity based on animals.

Teratogenicity - Assessment : No information available.

**STOT - single exposure****Components:****APALUTAMIDE:**

Exposure routes: Oral  
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

**STOT - repeated exposure****Components:****APALUTAMIDE:**

Target Organs: male reproductive organs, Endocrine system, Central nervous system  
Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

**Repeated dose toxicity****Components:****APALUTAMIDE:**

Species: Rat, male  
NOAEL: 100 mg/kg  
Application Route: Oral  
Exposure time: 3 months  
Number of exposures: once daily  
Dose: 25 - 50 - 100 mg/kg  
Subsequent observation period: 1 month  
GLP: yes

Species: Dog, male

**ERLEADA**

Version	Revision Date:	SDS Number:	Date of last issue: 2019/01/15
4.1	2019/01/17	100000011700	Date of first issue: 2015/08/18

NOAEL: 5 mg/kg  
Application Route: Oral  
Exposure time: 3 months  
Number of exposures: once daily  
Dose: 2,5 - 5 - 10 mg/kg  
Subsequent observation period: 2 months  
GLP: yes

Species: Rat, male  
NOAEL: 25 mg/kg  
Application Route: Oral  
Exposure time: 6 months  
Number of exposures: once daily  
Dose: 25 - 75 - 150 mg/kg  
GLP: yes

Species: Dog, male  
NOAEL: < 2.5 mg/kg  
Application Route: Oral  
Exposure time: 9 months  
Number of exposures: once daily  
Dose: 2,5 - 5 - 10 mg/kg  
GLP: yes

**Aspiration toxicity**

No data available

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****APALUTAMIDE:**

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 6.9 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 10 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 9.5 mg/l End point: Growth rate Exposure time: 72 h Test Type: Growth inhibition Method: OECD Test Guideline 201 GLP: yes

**ERLEADA**

Version 4.1	Revision Date: 2019/01/17	SDS Number: 100000011700	Date of last issue: 2019/01/15 Date of first issue: 2015/08/18
----------------	------------------------------	-----------------------------	-------------------------------------------------------------------

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 0.0068 mg/l  
Exposure time: 60 d  
Test Type: Fish full life cycle toxicity test  
Method: OECD Test Guideline 210  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 1.8 mg/l  
Exposure time: 21 d  
Test Type: Daphnia reproduction test  
Method: OECD Test Guideline 211  
GLP: yes

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to microorganisms : EC10 (activated sludge): > 1,000 mg/l  
Exposure time: 10 min  
Test Type: Respiration inhibition  
Method: OECD Test Guideline 209  
GLP: yes

EC50 (activated sludge): > 1,000 mg/l  
Exposure time: 10 min  
Test Type: Respiration inhibition  
Method: OECD Test Guideline 209  
GLP: yes

**Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>):**

Toxicity to fish : (Danio rerio (zebra fish)): > 100,000 mg/l  
Exposure time: 24 h  
Test Type: LC50

**Persistence and degradability****Components:****APALUTAMIDE:**

Biodegradability : aerobic  
Inoculum: activated sludge  
Result: Readily biodegradable.  
Exposure time: 28 d  
Method: OECD Test Guideline 301B  
GLP: yes

Stability in water : Test Type: aerobic  
Degradation half life (DT50): 30 d  
Method: OECD Test Guideline 308  
GLP: yes  
Remarks: Fresh water 1

Test Type: aerobic  
Degradation half life (DT50): > 1,000 d  
Method: OECD Test Guideline 308  
GLP: yes

Version	Revision Date:	SDS Number:	Date of last issue: 2019/01/15
4.1	2019/01/17	100000011700	Date of first issue: 2015/08/18

---

Remarks: sediment 1

Test Type: aerobic  
Degradation half life (DT50): 315 d  
Method: OECD Test Guideline 308  
GLP: yes  
Remarks: total system 1

Test Type: aerobic  
Degradation half life (DT50): 32 d  
Method: OECD Test Guideline 308  
GLP: yes  
Remarks: Fresh water 2

Test Type: aerobic  
Degradation half life (DT50): 105 d  
Method: OECD Test Guideline 308  
GLP: yes  
Remarks: sediment 2

Test Type: aerobic  
Degradation half life (DT50): 92 d  
Method: OECD Test Guideline 308  
GLP: yes  
Remarks: total system 2

### **Bioaccumulative potential**

#### **Components:**

##### **APALUTAMIDE:**

Bioaccumulation : Remarks: No data available

Partition coefficient: n-octanol/water : log Pow: 2.91  
pH: 7  
Method: OECD Test Guideline 107  
GLP: yes

##### **TITANDIOXIDE:**

Partition coefficient: n-octanol/water : Remarks: No data available

##### **Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-:**

Partition coefficient: n-octanol/water : Remarks: No data available

##### **Octadecanoic acid, magnesium salt:**

Partition coefficient: n-octanol/water : Remarks: No data available

**ERLEADA**

Version 4.1	Revision Date: 2019/01/17	SDS Number: 100000011700	Date of last issue: 2019/01/15 Date of first issue: 2015/08/18
----------------	------------------------------	-----------------------------	-------------------------------------------------------------------

---

**Mobility in soil****Components:****APALUTAMIDE:**

Distribution among environmental compartments : Adsorption/Soil  
Koc: 656 - 889 Method: OECD Test Guideline 106

Adsorption/Activated sludge  
Koc: 516 - 601 Method: OECD Test Guideline 106

**Other adverse effects****Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 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).

**Components:****APALUTAMIDE:**

Results of PBT and vPvB assessment : Non-classified PBT substance Non-classified vPvB substance

Endocrine disrupting potential : May cause endocrine disruption.

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : In accordance with National, Federal, State and Local regulations.

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

**SECTION 14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

UN number	: UN 3077
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (APALUTAMIDE)
Class	: 9
Packing group	: III
Labels	: 9

**ERLEADA**

Version	Revision Date:	SDS Number:	Date of last issue: 2019/01/15
4.1	2019/01/17	100000011700	Date of first issue: 2015/08/18

**IATA-DGR**

UN/ID No. : UN 3077  
 Proper shipping name : Environmentally hazardous substance, solid, n.o.s. (APALUTAMIDE)  
 Class : 9  
 Packing group : III  
 Labels : 9  
 Packing instruction (cargo aircraft) : 956  
 Packing instruction (LQ) : Y956  
 Packing instruction (EQ) : E1  
 Packing instruction (passenger aircraft) : 956  
 Packing instruction (LQ) : Y956  
 Remarks : Special Provision A197: Environmentally hazardous substances, classified under UN 3077 or UN 3082, when transported in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other provisions of the IATA DGR provided the packagings meet the general provisions of IATA DGR 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8., This substance can be shipped under 'de minimi's quantities' provisions if the net quantity per inner package <= 1mL for liquids or <= 1g for solids and the net quantity per outer package does not exceed 100mL for liquids or 100g for solids and provided packaging provisions of IATA DGR §2.6.10 are met.

**IMDG-Code**

UN number : UN 3077  
 Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (APALUTAMIDE)  
 Class : 9  
 Packing group : III  
 Labels : 9  
 EmS Code : F-A, S-F  
 Marine pollutant : yes  
 Remarks : 2.10.2.7: Environmentally Hazardous Substances/Marine Pollutants, classified under UN 3077 or UN 3082, packaged in single or combination packagings containing a net quantity per single of inner packaging of 5L or less for liquids or having a net mass per single of inner packaging of 5kg or less for solids are not subject to the IMDG provided the packagings meet the general requirements of 4.1.1.1, 4.1.1.2, and 4.1.1.4 to 4.1.1.8., This substance can be shipped under 'de minimi's quantities' provisions if the net quantity per inner package <= 1mL for liquids or <= 1g for solids and the net quantity per outer package does not exceed 100mL for liquids or 100g for solids and provided packaging provisions of ADR/RID/ADN/IMDG §3.5.1.4 are met.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**ERLEADA**

Version	Revision Date:	SDS Number:	Date of last issue: 2019/01/15
4.1	2019/01/17	100000011700	Date of first issue: 2015/08/18

**National Regulations****49 CFR**

UN/ID/NA number	:	UN 3077
Proper shipping name	:	Environmentally hazardous substance, solid, n.o.s. (APALUTAMIDE)
Class	:	9
Packing group	:	III
Labels	:	9
ERG Code	:	171
Marine pollutant	:	no
Remarks	:	49 CFR 171.4 - Marine Pollutant Exception: Except when transporting aboard a vessel, the requirements of this subchapter do not apply to non-bulk packagings transported by motor vehicles, rail cars, and aircraft., This substance can be shipped under 'de minimi's quantities' provisions if the net quantity per inner package <= 1mL for liquids or <= 1g for solids and the net quantity per outer package does not exceed 100mL for liquids or 100g for solids and provided packaging provisions of 49 CFR 173.4b are met.

**SECTION 15. REGULATORY INFORMATION****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 SOCM I 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

**US State Regulations****Massachusetts Right To Know**

CELLULOSE	9004-34-6
DIOXOSILANE	7631-86-9

**Pennsylvania Right To Know**

CELLULOSE	9004-34-6
Hydroxypropyl Methylcellulose Acetate Suuccinate	71138-97-1
APALUTAMIDE	956104-40-8
	74811-65-7
DIOXOSILANE	7631-86-9

**New York City Hazardous Substances**



**ERLEADA**

Version	Revision Date:	SDS Number:	Date of last issue: 2019/01/15
4.1	2019/01/17	100000011700	Date of first issue: 2015/08/18

TITANDIOXIDE

13463-67-7

**California Prop 65**

, which is/are known to the State of California to cause cancer.  
For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

TITANDIOXIDE

13463-67-7

Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>)

14807-96-6

**Other regulations**

: This product is not subject to TSCA and TSCA 12(b) Export notification because Food, Drugs and cosmetic products are exempt.

Restricted to professional users.

**California List of Hazardous Substances**

DIOXOSILANE

7631-86-9

**California Permissible Exposure Limits for Chemical Contaminants**

CELLULOSE

9004-34-6

DIOXOSILANE

7631-86-9

**California Regulated Carcinogens**Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>)

14807-96-6

**SECTION 16. OTHER INFORMATION****Full text of other abbreviations**

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); EC<sub>x</sub> - Concentration associated with x% response; EHS - Extremely Hazardous Substance; EL<sub>x</sub> - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErC<sub>x</sub> - 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; IC<sub>50</sub> - 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; LC<sub>50</sub> - Lethal Concentration to 50 % of a test population; LD<sub>50</sub> - 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 Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals 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

# SAFETY DATA SHEET



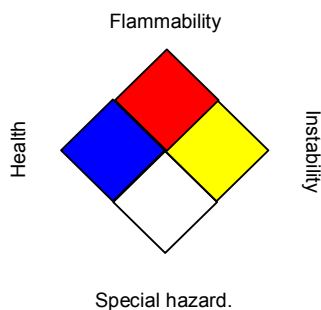
## ERLEADA

Version 4.1      Revision Date: 2019/01/17      SDS Number: 100000011700      Date of last issue: 2019/01/15  
Date of first issue: 2015/08/18

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

### Further information

#### NFPA:



#### HMIS® IV:

<b>HEALTH</b>	<input type="text"/>	<input type="text"/>
<b>FLAMMABILITY</b>	<input type="text"/>	
<b>PHYSICAL HAZARD</b>	<input type="text"/>	

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.

Revision Date : 2019/01/17

#### Date and Number Formats

This document uses the following notation for printing dates and numbers:

**Date:** Dec 31th, 2012 as 2012/12/31

**Numbers:** 123456,78 as 123,456.78

The information provided in this 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.

US / EN