

Comparison table for HKORC Compost and Soil Conditioner Quality Standards (2005) and Recommended New HKORC Standard for Compost and Soil Conditioner (the modifications were highlighted in red)

	HKORC Compost and Soil Conditioner Quality Standards (2005)		Recommended New HKORC Compost and Soil Conditioner Quality Standards	
Compost Maturity	Seed Germination Index: $\geq 80\%$		Seed Germination Index: $\geq 80\%^*$	
	<b>Group A</b>	<b>Group B</b>	<b>Group A*</b>	<b>Group B*</b>
	Ammonia conc. $\leq 700$ mg/kg dw	C/N ratio $\leq 25$	Ammonia conc. $\leq 500$ mg/kg dw	C/N ratio $\leq 20$
	Ammonia: nitrate ratio $\leq 3$	Oxygen demand $\leq 0.4$ g O <sub>2</sub> /kg TS/hr	Ammonia: nitrate ratio: no need to test	Oxygen demand $\leq 0.4$ g O <sub>2</sub> /kg TS/hr
	Volatile organic acids conc. $\leq 500$ ppm dw	Carbon dioxide evolution $\leq 2$ g C/kg VS/day	Volatile organic acids conc.: no need to test	Carbon dioxide evolution $\leq 2$ g C/kg VS/day
Compost Quality	<b>Foreign matter:</b> Stone larger than 5 mm: $\leq 5\%$ dw, Man-made foreign matters include glass, plastic and metal larger than 2 mm $\leq 0.5\%$ dw			
	<b>Heavy metal (Unit : mg/kg dw)</b>			
		<u>Organic farming</u>	<u>General agricultural use</u>	<u>Non-agricultural use</u>
	Arsenic	$\leq 10$	$\leq 13$	$\leq 41$
	Cadmium	$\leq 1.5$	$\leq 3$	$\leq 39$
	Chromium	$\leq 100$	$\leq 210$	$\leq 1,200$
	Copper	$\leq 300$	$\leq 700$	$\leq 1,500$
	Mercury	$\leq 1$	$\leq 1$	$\leq 17$
	Nickel	$\leq 50$	$\leq 62$	$\leq 420$
	Lead	$\leq 100$	$\leq 150$	$\leq 300$

	Selenium	≤ 2	≤ 5	≤ 36
	Zinc	≤ 600	≤ 1,300	≤ 2,800
<b>Physicochemical properties</b>				
	pH: 5.5 – 8.5		pH: 5.5 – 8.5	
	Organic matter > 20% dw		Organic matter > 20% dw	
	Moisture 25 – 35%		Moisture 25 – 45%	
<b>Pathogen:</b> <i>Salmonella sp.</i> ≤ 3 MPN/4 g , <i>Escherichia coli (E. coli)</i> ≤ 1,000 MPN/g				
<b>Nutrient contents:</b> total nitrogen + total phosphorus + total potassium ≥ 4% dw				

\* If the SGI is < 80%, EC, Group A (Ammonia conc.) and Group B (C/N ratio, and/or Oxygen demand and Carbon dioxide evolution) should be tested to further evaluate the compost maturity and stability according to the flowchart for determination of compost. If the SGI is ≥ 80%, then the compost is mature and stable, no other chemical characterization **testing of Group A, Group B and EC** is needed

