### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

#### SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No. 01)\*

#### **INERGY L P**

(Name of Issuer)

Common

(Title of Class of Securities)

456615103

(CUSIP Number)

September 30, 2012

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- x Rule 13d-1(b)
- o Rule 13d-1(c)
- o Rule 13d-1(d)

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

<sup>\*</sup> The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

456615103 No. NAMES OF REPORTING PERSONS 1 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Neuberger Berman Group LLC CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 2 (a) o (b) x SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 Delaware **SOLE VOTING POWER** 5 0 NUMBER OF SHARED VOTING POWER **SHARES** BENEFICIALLY 6 OWNED BY 10042889 **EACH** REPORTING SOLE DISPOSITIVE POWER PERSON WITH: 7 0 SHARED DISPOSITIVE POWER 8 12678261 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9 12678261

10	INSTRUCTIONS)
	x
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
	10.076%
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)
	НС
	FOOTNOTES

456615103 No. NAMES OF REPORTING PERSONS 1 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Neuberger Berman LLC CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) 2 (a) o (b) x SEC USE ONLY 3 CITIZENSHIP OR PLACE OF ORGANIZATION 4 Delaware **SOLE VOTING POWER** 5 0 NUMBER OF SHARED VOTING POWER **SHARES** BENEFICIALLY 6 OWNED BY 10042889 **EACH** REPORTING SOLE DISPOSITIVE POWER PERSON WITH: 7 0 SHARED DISPOSITIVE POWER 8 12678261 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9

12678261

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

x

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

10.076%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

12

IA, BD

FOOTNOTES

Item 1. Name of Issuer (a) **INERGY L P** (b) Address of Issuer's Principal Executive Offices TWO BRUSH CREEK **SUITE 200** KANSAS CITY 64112 Item 2. Name of Person Filing (a) Neuberger Berman Group LLC Neuberger Berman LLC (b) Address of Principal Business Office or, if none, Residence 605 Third Avenue New York NY 10158 (c) Citizenship Delaware (d) Title of Class of Securities Common (e) **CUSIP** Number 456615103 Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a: (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o). o (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c). 0 Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). (c) o (d) o Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E); (e) o (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); (g) A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);

(h) o A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);

- (i) o A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
  - (j) o A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J).
- (k)x A group, in accordance with 240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

Item 4. Ownership.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a)	Amount beneficially owned: 12,678,261
	(b) Percent of class: 10.076
(c)	Number of shares as to which the person has:
(i)	Sole power to vote or to direct the vote: 0
(ii)	Shared power to vote or to direct the vote: 10,042,889
(iii)	Sole power to dispose or to direct the disposition of: 0
(iv)	Shared power to dispose or to direct the disposition of: 12,678,261

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following o.

#### Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Neuberger Berman Group LLC may be deemed to be a beneficial owner of securities for purposes of Rule 13d-3 because certain affiliated persons have shared power to retain or dispose of the securities of many unrelated clients. Neuberger Berman Group LLC or its affiliated persons do not, however, have any economic interest in the securities of those clients. The clients are the actual owners of the securities and have the sole right to receive and the power to direct the receipt of dividends from or proceeds from the sale of such securities. No one client has an interest of more than 5% of the issuer.

With regard to the shares set forth under item 4(c)(ii), Neuberger Berman Group LLC may be deemed to be the beneficial owner for purposes of Rule 13d-3 because certain affiliated persons have shared power to retain, dispose of and vote the securities. Each of Neuberger Berman LLC and Neuberger Berman Management LLC serve as a sub-adviser and investment manager, respectively, of Neuberger Berman Group LLC's various registered mutual funds which hold such shares in the ordinary course of their business and not with the purpose nor with the effect of changing or influencing the control of the issuer. The holdings of Neuberger Berman Trust Co N.A., Neuberger Berman Trust Co of Delaware N.A., NB Alternative Fund Management LLC, NB Alternatives Advisers LLC and Neuberger Berman Fixed Income LLC, affiliates of Neuberger Berman LLC, are also aggregated to comprise the holdings referenced herein.

It should be further noted the share calculation under item 4(c)(iv) is derived from a total combination of the shares set forth under Item 4(c)(ii) plus any remaining balance of shares from individual client accounts over which Neuberger Berman LLC has shared power to dispose but does not have voting power over these shares. The holdings of Neuberger Berman Trust Co of Delaware N.A., NB Alternative Fund Management

LLC, NB Alternatives Advisers LLC and Neuberger Berman Fixed Income LLC, affiliates of Neuberger Berman LLC, are also aggregated to comprise the holdings referenced herein.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company

Item 8. Identification and Classification of Members of the Group

Item 9. Notice of Dissolution of Group

Item Certification 10.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

#### **SIGNATURE**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

### Neuberger Berman Group LLC

Date: October 10, 2012 By: /s/ Brad Cetron

Name: Brad Cetron

Title: Deputy General Counsel

#### **Neuberger Berman LLC**

Date: October 10, 2012 By: /s/ Brad Cetron

Name: Brad Cetron

Title: Deputy General Counsel

Footnotes: Neuberger Berman Group LLC, Neuberger Berman LLC, Neuberger Berman Management LLC and certain affiliated persons own directly no shares. As investment advisers, certain affiliated persons that are controlled by Neuberger Berman Group LLC have investment and voting powers with respect to the shares held.

Neuberger Berman Group LLC, through its direct and indirect subsidiary Neuberger Berman Holdings LLC, controls Neuberger Berman LLC and certain affiliated persons. By reason of the provisions of Rule 13d-3 of the Securities Exchange Act of 1934, as amended, each of Neuberger Berman Group LLC, Neuberger Berman LLC and Neuberger Berman Management LLC may be deemed to beneficially own the number of shares indicated above. Each of Neuberger Berman Group LLC, Neuberger Berman LLC, Neuberger Berman Management LLC and certain affiliated persons disclaim beneficial ownership of any of the securities covered by this statement.

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)