Form 5500-SF

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Short Form Annual Return/Report of Small Employee Benefit Plan

This form is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA), and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500-SF.**

OMB Nos. 1210-0110
1210-0089

2013

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2013 or fiscal plan year beginning 01/01/2013 and ending 12/31/2013

A This return/report is for: [X] a single-employer plan [ ] a multiple-employer plan (not multiemployer) [ ] a one-participant plan

B This return/report is: [ ] the first return/report [ ] the final return/report
[ ] an amended return/report [ ] a short plan year return/report (less than 12 months)

C Check box if filing under: [X] Form 5558 [ ] automatic extension [ ] DFVC program
[ ] special extension (enter description)

Part II Basic Plan Information—enter all requested information

1a Name of plan
RHEIN CHEMIE CORPORATION RETIREMENT PLAN FOR UNIO EMPLOYEES AT LITTLE ROCK, AR

1b Three-digit plan number (PN) ▶ 002

1c Effective date of plan 04/30/2005

2a Plan sponsor's name and address; include room or suite number (employer, if for a single-employer plan)
RHEIN CHEMIE CORPORATION

111 PARK WEST DRIVE
PITTSBURGH, PA 15275

2b Employer Identification Number (EIN) 21-0730107

2c Sponsor's telephone number 412-809-2204

2d Business code (see instructions) 325900

3a Plan administrator's name and address [X] Same as Plan Sponsor Name [ ] Same as Plan Sponsor Address

3b Administrator's EIN

3c Administrator's telephone number

4 If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN, and the plan number from the last return/report.
a Sponsor's name

4b EIN

4c PN

5a Total number of participants at the beginning of the plan year	**5a**	36
b Total number of participants at the end of the plan year	**5b**	36
c Number of participants with account balances as of the end of the plan year (defined benefit plans do not complete this item)	**5c**	

6a Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.) [X] Yes [ ] No

b Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? (See instructions on waiver eligibility and conditions.) [X] Yes [ ] No

If you answered "No" to either line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.

c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? [X] Yes [ ] No [ ] Not determined

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/08/2014	LUDOVICO MARTIN
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	10/08/2014	LUDOVICO MARTIN
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor

Preparer's name (including firm name, if applicable) and address; include room or suite number (optional)

Preparer's telephone number (optional)

Part III Financial Information

7 Plan Assets and Liabilities		(a) Beginning of Year	(b) End of Year
a Total plan assets	7a	2487268	2795537
b Total plan liabilities	7b		
c Net plan assets (subtract line 7b from line 7a)	7c	2487268	2795537
8 Income, Expenses, and Transfers for this Plan Year		**(a) Amount**	**(b) Total**
a Contributions received or receivable from: (1) Employers	8a(1)	366847	
(2) Participants	8a(2)		
(3) Others (including rollovers)	8a(3)	115488	
b Other income (loss)	8b		
c Total income (add lines 8a(1), 8a(2), 8a(3), and 8b)	8c		482335
d Benefits paid (including direct rollovers and insurance premiums to provide benefits)	8d	169668	
e Certain deemed and/or corrective distributions (see instructions)	8e		
f Administrative service providers (salaries, fees, commissions)	8f	4398	
g Other expenses	8g		
h Total expenses (add lines 8d, 8e, 8f, and 8g)	8h		174066
i Net income (loss) (subtract line 8h from line 8c)	8i		308269
j Transfers to (from) the plan (see instructions)	8j		

Part IV Plan Characteristics

9a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions:
1A 1I 3H

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

Part V Compliance Questions

10 During the plan year:		Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? (See instructions and DOL's Voluntary Fiduciary Correction Program)	10a		X	
b Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.)	10b		X	
c Was the plan covered by a fidelity bond?	10c	X		2000000
d Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	10d		X	
e Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service, or other organization that provides some or all of the benefits under the plan? (See instructions.)	10e		X	
f Has the plan failed to provide any benefit when due under the plan?	10f		X	
g Did the plan have any participant loans? (If "Yes," enter amount as of year end.)	10g		X	
h If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	10h			
i If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3	10i			

Part VI Pension Funding Compliance

11 Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500) and line 11a below) — [X] Yes [ ] No

11a Enter the unpaid minimum required contribution for current year from Schedule SB (Form 5500) line 39 — 11a: 0

12 Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? — [ ] Yes [X] No

(If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.)

a If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions, and enter the date of the letter ruling granting the waiver. Month _____ Day _____ Year _____

If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.

b Enter the minimum required contribution for this plan year — 12b:

c Enter the amount contributed by the employer to the plan for this plan year	**12c**	
d Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount)	**12d**	
e Will the minimum funding amount reported on line 12d be met by the funding deadline?		☐ Yes ☐ No ☐ N/A

Part VII Plan Terminations and Transfers of Assets

13a Has a resolution to terminate the plan been adopted in any plan year?		☐ Yes ☒ No
If "Yes," enter the amount of any plan assets that reverted to the employer this year	**13a**	
b Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?		☐ Yes ☒ No

c If during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

13c(1) Name of plan(s):	**13c(2)** EIN(s)	**13c(3)** PN(s)

Part VIII Trust Information (optional)

14a Name of trust	**14b** Trust's EIN

SCHEDULE SB (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Single-Employer Defined Benefit Plan Actuarial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500 or 5500-SF.**

OMB No. 1210-0110

2013

This Form is Open to Public Inspection

For calendar plan year 2013 or fiscal plan year beginning 01/01/2013 and ending 12/31/2013

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of $1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan
RHEIN CHEMIE CORPORATION RETIREMENT PLAN FOR UNIO EMPLOYEES AT LITTLE ROCK, AR

B Three-digit plan number (PN) ▶ 002

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
RHEIN CHEMIE CORPORATION

D Employer Identification Number (EIN)
21-0730107

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [ ] 100 or fewer [X] 101-500 [ ] More than 500

Part I Basic Information

1	Enter the valuation date: Month _____ Day _____ Year _____			
2	Assets:			
	a Market value	**2a**		2482465
	b Actuarial value	**2b**		2546869
3	Funding target/participant count breakdown:		**(1)** Number of participants	**(2)** Funding Target
	a For retired participants and beneficiaries receiving payment	**3a**	13	1920362
	b For terminated vested participants	**3b**	6	459300
	c For active participants:			
	(1) Non-vested benefits	**3c(1)**		80576
	(2) Vested benefits	**3c(2)**		1444266
	(3) Total active	**3c(3)**	17	1524842
	d Total	**3d**	36	3904504
4	If the plan is in at-risk status, check the box and complete lines (a) and (b) [ ]			
	a Funding target disregarding prescribed at-risk assumptions	**4a**		
	b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	**4b**		
5	Effective interest rate	**5**		6.32 %
6	Target normal cost	**6**		15000

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE

	09/25/2014
Signature of actuary	Date
SANNIDH S. AMBERKAR	14-07276
Type or print name of actuary	Most recent enrollment number
HEWITT ASSOCIATES LLC	847-295-5000
Firm name	Telephone number (including area code)
4 OVERLOOK POINT LINCOLNSHIRE, IL 60069	
Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions [ ]

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	0
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	0
10	Interest on line 9 using prior year's actual return of 2.24 %		
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		660
	b Interest on (a) using prior year's effective interest rate of 7.02 % except as otherwise provided (see instructions)		46
	c Total available at beginning of current plan year to add to prefunding balance		706
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	0

Part III Funding Percentages

14	Funding target attainment percentage	14	65.22 %
15	Adjusted funding target attainment percentage	15	65.22 %
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	67.78 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	63.57 %

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
04/15/2013	79074				
07/15/2013	78102				
10/15/2013	78573				
01/15/2014	78573				
09/15/2014	52525				
			Totals ► 18(b)	366847	18(c) 0

19	Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:		
	a Contributions allocated toward unpaid minimum required contributions from prior years.	19a	0
	b Contributions made to avoid restrictions adjusted to valuation date	19b	0
	c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	349213

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? [X] Yes [ ] No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? [X] Yes [ ] No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	
4.94%	6.15%	6.76 %	☐ N/A, full yield curve used

b Applicable month (enter code)	**21b**	4
22 Weighted average retirement age	**22**	61

23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment	☐ Yes	☒ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment	☐ Yes	☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment	☒ Yes	☐ No

27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	**27**	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	**28**	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	**29**	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	**30**	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):

a Target normal cost (line 6)	**31a**	15000
b Excess assets, if applicable, but not greater than line 31a	**31b**	0

32 Amortization installments:

	Outstanding Balance	Installment
a Net shortfall amortization installment	1357635	334213
b Waiver amortization installment	0	0

33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	**33**	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	**34**	349213

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0

36 Additional cash requirement (line 34 minus line 35)	**36**	349213
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	349213
38 Present value of excess contributions for current year (see instructions)		
a Total (excess, if any, of line 37 over line 36)	**38a**	0
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	**39**	0
40 Unpaid minimum required contributions for all years	**40**	0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:

a Schedule elected ☐ 2 plus 7 years ☐ 15 years

b Eligible plan year(s) for which the election in line 41a was made ☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011

42 Amount of acceleration adjustment	**42**	
43 Excess installment acceleration amount to be carried over to future plan years	**43**	

Schedule SB Attachment (Form 5500)—2013 Plan Year
Rhein Chemie Corporation Retirement Plan for Union Employees at Little Rock, AR
EIN: 21-0730107 PN: 002

Schedule SB, line 19—Discounted Employer Contributions

Year applied for contributions: 2013

Date	Amount	Interest Rate	Days to Discount to 1/1/2013	Interest Adjusted Contribution
April 15, 2013	$ 79,074	6.32%	104	$ 77,705
July 15, 2013	78,102	6.32%	195	75,586
October 15, 2013	78,573	6.32%	287	74,877
January 15, 2014	78,573	6.32%	379	73,729
September 15, 2014	52,525	6.32%	622	47,316
Total Contribution	$ 366,847			$ 349,213

Schedule SB Attachment (Form 5500)—2013 Plan Year
Rhein Chemie Corporation Retirement Plan for Union Employees at Little Rock, AR
EIN: 21-0730107 PN: 002

Schedule SB, line 22—Description of Weighted Average Retirement Age

The assumed retirement age is the earlier of Age 60 with 30 Years of Service or Age 62.

Employees projected to have at least 30 Years of Service by Age 60: 11

Employees projected to have less than 30 Years of Service by Age 60: 4

1 Employee is currently Age 68

1 Employee is currently Age 62 with 30 Years of Service

11/17 * 60 = 38.82

4/17 * 62 = 14.59

1/17 * 68 = 4.00

1/17 * 62 = 3.65

38.82 + 14.59 + 4.00 + 3.65= 61.06

Schedule SB Attachment (Form 5500)—2013 Plan Year
Rhein Chemie Corporation Retirement Plan for Union Employees at Little Rock, AR
EIN: 21-0730107 PN: 002

Schedule SB, line 26—Schedule of Active Participant Data as of January 1, 2013

Number of Participants and Credited Service

Attained Age	Years of Credited Service									
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+
<25										
25-29										
30-34										
35-39										
40-44		1				1				
45-49			3		1		2			
50-54							5	1		
55-59			1				1			
60-64							1			
65-69										
70+										

N-17

Schedule SB Attachment (Form 5500)—2013 Plan Year
Rhein Chemie Corporation Retirement Plan for Union Employees at Little Rock, AR
EIN: 21-0730107 PN: 002

Schedule SB, line 32—Schedule of Amortization Bases

Type of Base	Present Value of Installments	Valuation Date Established	Remaining Years in Amortization Period	Amortization Installment
Shortfall	$ 690,462	October 1, 2009	3.75	$ 196,714
Shortfall	$ 130,964	October 1, 2010	4.75	$ 30,143
Shortfall	$ 686,315	October 1, 2011	5.75	$ 134,377
Shortfall	$ (392,790)	October 1, 2012	6.75	$ (67,523)
Shortfall	$ 242,684	January 1, 2013	7.00	$ 40,502
Total	$ 1,357,635			$ 334,213

Schedule SB Attachment (Form 5500)—2013 Plan Year
Rhein Chemie Corporation Retirement Plan for Union Employees at Little Rock, AR
EIN: 21-0730107 PN: 002

Schedule SB, Part V—Statement of Actuarial Assumptions/Methods

For ERISA Requirements

Interest Rates for Minimum Funding Purposes	Based on segment rates with a four-month lookback (as of September 2012), each adjusted as needed to fall within the 25-year average interest rate corridor under MAP-21
1st Segment Rate	4.94%
2nd Segment Rate	6.15%
3rd Segment Rate	6.76%
Interest Rates for Maximum Tax Purposes	Based on segment rates with a four-month lookback (as of September 2012), without regard to the MAP-21 interest rate corridor
1st Segment Rate	1.75%
2nd Segment Rate	4.62%
3rd Segment Rate	5.72%
Retirement Age	
Active Participants	See Table 1
Terminated Vested Participants	Age 62
Mortality Rates	
Healthy	Generational mortality table for annuitants and non-annuitants per §1.430(h)(3)-1(d)
Disabled	Revenue Ruling 96-7 mortality table for disability after December 31, 1994
Withdrawal Rates	See Table 2
Disability Rates	See Table 3
Decrement Timing	Middle of year decrements, with 100% retirement occurring at beginning of year
Surviving Spouse Benefit	It is assumed that 80% of males and 80% of females have an eligible spouse, and that males are four years older than their spouses.
Benefit Limits	Projected benefits are limited by the current IRC section 415 maximum benefit of $205,000.

Schedule SB Attachment (Form 5500)—2013 Plan Year
Rhein Chemie Corporation Retirement Plan for Union Employees at Little Rock, AR
EIN: 21-0730107 PN: 002

For ERISA Requirements

Valuation of Plan Assets	Smoothed fair market value of assets over the current and prior two years, adjusted for contributions, benefit payments, administrative expenses, and expected earnings. The average value of assets calculated in this manner is further limited to not less than 90% nor more than 110% of fair market value. A characteristic of this method is that the expected distribution of the value of plan assets is skewed toward understatement relative to the corresponding market values for expected long-term rates of return in excess of the third segment rate under IRC section 430(h)(2)(C)(iii).
Expected Return on Assets	
January 1, 2011 – December 31, 2011	7.00%, limited to 6.34%
January 1, 2012 – December 31, 2012	7.00%, limited to 6.34%
Optional Payment Form Election Percentage	The liabilities reflect the following optional form election percentages:
50% Joint & Survivor	30%
100% Joint & Survivor	20%
5-year Certain & Life	50%
Year of Service Subsequent to the Valuation Date	Each participant is assumed to accrue one year of vesting service for each future year unless information provided by the plan sponsor indicates otherwise
Retirement Benefits	If a retiree is older than his spouse and elects to commence a Pop-Up benefit, it is assumed that the participant will die before his spouse.
Trust Expenses Included in Target Normal Cost	$15,000
Actuarial Method	Standard unit credit cost method
Valuation Date	January 1, 2013

Schedule SB Attachment (Form 5500)—2013 Plan Year
Rhein Chemie Corporation Retirement Plan for Union Employees at Little Rock, AR
EIN: 21-0730107 PN: 002

For ERISA Requirements

Changes in prescribed assumptions since prior year:

- A change in the interest rate assumption from segment rates with a four-month look-back (1.84%, 4.79%, and 5.90%) as of June 2012 to segment rates with a four-month look-back (1.75%, 4.62%, 5.72%) as of September 2012 each adjusted as needed to fall within the 25-year average interest rate corridor under MAP 21 (4.94%, 6.15%, and 6.76%).

Table 1

Retirement Rates

	Years of Service	
Age	**0-29**	**30+**
60	0.00%	100.00%
61	0.00%	100.00%
62+	100.00%	100.00%

Table 2

Withdrawal Rates

Service	Rate
0	10.00%
1	10.00%
2	8.00%
3	8.00%
4	6.00%
5	6.00%
6	4.00%
7	4.00%
8	2.00%
9	2.00%
10+	0.00%

Table 3

Disability Rates

Age	Rate	Age	Rate
16	0.03%	46	0.11%
17	0.03%	47	0.12%
18	0.03%	48	0.14%
19	0.03%	49	0.16%
20	0.03%	50	0.18%
21	0.03%	51	0.20%
22	0.03%	52	0.23%
23	0.03%	53	0.26%
24	0.03%	54	0.30%
25	0.03%	55	0.36%
26	0.04%	56	0.42%
27	0.04%	57	0.50%
28	0.04%	58	0.59%
29	0.04%	59	0.69%
30	0.04%	60	0.90%
31	0.04%	61	1.16%
32	0.04%	62	1.46%
33	0.05%	63	1.81%
34	0.05%	64	2.22%
35	0.05%	65+	0.00%
36	0.06%		
37	0.06%		
38	0.06%		
39	0.06%		
40	0.07%		
41	0.07%		
42	0.08%		
43	0.08%		
44	0.09%		
45	0.10%		

Schedule SB Attachment (Form 5500)—2013 Plan Year
Rhein Chemie Corporation Retirement Plan for Union Employees at Little Rock, AR
EIN: 21-0730107 PN: 002

Schedule SB, Part V—Summary of Plan Provisions

History of Plan

The Tire Curing Bladders, LLC ("TCB LLC") entered into an asset purchase agreement with Pirelli Tire, LLC effective April 30, 2005. Under such agreement TCB LLC has established this plan solely for the participants of the Pirelli Tire Retirement Pension Plan (the "Pirelli Tire Plan") as of August 15, 2004 that were subject to the Little Rock collective bargaining agreement of which such employees continue to remain employed with the Employer on or after April 30, 2005. LANXESS U.S. acquired TCB LLC in 2012 and now maintains the plan.

Participation

Employees who were part of Pirelli Tire Retirement Pension Plan as of August 15, 2004 and continued to be employed on or after April 30, 2005

Plan Freeze

On August 15, 2004, service was frozen for all active participants. Nonvested participants were fully vested in their benefit upon termination.

Normal Retirement

Eligibility

Age 65 and 5 years of service

Monthly Benefit

A+B, subject to a minimum monthly benefit of $41.00 multiplied by the participant's credit service:

A: 0.5% of final compensation (monthly) prior to the participant's 5th anniversary date, multiplied by his full years of past service to said anniversary date

B: 0.5% of final compensation (monthly) up to $3,000 plus 1% of final compensation over $3,000, multiplied by his credit service between said anniversary date and his normal retirement date

Early Retirement

Eligibility

Age 55 and 10 years of service

Benefit

Accrued normal retirement benefit reduced 4/10% for each month that the commencement date precedes the month in which the participant attains age

Unreduced Early Retirement

Eligibility

Age 62 and 10 years of service, or
Complete 30 years of service

Monthly Benefit

Unreduced normal retirement benefit

Special Early Retirement

Eligibility

Age 55 and 30 years of service

Monthly Benefit

Pre-62: $50 multiplied by credit service plus $10 multiplied by credit service after age 55
Post-62: Unreduced normal retirement benefit

Late Retirement

Benefit

Accrued normal retirement benefit, including accruals beyond age 65

Disability Retirement

Eligibility

10 years of service and total disability

Benefit

Unreduced accrued benefit at time of disability, payable in the sixth month following the disability

Deferred Vested Retirement

Eligibility

5 years of service.

Benefit

Accrued benefit at termination if benefits deferred to normal retirement age;
Actuarial equivalent of accrued benefit at termination if commencing before normal retirement age

Preretirement Death Benefit

Eligibility

5 years of service and married for at least one year

Benefit
For active participants: Qualified Joint & Survivor Annuity (QJSA) deferred to participant's earliest retirement age, reduced based on actuarial equivalence if commencing immediately

For terminated vested participants: Deferred vested benefit payable as a QJSA at the earliest retirement date, reduced by 0.5% for each year of coverage

Supplemental Postretirement Death Benefit

Eligibility

Retired from active status, or retired from terminated vested status after age 60, and married for at least one year

Benefit
Lump sum of $4,000

Transition Survivor Income Benefit

Eligibility

30 days of credit service at death

Monthly Benefit
$500 less any qualified preretirement survivor annuity payable, subject to a maximum of $300, payable until survivor reaches age 62 for at most two years.

Bridge Survivor Benefit

Eligibility

Age 45 at death

Monthly Benefit
$500 less any qualified preretirement survivor annuity payable, subject to a maximum of $300, payable two years after death and until survivor reaches age 62 or remarries.

Special Medicare Benefit

Eligibility

Age 65

Monthly Benefit
$50, subject to maximum of the standard monthly premium for Medicare Part B coverage

Form of Benefit Payment

Normal

Single participant: Five-year certain and life annuity
Married participant: 50% joint & survivor annuity

Optional

10 and 15 year certain and life annuity; 50% and 100% joint & survivor annuity with Pop-up; cash refund annuity

Changes Since the Prior Year

The funding and plan reporting valuations do not reflect any plan changes.

Other Information to Fully and Fairly Disclose the Actuarial Position of the Plan

Due to software limitations with the electronic filing process, information filed electronically cannot be controlled by the Enrolled Actuary. The values on the signed Schedule SB will govern to the extent there are any differences in the entries filed electronically and the actual data contained on the signed Schedule SB.

SCHEDULE SB (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Single-Employer Defined Benefit Plan Actuarial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500 or 5500-SF.**

OMB No. 1210-0110

2013

This Form is Open to Public Inspection

For calendar plan year 2013 or fiscal plan year beginning 01/01/2013 and ending 12/31/2013

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of $1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan

RHEIN CHEMIE CORP RET PLAN FOR UN EMPL AT LITTLE ROCK AR

B Three-digit plan number (PN) ▶ 002

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF

RHEIN CHEMIE CORPORATION

D Employer Identification Number (EIN)

21-0730107

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [ ] 100 or fewer [X] 101-500 [ ] More than 500

Part I Basic Information

1	Enter the valuation date: Month 1 Day 1 Year 2013			
2	Assets:			
	a Market value	2a		2,482,465
	b Actuarial value	2b		2,546,869
3	Funding target/participant count breakdown:		(1) Number of participants	(2) Funding Target
	a For retired participants and beneficiaries receiving payment	3a	13	1,920,362
	b For terminated vested participants	3b	6	459,300
	c For active participants:			
	(1) Non-vested benefits	3c(1)		80,576
	(2) Vested benefits	3c(2)		1,444,266
	(3) Total active	3c(3)	17	1,524,842
	d Total	3d	36	3,904,504
4	If the plan is in at-risk status, check the box and complete lines (a) and (b) [ ]			
	a Funding target disregarding prescribed at-risk assumptions	4a		
	b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b		
5	Effective interest rate	5		6.32 %
6	Target normal cost	6		15,000

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE Sannidh Amberkar, S.A. — Signature of actuary

09/25/2014 — Date

Sannidh S. Amberkar — Type or print name of actuary

14-07276 — Most recent enrollment number

Hewitt Associates LLC — Firm name

(847) 295-5000 — Telephone number (including area code)

4 Overlook Point

Lincolnshire IL 60069 — Address of the firm

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions [ ]

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	0	0
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	0	0
10	Interest on line 9 using prior year's actual return of 2.24 %		
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		660
	b Interest on (a) using prior year's effective interest rate of 7.02 % except as otherwise provided (see instructions)		46
	c Total available at beginning of current plan year to add to prefunding balance		706
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	0	0

Part III Funding Percentages

14	Funding target attainment percentage	14	65.22 %
15	Adjusted funding target attainment percentage	15	65.22 %
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	67.78 %
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	63.57 %

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
04/15/2013	79,074				
07/15/2013	78,102				
10/15/2013	78,573				
01/15/2014	78,573				
09/15/2014	52,525				
			Totals ▶ 18(b)	366,847	18(c) 0

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years.	19a	0
b Contributions made to avoid restrictions adjusted to valuation date	19b	0
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	349,213

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? [X] Yes [ ] No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? [X] Yes [ ] No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th
0	0	0	0

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	
4.94 %	6.15 %	6.76 %	☐ N/A, full yield curve used

b Applicable month (enter code)	21b	4
22 Weighted average retirement age	22	61

23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment	☐ Yes	☒ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment	☐ Yes	☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment	☒ Yes	☐ No

27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):		
a Target normal cost (line 6)	31a	15,000
b Excess assets, if applicable, but not greater than line 31a	31b	0

32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	1,357,635	334,213
b Waiver amortization installment	0	0

33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	34	349,213

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0

36 Additional cash requirement (line 34 minus line 35)	36	349,213
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37	349,213
38 Present value of excess contributions for current year (see instructions)		
a Total (excess, if any, of line 37 over line 36)	38a	0
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b	0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39	0
40 Unpaid minimum required contributions for all years	40	0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:

a Schedule elected ☐ 2 plus 7 years ☐ 15 years

b Eligible plan year(s) for which the election in line 41a was made ☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011

42 Amount of acceleration adjustment	42	
43 Excess installment acceleration amount to be carried over to future plan years	43	