

Portable X-ray fluorescence spectroscopy as a rapid screening technique for analysis of TiO₂ and ZnO in sunscreens

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Supporting Information:

1. Matrix composition

Matrix A: Avobenzene (2%), Homosalate (13%), Octisalate (5%), Octocrylene (2%), Oxybenzene (4%), Aluminum Starch Octenylsuccinate, Benzyl Alcohol, Carbomer, Dimethicone, Disodium EDTA, VP/Icosene Copolymer and Methylparaben

Matrix B: Avobenzene (3%), Homosalate (5%), Octisalate (5%), Octocrylene (7%), Oxybenzene (6%), Archidyl Alcohol, Alcohol Denatured, Benzyl alcohol, Cyclopenta siloxane, Dimethicone, Disodium EDTA, Ethyl paraben, Glyceryl Stearate, Glycerin, Isodecyl neopentionate and Laureth-7

Matrix C: Avobenzene (3%), Octisalate (5%), Octocrylene (3%), Aloe Barbadensis Leaf Juice, Allantoin, Borage Oil, Carbomer, Capric Caprylic Triglycerides, Cetyl Alcohol, Citrus Lemon Peak Oil, Dimethicone, Emblica Officinalis Fruit, Ethyl Hexyl Glycerin, Flax Seed Oil, Fragrance, Glyceryl Stearate, Honey, Heat Shock Proteins and Lecithin

2. Standard calibration curves

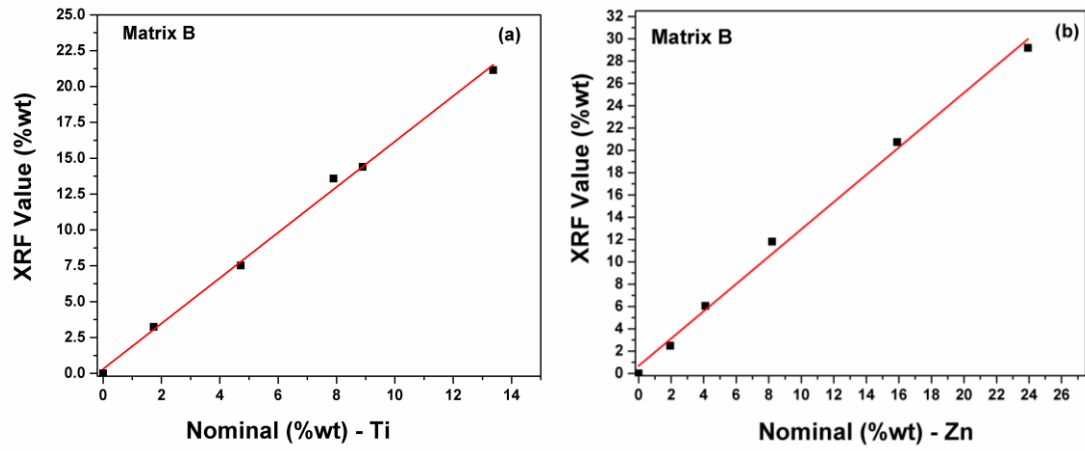


Figure S1. (a) Calibration curve of [Ti]-working standards prepared by using matrix B. (b) Calibration curve of [Zn]-working standards prepared by using matrix B.

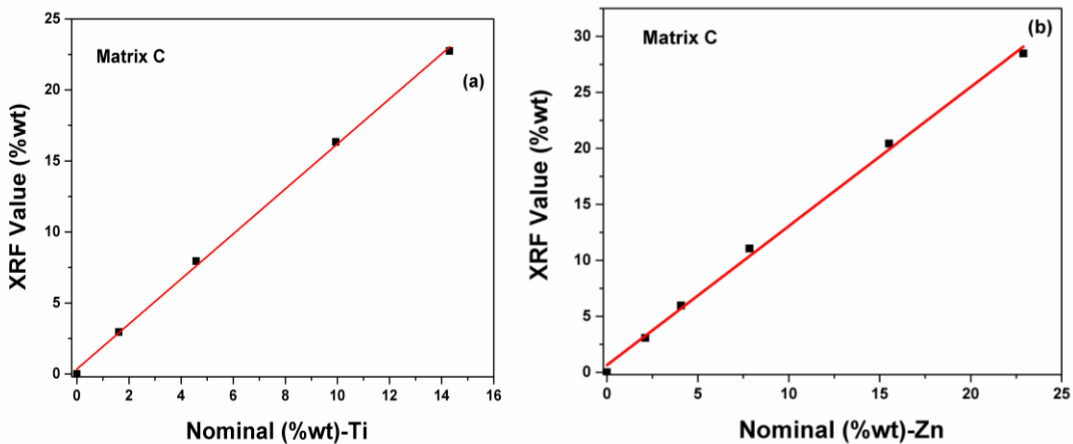


Figure S2. (a) Calibration curve of [Ti]-working standards prepared by using matrix C. (b) Calibration curve of [Zn]-working standards prepared by using matrix C.