CERTIFICATE OF ANALYSIS

PRODUCT NAME : ACRYPOL 971G (40#)

 BATCH NO.
 : 44318011
 ISSUE DATE. : 24-Jul-2018

 MFG. MONTH
 : Jul-2018
 A.R.NO. : A181910002632

RETEST. MONTH: Jun-2021

The supply as detailed above has been tested and found to meet the requirement as below on sample basis.

R.No	PARAMETER	UNIT	SPECIFICATION	RESULTS
1	DESCRIPTION		WHITE, FREE FLOWING GRANULES, HAVING A SLIGHT, CHARACTERISTIC ODOR. THE PH OF 1 IN 100 DISPERSION IN WATER IS ABOUT 3.	WHITE, FREE FLOWING GRANULES, HAVING A SLIGHT, CHARACTERISTIC ODOR. THE PH OF 1 IN 100 DISPERSION IN WATER IS ABOUT 3.
2	SOLUBILITY		A. WHEN NEUTRALIZED WITH ALKALI HYDROXIDES OR WITH AMINES, IT SWELLS GIVING THE APPEARANCE OF DISSOLVING IN WATER.	COMPLIES
3	SOLUBILITY		B. WHEN NEUTRALIZED WITH LOWER AMINES AND ALKANOLAMINES, IT SWELLS GIVING THE APPEARANCE OF DISSOLVING IN METHANOL OR GLYCERIN.	COMPLIES
4	SOLUBILITY		C. WHEN NEUTRALIZED WITH ETHOXYLATED LONG-CHAIN AMINES, IT SWELLS GIVING THE APPEARANCE OF DISSOLVING IN ETHANOL.	COMPLIES
5	IDENTIFICATION		INFRARED ABSORPTION	MATCHED WITH STANDARD SPECTRUM
6	IDENTIFICATION		GEL FORMULATION AFTER THE NEUTRALIZATION OF THE DISPERSION	GEL FORMED
7	IDENTIFICATION		10 ML GEL WITH 2 ML OF CaCl2 (100 MG/ML) - WHITE PRECIPITATE FORMED	WHITE PRECIPITATE FORMED
8	IDENTIFICATION		10 MG/ML DISPERSION WITH THYMOL BLUE GIVES ORANGE COLOR; 10 MG/ML DISPERSION WITH CRESOL RED GIVES YELLOW COLOR	COMPLIES
9	VISCOSITY	mPa.s	4000 TO 8000	7800
10	PARTICLE SIZE (PASS THROUGH 40#)	%	NLT 95.0	98.2
11	PARTICLE SIZE (PASS THROUGH 100#)	%	NMT 10	4.99
12	LOSS ON DRYING (IN A VACUUM AT 80°C FOR 1 HOUR)	%	NMT 2.0	0.9
13	RESIDUE ON IGNITION	%	NMT 4.0	0.96
14	RESIDUAL SOLVENT (CYCLOHEXANE)	%	NMT 0.3	Not Detected
15	RESIDUAL SOLVENT (ETHYL ACETATE)	%	NMT 0.5	Not Detected
16	LIMIT OF BENZENE	μg/gm	NMT 2.0	Not Detected
17	LIMIT OF ACRYLIC ACID	%	NMT 0.25	0.23
18	ASSAY FOR CARBOXYLIC ACID CONTENT	%	BETWEEN 56.0 TO 68.0	57.2

 ${\bf STATUS:} \quad {\bf Approve\ Above\ Spec}.$

"This is an electronically generated report, hence does not require signature"

The Next Generation Polymer Technologist

^{*} Specification as per finished product specification [QC/WI/339G(03)] (Carbomer Homopolymer Type A). Meeting requirement of USP/NF & IN HOUSE.