

## Ritonavir

**Cat#: orb363866 (MSDS)**

### 1. Identification of substance

Product Name Ritonavir

### 2. Composition/data on components

Chemical Name (3S, 4S, 6S, 9S) -4- hydroxy- 12- methyl- 9- (1- methylethyl) - 13- [2- (1- methylethyl) - 4- thiazolyl] - 8, 11-dioxo- 3, 6- bis(phenylmethyl) - 2, 7, 10, 12- Tetraazatridecanoic acid 5- thiazolylmethyl ester

Synonyms Norvir, Norvir Softgel

Hazardous Ingredient Ritonavir

CAS Registry Number 155213-67-5

Molecular Weight 720.94

Molecular Formula C37H48N6O5S2

### 3. Hazard identification

Hazard Description

Toxic. Contains a pharmaceutically active ingredient.

Handling should only be performed by personnel trained and familiar with handling of potent active pharmaceutical ingredients. Moderate to severe irritant to the skin and eyes.

### 4. First aid measures

After Inhalation

if inhaled, remove to fresh air; if breathing is difficult, give oxygen; if breathing stops, give artificial respiration

After skin contact

flush with copious amounts of water; remove contaminated clothing and shoes; call a physician

After eye contact

check for and remove contact lenses and flush with copious amounts of water; assure adequate flushing by separating the eyelids with fingers; call a physician

After swallowing

if swallowed, wash out mouth with copious amounts of water; call a physician

### 5. Firefighting measures

Suitable extinguishing agents

water spray, carbon dioxide, dry chemical powder or foam

## Protective equipment

wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
Unusual fire hazard emits toxic fumes such as carbon monoxide, etc.

## 6. Accidental release measures

### Suitable extinguishing agents

water spray, carbon dioxide, dry chemical powder or foam

### Protective equipment

wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### Unusual fire hazard

emits toxic fumes such as carbon monoxide, etc.

## 7. Handling

### Information for safe handling

avoid inhalation and contact with skin, eyes and clothing; material may be an irritant

## 8. Exposure controls and personal protection

### Personal protective equipment as follows

#### Breathing equipment

NIOSH/MSHA-approved respirator

#### Protection of hands

chemical-resistant rubber gloves

#### Eye protection

chemical safety goggles

## 9. Stability and reactivity

### Stability

stable if stored as directed; avoid strong oxidizing agents

Thermal decomposition / conditions to be avoided: protect from light and heat

### Dangerous products of decomposition

thermal decomposition may produce toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides

## 10. Toxicological information

### RTECS#

#### Acute toxicity

none known

#### Primary irritant effect

not known

#### On the skin

none known  
On the eye  
not known; may be an irritant

#### 11. Ecological information

General notes  
no data available

#### 12. Disposal consideration

Dispose of in accordance with prevailing country, federal, state and local regulations

#### 13. Transport information

DOT  
Proper shipping name  
none  
Non-Hazardous for transport  
this substance is considered to be non-hazardous for transport  
IATA class  
IATA class  
none  
Non-Hazardous for transport  
this substance is considered to be non-hazardous for transport

#### 14. Regulations

Code letter and hazard designation of product:  
Hazard-determining components of labeling:  
EU Risk And Safety phrases:  
S24/25: avoid contact with skin and eyes  
S26: in case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
S28: after contact with skin, wash immediately with plenty of water  
S36/37/39: wear protective clothing, gloves and eye/face protection  
R28: very toxic if swallowed  
R38: irritating to skin  
R41: risk of serious damages to eyes  
R48: toxic; danger of serious damage to health by prolonged exposure  
R62: possible risk of impaired fertility  
R63: possible risk of harm to unborn child