

LyondellBasell Industries N.V.
Form SC 13D
January 10, 2011

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

LyondellBasell Industries N.V.

(Name of Issuer)

Class A ordinary shares, par value 0.04 per share

(Title of Class of Securities)

N53745100

(CUSIP Number)

Alejandro Moreno

c/o Access Industries, Inc
730 Fifth Avenue, 20th Floor
New York, New York 10019

Tel. No.: (212) 247-6400

with copies to:

Matthew E. Kaplan

Debevoise & Plimpton LLP

919 Third Avenue

New York, New York 10022

(212) 909-6000

(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

January 1, 2011

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

CUSIP No. N53745100

13D

NAME OF REPORTING PERSON.

1

AI International Chemicals S.À.R.L.

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

(a)

(b)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Luxembourg

SOLE VOTING POWER

7

NUMBER OF 55,936,658 shares

SHARED VOTING POWER

SHARES BENEFICIALLY OWNED BY 8

34,506,708 shares

SOLE DISPOSITIVE POWER

EACH REPORTING 9

PERSON 55,936,658 shares

WITH SHARED DISPOSITIVE POWER

10

34,506,708 shares

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

90,443,366 shares

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11);

13

15.99%⁽¹⁾

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

OO (Limited Liability Company)

(1) All percentages are based on an aggregate of 565,673,773 ordinary shares issued and outstanding on November 9, 2010 as reported in the Issuer's quarterly report on Form 10-Q filed on November 10, 2010.

CUSIP No. N53745100

13D

NAME OF REPORTING PERSON.

1

Len Blavatnik

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

(a)

(b)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

United States of America

SOLE VOTING POWER

7

NUMBER OF

0 shares

SHARES
BENEFICIALLY OWNED BY

SHARED VOTING POWER

8

OWNED BY

90,443,366 shares

EACH
REPORTING

SOLE DISPOSITIVE POWER

9

PERSON 0 shares

WITH SHARED DISPOSITIVE POWER

10

90,443,366 shares

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

90,443,366 shares

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11);

13

15.99%⁽¹⁾

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

IN

(1) All percentages are based on an aggregate of 565,673,773 ordinary shares issued and outstanding on November 9, 2010 as reported in the Issuer's quarterly report on Form 10-Q filed on November 10, 2010.

CUSIP No. N53745100

13D

NAME OF REPORTING PERSON.

1

AI Chemical Holdings LLC

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

(a)

(b)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Delaware

SOLE VOTING POWER

7

NUMBER OF

0 shares

SHARES
BENEFICIALLY OWNED BY

SHARED VOTING POWER

8

90,443,366 shares

EACH
REPORTING

SOLE DISPOSITIVE POWER

9

PERSON 0 shares

WITH SHARED DISPOSITIVE POWER

10

90,443,366 shares

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

90,443,366 shares

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11);

13

15.99%⁽¹⁾

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

OO (Limited Liability Company)

(1) All percentages are based on an aggregate of 565,673,773 ordinary shares issued and outstanding on November 9, 2010 as reported in the Issuer's quarterly report on Form 10-Q filed on November 10, 2010.

CUSIP No. N53745100

13D

NAME OF REPORTING PERSON.

1

AI SMS L.P.

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

(a)

(b)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

British Virgin Islands

SOLE VOTING POWER

7

NUMBER OF

0 shares

SHARES
BENEFICIALLY OWNED BY

SHARED VOTING POWER

8

90,443,366 shares

EACH
REPORTING

SOLE DISPOSITIVE POWER

9

PERSON 0 shares

WITH SHARED DISPOSITIVE POWER

10

90,443,366 shares

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

90,443,366 shares

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11);

13

15.99%⁽¹⁾

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

PN

(1) All percentages are based on an aggregate of 565,673,773 ordinary shares issued and outstanding on November 9, 2010 as reported in the Issuer's quarterly report on Form 10-Q filed on November 10, 2010.

CUSIP No. N53745100

13D

NAME OF REPORTING PERSON.

1

AI SMS GP Limited

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

(a)

(b)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

British Virgin Islands

SOLE VOTING POWER

7

NUMBER OF

0 shares

SHARES
BENEFICIALLY OWNED BY

SHARED VOTING POWER

8

90,443,366 shares

EACH
REPORTING

SOLE DISPOSITIVE POWER

9

PERSON 0 shares

WITH SHARED DISPOSITIVE POWER

10

90,443,366 shares

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

90,443,366 shares

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11);

13

15.99%⁽¹⁾

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

OO (Limited Liability Company)

(1) All percentages are based on an aggregate of 565,673,773 ordinary shares issued and outstanding on November 9, 2010 as reported in the Issuer's quarterly report on Form 10-Q filed on November 10, 2010.

CUSIP No. N53745100

13D

NAME OF REPORTING PERSON.

1

Access Industries, LLC

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

(a)

(b)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Delaware

SOLE VOTING POWER

7

NUMBER OF

0 shares

SHARES
BENEFICIALLY OWNED BY

SHARED VOTING POWER

8

90,443,366 shares

EACH
REPORTING

SOLE DISPOSITIVE POWER

9

PERSON 0 shares

WITH SHARED DISPOSITIVE POWER

10

90,443,366 shares

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

90,443,366 shares

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11);

13

15.99%⁽¹⁾

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

OO (Limited Liability Company)

(1) All percentages are based on an aggregate of 565,673,773 ordinary shares issued and outstanding on November 9, 2010 as reported in the Issuer's quarterly report on Form 10-Q filed on November 10, 2010.

CUSIP No. N53745100

13D

NAME OF REPORTING PERSON.

1

Access Industries Management, LLC

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

(a)

(b)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Delaware

SOLE VOTING POWER

7

NUMBER OF

0 shares

SHARES
BENEFICIALLY OWNED BY

SHARED VOTING POWER

8

90,443,366 shares

EACH
REPORTING

SOLE DISPOSITIVE POWER

9

PERSON 0 shares

WITH SHARED DISPOSITIVE POWER

10

90,443,366 shares

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

90,443,366 shares

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11);

13

15.99%⁽¹⁾

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

OO (Limited Liability Company)

(1) All percentages are based on an aggregate of 565,673,773 ordinary shares issued and outstanding on November 9, 2010 as reported in the Issuer's quarterly report on Form 10-Q filed on November 10, 2010.

CUSIP No. N53745100

13D

NAME OF REPORTING PERSON.

1

Altep 2010 L.P.

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

(a)

(b)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

Delaware

SOLE VOTING POWER

7

NUMBER OF

334,010 shares

SHARES
BENEFICIALLY OWNED BY

SHARED VOTING POWER

8

90,109,356 shares

EACH
REPORTING

SOLE DISPOSITIVE POWER

9

PERSON 334,010 shares

WITH SHARED DISPOSITIVE POWER

10

90,109,356 shares

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

90,443,366 shares

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11);

13

15.99%⁽¹⁾

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

PN

(1) All percentages are based on an aggregate of 565,673,773 ordinary shares issued and outstanding on November 9, 2010 as reported in the Issuer's quarterly report on Form 10-Q filed on November 10, 2010.

CUSIP No. N53745100

13D

NAME OF REPORTING PERSON.

1

Access Industries, Inc.

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

2

(a)

(b)

SEC USE ONLY

3

SOURCE OF FUNDS (SEE INSTRUCTIONS)

4

OO

CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

5

CITIZENSHIP OR PLACE OF ORGANIZATION

6

New York

SOLE VOTING POWER

7

NUMBER OF

334,010 shares

SHARES
BENEFICIALLY OWNED BY

8

SHARED VOTING POWER

90,109,356 shares

EACH
REPORTING

9

SOLE DISPOSITIVE POWER

PERSON 334,010 shares

WITH SHARED DISPOSITIVE POWER

10

90,109,356 shares

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

90,443,366 shares

CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

12

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11);

13

15.99%⁽¹⁾

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

14

CO

(1) All percentages are based on an aggregate of 565,673,773 ordinary shares issued and outstanding on November 9, 2010 as reported in the Issuer's quarterly report on Form 10-Q filed on November 10, 2010.

Item 1. Security and Issuer

This Schedule 13D relates to the Class A ordinary shares, par value 0.04 per share (the ordinary shares), of LyondellBasell Industries N.V. (the Issuer). The address of the principal executive officers of the Issuer is Weena 737, 3013AM Rotterdam, The Netherlands.

Item 2. Identity and Background

The identity and background of the following persons filing this Schedule 13D (each a Reporting Person, and collectively, the Reporting Persons) is as follows:

Name	Address of Business/Principal Office	Principal Business/Occupation	Jurisdiction of Organization/Citizenship
AI International Chemicals S.À.R.L.	15-17 Ave. Gaston Diderich L-1420 Luxembourg	Holding Issuer securities	Luxembourg
Len Blavatnik	c/o Access Industries, Inc. 730 Fifth Avenue New York, NY 10019	Chairman of Access Industries, Inc., the principal business of which is holding strategic investments in a variety of industries worldwide	United States of America
AI Chemical Holdings LLC	c/o Access Industries, Inc. 730 Fifth Avenue New York, NY 10019	Holding strategic investments in a variety of industries worldwide	Delaware
AI SMS L.P.	Trinity Chambers Road Town Tortola British Virgin Islands	Holding strategic investments in a variety of industries worldwide	British Virgin Islands
AI SMS GP Limited	Trinity Chambers Road Town Tortola British Virgin Islands	General partner of AI SMS L.P.	British Virgin Islands
Access Industries, LLC	c/o Access Industries, Inc. 730 Fifth Avenue New York, NY 10019	Holding strategic investments in a variety of industries worldwide	Delaware
Access Industries Management, LLC	c/o Access Industries, Inc. 730 Fifth Avenue New York, NY 10019	Manager of companies holding strategic investments in a variety of industries worldw	