

January 9, 2003
revised October 25, 2012

MATERIAL SAFETY DATA SHEET

[CAUTION: The identity of this substance is proprietary to Starks Associates, Inc. and to National Institute of Allergy and Infectious Diseases]

-----IDENTIFICATION-----

Chemical Name: D-erythro-Pentonamide, 2,3,5-trideoxy-N-[(1S,2R)-2,3-dihydro-2-hydroxy-1H-inden-1-yl]-5-[(2S)-2-[[[(1,1-dimethylethyl)amino]carbonyl]-4-(3-pyridinylmethyl)-1-piperazinyl]-2-(phenylmethyl)-, sulfate (1:1) salt

Other Name: Indinavir sulfate

Starks Reference No: NG40-93-1

Chemical Formula: $C_{36}H_{47}N_5O_4 \cdot H_2SO_4$

-----CAS REGISTRY NUMBER(S)-----

CAS#: 157810-81-6

-----HEALTH HAZARD DATA-----

RTECS#: SB7210500 (see attached RTECS file)

-----PRIMARY ROUTE(S) OF ENTRY (Accidental Exposure)-----

No applicable information was found; prevent all accidental exposure to skin, eyes, or lungs.

-----PHYSICAL AND CHEMICAL CHARACTERISTICS-----

White solid; melting point 153-155°C (uncorrected); soluble in water or methanol; insoluble in hexanes.

-----PHYSICAL HAZARDS-----

No applicable information was found; as with most organic powders, dust explosion may be possible when powder is suspended in air.

-----EXPOSURE LIMIT-----

No specifically applicable information was found; advisable to avoid exposure to skin, eyes or lungs.

-----NTP, IARC, OSHA-----

No entries were found. To the best of our knowledge, the potential carcinogenic properties of this material are not known.

-----PRECAUTIONS FOR SAFE HANDLING-----

This product should be handled only by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of many compounds are not yet well defined.

Appropriate Hygiene Practices

Avoid personal contact through ingestion, inhalation, contact with eyes or skin.

Protective Measures During Repair or Maintenance of Contaminated Equipment

No applicable information was found.

Steps to be taken if material is released or spilled

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.

Sweep up, place in a bag and hold for waste disposal.

Avoid raising dust.
Ventilate area and wash spill site after material pickup is complete.

Waste disposal method

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Observe all federal, state & local laws.

-----CONTROL MEASURES-----

Engineering Controls

Mechanical exhaust required.

Personal Protective Equipment

Safety glasses or chemical safety goggles.
Impermeable gloves and lab coat. NIOSH/MSHA
approved respirator may be advisable.

-----EMERGENCY AND FIRST AID PROCEDURS-----

In case of contact, immediately flush eyes with copious
amounts of water for at least 15 minutes.

In case of contact, immediately wash skin with soap and
copious amount of water.

If inhaled, remove to fresh air. If not breathing give
artificial respiration. If breathing is difficult, give
oxygen.

Call a physician.

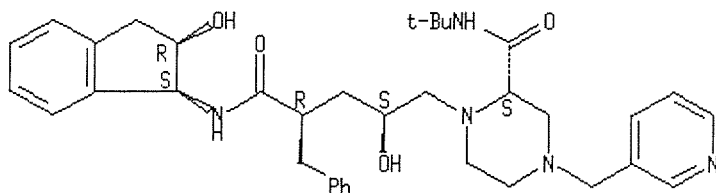
Wash contaminated clothing before reuse or discard.

Information contained herein is based upon observations made
in the course of resynthesizing this substance and other
information available to us. We have undertaken no tests to
confirm the accuracy or completeness of this information and
assume no responsibility in this regard.

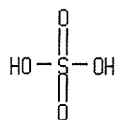
RTECS Number (RTN): SB7210500
Molecular Formula (MF): C36 H47 N5 O4 . H2 O4 S
Formula Weight (FW): 711.96
Chemical Name (CN): D-erythro-Pentonamide,
2,3,5-trideoxy-N-(2,3-dihydro-2-hydroxy-1H-inden-1-yl)-5-(2-(((1,1-dimethylethyl)amino)carbonyl)-4-(3-pyridinylmethyl)-1-piperazinyl)-2-(phenylmethyl)-, (1(1S,2R),5(S))-, sulfate (1:1) (salt);
Crixivan; Indinavir sulfate; L 735524; MK639
Entry/Update Date (DATE): Jul 2010
Character Count: 2484

CM 1

Absolute stereochemistry.



CM 2



TOXICITY DATA (TOX):

Effect EFF	Route RTE	Organism ORGN	Dose DOSE	Source SO
	oral	rat	LD50 >5 g/kg	YAKUD5 39,2167,19 97
	intraperitoneal	rat	LD50 >5 g/kg	YAKUD5 39,2167,19 97
	oral	Mouse	LD50 >5 g/kg	YAKUD5 39,2167,19 97
	intraperitoneal	Mouse	LD50 >5 g/kg	YAKUD5 39,2167,19 97
K13	oral	dog	LD50 >640 mg/kg	YAKUD5 39,2167,19 97
K13	intraperitoneal	dog	LD50 >640 mg/kg	YAKUD5 39,2167,19 97

TOXICITY DATA REFERENCES:

YAKUD5 Gekkan Yakuji Pharmaceuticals Monthly. (Yakugyo Jihosha, Inaoka Bldg., 2-36 Jinbo-cho, Kanda, Chiyoda-ku, Tokyo 101, Japan) V.1- 1959-

OTHER MULTIPLE DOSE DATA (OMUL):

Effect EFF	Route RTE	Organism ORGN	Dose DOSE	Duration DUR	Source SO
L30;L70;N75	unreported	rat	TDLo 3.1360E+04 mg/kg	14W-I	YAKUD5 39,2167,19 97
M16	unreported	rat	TDLo 1.8250E+04 mg/kg	1Y-I	YAKUD5 39,2167,19 97
K13	unreported	dog	TDLo 2.9200E+04 mg/kg	1Y-I	YAKUD5 39,2167,19 97
H16;H30;P28	oral	Mouse	TDLo 2100 mg/kg	20W-C	TOLED5 187,164,20 09

OTHER MULTIPLE DOSE REFERENCES:

YAKUD5 Gekkan Yakuji Pharmaceuticals Monthly. (Yakugyo Jihosha, Inaoka Bldg., 2-36 Jinbo-cho, Kanda, Chiyoda-ku, Tokyo 101, Japan) V.1- 1959-
 TOLED5 Toxicology Letters (Elsevier Science Pub. B.V., POB 211, 1000 AE Amsterdam, Netherlands) V.1- 1977-

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COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

FULL ESTIMATED COST

4.17

7.13

STN INTERNATIONAL LOGOFF AT 08:04:04 ON 25 OCT 2012