

DOW CHEMICAL CO /DE/
 Form 424B3
 February 27, 2012

The information in this preliminary pricing supplement is not complete and may be changed. This preliminary pricing supplement and the accompanying prospectus supplement and prospectus are not offers to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion

Preliminary Pricing Supplement dated

Filed under 424(b)(3), Registration Statement No. 333-164985

Pricing Supplement No. 109 - Dated Monday, February 27, 2012 (To: Prospectus Dated February 19, 2010, and Prospectus Supplement Dated February 19, 2010)

| CUSIP | Principal | Gross | Net | Coupon | Coupon | Maturity | 1st Coupon | 1st Coupon | Survivors | Product | |
|-----------|-----------|---------------|------------|----------|--------|-------------|------------|------------|-----------|---------|------------------------|
| Number | Amount | Selling Price | Concession | Proceeds | Rate | Frequency | Date | Date | Amount | Option | Ranking |
| 26054LPQ0 | | 100% | 1.250% | | 2.300% | Semi-Annual | 03/15/2017 | 09/15/2012 | \$11.95 | Yes | Senior Unsecured Notes |

Redemption Information: Callable at 100.000% on 03/15/2013 and every coupon date thereafter

Joint Lead Managers and Lead Agents: BofA Merrill Lynch, Incapital LLC **Agents:** Citi, Merrill Lynch, Morgan Stanley, UBS Securities LLC, Wells Fargo Advisors, LLC

The Dow Chemical Company InterNotes will be subject to redemption at the option of The Dow Chemical Company, in whole on the interest payment date occurring on 03/15/2013 and on any interest payment date thereafter at a redemption price equal to 100% of the principal amount of the The Dow Chemical Company InterNotes plus accrued interest thereon, if any, upon at least 30 days prior notice to the noteholder and the trustee, as described in the prospectus.

| | | | | | | | | | | | |
|-----------|--|------|--------|--|--------|-------------|------------|------------|---------|-----|------------------------|
| 26054LPR8 | | 100% | 1.450% | | 3.050% | Semi-Annual | 03/15/2019 | 09/15/2012 | \$15.84 | Yes | Senior Unsecured Notes |
|-----------|--|------|--------|--|--------|-------------|------------|------------|---------|-----|------------------------|

Redemption Information: Callable at 100.000% on 03/15/2013 and every coupon date thereafter

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described in the prospectus.

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|------------------|------|--------|--------|-------------|------------|------------|---------|-----|------------------------|
| 26054LPS6 | 100% | 1.800% | 3.600% | Semi-Annual | 03/15/2022 | 09/15/2012 | \$18.70 | Yes | Senior Unsecured Notes |
|------------------|------|--------|--------|-------------|------------|------------|---------|-----|------------------------|

Redemption Information: Callable at 100.000% on 03/15/2013 and every coupon date thereafter

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Trade Date: Monday, March 5, 2012 @ 12:00 PM ET Settle Date:
Thursday, March 8, 2012

The Dow Chemical Company

The Dow Chemical Company

The Dow Chemical Company InterNotes

Minimum Denomination/Increments: \$1,000.00/\$1,000.00 Initial
trades settle flat and clear SDFS: DTC Book Entry only DTC
Number 0235 via RBC Dain Rauscher Inc

2030 Willard H. Dow Center

Midland MI 48674

If the maturity date or an interest payment date for any note is not a business day (as term is defined in prospectus), principal, premium, if any, and interest for that note is paid on the next business day, and no interest will accrue from, and after, the maturity date or interest payment date.

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