Supplementary Information

Epoxy Value:

Oxirane oxygen content was determined by dissolving 0.2-1.0gm of sample in 10ml of acetic acid and adding 2-3 drops of crystal violet in acetic acid as an indicator using 0.1N HBr solution in glacial acetic acid as titrant according to ASTM D1652. Endpoint was the disappearance of purple and appearance of green colour. Epoxy value was calculated by using below equation.

$$Epoxy\ Value = \frac{N \times V}{W}$$

Where, N = Normality of HBr solution in Eq./L or N,
V = HBr Volume required for the titration in ml,
And, W = Weight of the sample in g.

$$\%\ OOC = 1.6 \times Epoxy\ Value$$

Iodine Value:

Iodine Value (IV) is defined as iodine absorbed in number of centigram per gram of sample by using Wij's solution method. ASTM D5768-02 method was used to determine IV. Briefly, .0.1-0.15 g of oil was dissolved in 20ml of chloroform and 25ml of Wijs solution was added to it. Shake well and place in dark for 1hour. Then, 20ml of 10% potassium iodide (KI) and 100ml of distilled water were added to the flask and the content was titrated with 0.1N sodium thiosulfate anhydrous until pale straw colour is observed. 5 mL of starch was then added as indicator and titration continued until yellow iodide colour had disappeared.

$$Iodine\ Value = \frac{12.69 \times (B - S) \times N}{W}$$

Where, B = Blank Titration Value of $Na_2S_2O_3$ solution in ml,
S = Sample Titration Value of $Na_2S_2O_3$ solution in ml,
N = Normality of the $Na_2S_2O_3$ solution in Eq./L or N,
W = weight of the sample in g.

Acid Value:

The acid value is used to determine the number of acid groups in the oil or polymer resin. It is termed as the number of milli grams of potassium hydroxide (KOH) which is required to neutralize the free fatty acid present in one gram of a oil, fat or resin. ASTM D 1639- 89 method was used to determined acid value

Briefly, weigh about 5 g of the substance into a 250-mL flask and add 20 mL of a isopropyl alcohol or n-butanol. Dissolve the sample completely and titrate with methanolic potassium hydroxide (0.1N) with phenolphthalein indicator until a pink colour, which persists for 15 seconds, is obtained.

$$Acid\ Value = \frac{56.1 \times N \times V}{W}$$

Where, N = Normality of KOH solution

V =Volume of KOH consumed
And, W = Weight of the sample in g

Supplementary Figure S1. Salt Spray Fog Test Panels (up to 120 h) of NIPU Composites coated on MS panels

Sample Code	CT 0.0	CT 0.5	CT 1.0	CT 2.0	CT 4.0
Hr					
0					
24					
48					
72					
96					
120					