



**Rohm and Haas Canada LP,
a wholly owned subsidiary of
The Dow Chemical Company
Toxic Substance Reduction Plan Summary
Acrylamide**

Issue Date: 17-Dec-2012

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| Purpose | Rohm and Haas Canada LP, a wholly owned subsidiary of The Dow Chemical Company is regulated under the Toxics Reduction Act, 2009 and Ontario Regulation 455/09. The act and regulation require that a summary of the Toxic Substance Reduction Plan is submitted to the Ontario Ministry of the Environment and made public. |
| NPRI Identification Number | 2065 |
| MOE O.Reg 127/01 Identification Number | n/a |
| Legal Name and Facility Address of the Owner and Operator of the facility | Rohm and Haas Canada LP 2 Manse Road Toronto, ON M1E 3T9 |
| Mailing Address | Same as Facility Address |
| UTM Coordinates | Easting: 647152 Northing: 4846708 Zone: 17T |
| Number of Full-Time Employees | 72 |
| North American Industry Classification System (NAICS) 2, 4 and 6 digit code | 31-33 - Manufacturing 3255 - Paint, Coating and Adhesive Manufacturing 325510 - Paint and Coating Manufacturing |
| Legal Canadian Parent Company | Rohm and Haas Canada Finance Company 100% Ownership 2 Manse Road Toronto, ON M1E 3T9 |
| Public Contact | Shawna M. Bruce Public Affairs Manager Phone: 780.998.8445 Email: smbruce@dow.com |
| Toxic Substances for Which Facility Must Prepare Plan | Acrylamide CAS: 79-06-1 (covered by this plan summary) Sulphuric Acid CAS: 7664-93-9 (covered in a different plan summary) Zinc (and its compounds) CAS: n/a (covered in a different plan summary) |

Facility Description

Rohm and Haas Canada LP is a wholly owned subsidiary of The Dow Chemical Company. At the West Hill site we manufacture Acrylic Latex emulsions for the paint and coatings industry. Our products are used in water-based paints and coatings, including new technologies such as low and no VOC acrylic latex paints. The following operations take place at the facility:

- Manufacturing of water based emulsions
- Unloading and storage of raw materials
- Storage and loading of finished products
- other ancillary and support processes e.g. quality control, plant maintenance, etc.

As part of The Dow Chemical Company our facility is Responsible Care® certified. Responsible Care® is a voluntary initiative of the global chemical industry to safely handle our products from inception in the research laboratory, through manufacture and distribution, to ultimate reuse, recycle and disposal, and to involve the public in our decision-making processes. Our facility was a founding member when the initiative was born in Canada in 1987. The program has resulted in significant reductions in releases to air, land and water, major improvements in workplace and community safety, and expanded programs to research and test chemicals for potential health and environmental impacts.

We are committed to further reduce our environmental footprint by actively managing our fresh water and energy usage and perusing waste and emission reduction opportunities as new technologies become available. We strive to develop and employ inherently safer technology for chemical manufacturing.

Description of Substance

Acrylamide is used by Rohm and Haas Canada LP as an active ingredient in the manufacture of waterbased acrylic polymer emulsions. The Acrylamide is polymerized (destroyed) in the production process of the acrylic polymer.

Statement of Intent to Reduce

Acrylamide is used by Rohm and Haas Canada LP, a wholly owned subsidiary of The Dow Chemical Company in the manufacture of acrylic emulsions as a monomer.

At this time, we do not intend to reduce the amount of Acrylamide used at the facility as currently there is no suitable replacement for Acrylamide in our products. However, through our commitment to Responsible Care® Rohm and Haas Canada LP is committed to minimize the emissions and disposals of Acrylamide and to use Acrylamide in a responsible and efficient way.

Reduction Objectives

A further reduction of Acrylamide emissions and disposals at this point is not technically feasible but we remain committed to evaluate new technologies as they become available.

Reduction Options to be Implemented

No technically and economically feasible use reduction options were identified. Therefore none are scheduled for implementation.
At this point, Acrylamide is an essential monomer needed to archive the desired properties of acrylic polymer emulsions.

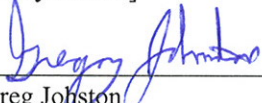
Plan Summary Statement

The plan summary accurately reflects the content of the toxic substance reduction plan for Acrylamide prepared by Rohm and Haas Canada LP, dated December 17, 2012.

PLAN CERTIFICATION

As of December 17, 2012, I, Greg Johnston, certify that I have read the toxic substance reduction plan for the toxic substance referred to be low and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

[Acrylamide]




Greg Johnston
Site Leader, Rohm and Haas Canada LP

17-Dec-2012
Date

As of December 17, 2012, I, Wolfram Esser, certify that I am familiar with the processes at Rohm and Haas Canada LP that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Toxics Reduction Act 2009 that are set out in the plan dated December 17, 2012 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

[Acrylamide]



Wolfram Esser
EH&S Specialist, Rohm and Haas Canada LP
Toxic Substance Reduction Planner, License #: TSRP0094

17-Dec-2012
Date



**Rohm and Haas Canada LP,
a wholly owned subsidiary of
The Dow Chemical Company
Toxic Substance Reduction Plan Summary
Sulfuric Acid**

Issue Date: 18-Dec-2012

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| Purpose | Rohm and Haas Canada LP, a wholly owned subsidiary of The Dow Chemical Company is regulated under the Toxics Reduction Act, 2009 and Ontario Regulation 455/09. The act and regulation require that a summary of the Toxic Substance Reduction Plan is submitted to the Ontario Ministry of the Environment and made public. |
| NPRI Identification Number | 2065 |
| MOE O.Reg 127/01 Identification Number | n/a |
| Legal Name and Facility Address of the Owner and Operator of the facility | Rohm and Haas Canada LP 2 Manse Road Toronto, ON M1E 3T9 |
| Mailing Address | Same as Facility Address |
| UTM Coordinates | Easting: 647152 Northing: 4846708 Zone: 17T |
| Number of Full-Time Employees | 72 |
| North American Industry Classification System (NAICS) 2, 4 and 6 digit code | 31-33 - Manufacturing 3255 - Paint, Coating and Adhesive Manufacturing 325510 - Paint and Coating Manufacturing |
| Legal Canadian Parent Company | Rohm and Haas Canada Finance Company 100% Ownership 2 Manse Road Toronto, ON M1E 3T9 |
| Public Contact | Shawna M. Bruce Public Affairs Manager Phone: 780.998.8445 Email: smbruce@dow.com |
| Toxic Substances for Which Facility Must Prepare Plan | Acrylamide CAS: 79-06-1 (covered in a different plan summary) Sulphuric Acid CAS: 7664-93-9 (covered by this plan summary) Zinc (and its compounds) CAS: n/a (covered in a different plan summary) |

Facility Description

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- Manufacturing of water based emulsions
- Unloading and storage of raw materials
- Storage and loading of finished products
- other ancillary and support processes e.g. quality control, plant maintenance, etc.

As part of The Dow Chemical Company our facility is Responsible Care® certified. Responsible Care® is a voluntary initiative of the global chemical industry to safely handle our products from inception in the research laboratory, through manufacture and distribution, to ultimate reuse, recycle and disposal, and to involve the public in our decision-making processes. Our facility was a founding member when the initiative was born in Canada in 1987. The program has resulted in significant reductions in releases to air, land and water, major improvements in workplace and community safety, and expanded programs to research and test chemicals for potential health and environmental impacts.

We are committed to further reduce our environmental footprint by actively managing our fresh water and energy usage and perusing waste and emission reduction opportunities as new technologies become available. We strive to develop and employ inherently safer technology for chemical manufacturing.

Description of Substance

Sulfuric Acid is used by Rohm and Haas Canada LP as a utility chemical in support processes necessary for the manufacture of waterbased acrylic polymer emulsions. All Sulfuric Acid is neutralized (destroyed) at the facility.

Statement of Intent to Reduce

Sulfuric Acid is used by Rohm and Haas Canada LP, a wholly owned subsidiary of The Dow Chemical Company in two ancillary processes.

Rohm and Haas Canada LP intends to reduce the use of Sulfuric Acid by continuously improving our operation where technically and economically feasible and to evaluate new opportunities as new technologies become available.

Reduction Objectives

Through our commitment to Responsible Care®, Rohm and Haas Canada LP is committed to continuously improve our operations. We intent to reduce Sulfuric Acid usage by improving utility usage of our process.

We are targeting a reduction of 1,800 kg of Sulfuric Acid by reducing the amount of deionized water used in the manufacturing process.

Reduction Options to be Implemented

The following option has been identified for implementation to reduce the use of Sulfuric Acid:

- Reduce deionized water usage

| On a facility basis: | Estimated Reduction [kg] | Time Line |
|---|---------------------------------|------------------|
| Amount that entered the facility as the substance itself or as a constituent of another substance | 1,800 | 2-3 years |
| Amount of the substance that was created | 0 | |
| Amount contained in product | 0 | |
| Total Quantity Released (All Media) | 0 | |
| Off-site Transfer for Disposal | 0 | |
| Off-site Transfer for Treatment | 0 | |
| Off-site Transfer for Recycling | 0 | |

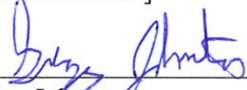
Plan Summary Statement

The plan summary accurately reflects the content of the toxic substance reduction plan for Sulfuric Acid prepared by Rohm and Haas Canada LP, dated December 18, 2012.

PLAN CERTIFICATION

As of December 18, 2012, I, Greg Johnston, certify that I have read the toxic substance reduction plan for the toxic substance referred to be low and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

[Sulfuric Acid]



Greg Johnston
Site Leader, Rohm and Haas Canada LP

18-Dec-2012

Date

As of December 18, 2012, I, Wolfram Esser, certify that I am familiar with the processes at Rohm and Haas Canada LP that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Toxics Reduction Act 2009 that are set out in the plan dated December 18, 2012 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

[Sulfuric Acid]



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EH&S Specialist, Rohm and Haas Canada LP
Toxic Substance Reduction Planner, License # TSRP0094

18-Dec-2012

Date



**Rohm and Haas Canada LP,
a wholly owned subsidiary of
The Dow Chemical Company
Toxic Substance Reduction Plan Summary
Zinc**

Issue Date: 17-Dec-2012

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| Purpose | Rohm and Haas Canada LP, a wholly owned subsidiary of The Dow Chemical Company is regulated under the Toxics Reduction Act, 2009 and Ontario Regulation 455/09. The act and regulation require that a summary of the Toxic Substance Reduction Plan is submitted to the Ontario Ministry of the Environment and made public. |
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| MOE O.Reg 127/01 Identification Number | n/a |
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| Mailing Address | Same as Facility Address |
| UTM Coordinates | Easting: 647152 Northing: 4846708 Zone: 17T |
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Description of Substance

Zinc is mostly used as Zinc Oxide by Rohm and Haas Canada LP as a product ingredient in the manufacture of acrylic polymer emulsions. The facility has been preparing Pollution Prevention Plans for Zinc since 2001 and implemented extensive pollution prevention measures in the past to reduce emissions and disposals of Zinc.

Statement of Intent to Reduce

Zinc is used by Rohm and Haas Canada LP, a wholly owned subsidiary of The Dow Chemical Company mainly as Zinc oxide in the manufacture of acrylic emulsions as a product ingredient.

At this time, we do not intend to reduce the amount of Zinc oxide used at the facility as currently there is no suitable replacement for Zinc oxide in our products. However, through our commitment to Responsible Care® Rohm and Haas Canada LP is committed to minimize the emissions and disposals of Zinc and to use Zinc oxide in a responsible and efficient way.

Reduction Objectives

A further reduction of Zinc emissions and disposals at this point is not feasible but we remain committed to evaluate new technologies as they become available.

Reduction Options to be Implemented

No reduction options have been identified. Therefore none are scheduled for implementation. Reduction options in five of the seven categories have been implemented in the past, mostly as part of Pollution Prevention Plans with the City of Toronto. No options have been identified for two of the categories, 'Material or Feedstock Substitution' and 'Product Design and Reformulation' as Zinc is an essential ingredient in the products that contain it and cannot be substituted at this point.

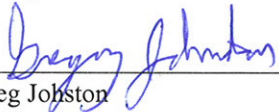
Plan Summary Statement

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PLAN CERTIFICATION

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[Zinc]




Greg Johnston
Site Leader, Rohm and Haas Canada LP

17-Dec-2012
Date

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[Zinc]



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