

Waste Acceptance Criteria Testing BS EN 12457
Part 3, 2 Stage Process
Issue 1



Sample Details		Test Values	
Sample Number	12345678	Mass of Raw Test Portion (MW) kg	0.177
Job Number	1234567	Mass of Dried Test Portion (MD) kg	0.175
Sample ID	Sample Description 1	Moisture Content Ratio (MC) %	1.41
Site	West Midlands	Dry Matter Content Ratio (DR) %	98.61
Job Description	West Midlands	Moisture Content @ 105c	1.4
Date Sampled	29/11/2016	Leachant Volume (1) (L2) Litre	0.348
Date Received	29/11/2016	Leachant Volume (2) (L8) Litre	1.4
Particle Size (<4mm)	<=95%	Eluate Volume (1) (VE1) Litre	0.3
Method of size reduction	Jaw Crusher	Eluate Volume (2) (VE2) Litre	1.38
Non-crushable matter	N/A		

Eluate Analysis	Concentration in Eluate		Amount Leached		Landfill Waste Acceptance Criteria		
	2:1	8:1	2:1	10:1	BS EN 12457-3 Limit Values (mg/Kg) at L:S 10:1		
Liquid:Waste Ratio							
Sample Number	12345691	12345692					
pH	11.46	11.06					
Temperature °C	20	20					
Conductivity uS/cm	1962	605					
	mg/l	mg/l	mg/Kg	mg/Kg	Inert Waste	Stable Non-Reactive hazardous waste in non-hazardous	Hazardous Waste
Arsenic as As	<0.0050	<0.0050	<0.010	<0.050	0.5	2	25
Barium as Ba	<0.060	<0.060	<0.12	<0.60	20	100	300
Cadmium as Cd	<0.00010	<0.00010	<0.00020	<0.0010	0.04	1	5
Chromium as Cr	0.03	0.0049	0.06	0.092	0.5	10	70
Copper as Cu	0.21	0.053	0.42	0.8	2	50	100
Mercury as Hg	<0.00050	<0.00050	<0.0010	<0.0050	0.01	0.2	2
Molybdenum as Mo	0.037	0.0036	0.074	0.093	0.5	10	30
Nickel as Ni	0.051	<0.020	0.1	0.087	0.4	10	40
Lead as Pb	0.17	<0.010	0.34	0.29	0.5	10	50
Antimony as Sb	<0.0060	<0.0060	<0.012	<0.060	0.06	0.7	5
Selenium as Se	<0.010	<0.010	<0.020	<0.100	0.1	0.5	7
Zinc as Zn	<0.025	<0.025	<0.050	<0.25	4	50	200
Chloride as Cl	36.3	4.4	73	99	800	15000	25000
Fluoride as F	0.678	0.284	1.4	3.5	10	150	500
Sulphate as SO4	22.4	11.8	45	140	1000	20000	50000
Total Dissolved Solids (TDS)	607	243	1200	3100	4000	60000	100000
Phenol Index	<0.10	<0.10	<0.20	<1.0	1		
Dissolved Organic Carbon (DOC)	44.4	11.2	89	170	500	800	1000
Waste Analysis							
Total Organic Carbon w/w %				4.1	3%	5%	6%
Loss on Ignition %				4.2			10%
BTEX mg/Kg					6		
PCBs (7 congeners) mg/Kg					1		
Mineral Oil (C10-C40) mg/Kg				760	500		
PAHs mg/Kg				25	100		
pH				11		>6	
Acid Neutralisation Capacity (pH4) mol/Kg				0.015		To be evaluated	To be evaluated
Acid Neutralisation Capacity (pH7) mol/Kg				0.025		To be evaluated	To be evaluated

Disclaimer: Eluate concentrations below the detection limit are assumed to be negligible when calculating mg/kg values. The limits quoted for Waste Acceptance are derived from the Landfill (England and Wales) Regulations 2002 (as amended) and are provided as guidance only. ALS Environmental does not take responsibility for any errors or omissions with regard to these limits.

Additional Eluate Analysis	Concentration in Eluate		Amount Leached	
	2:1	8:1	2:1	10:1
	mg/l	mg/l	mg/Kg	mg/Kg

Additional Waste Analysis	Units	Result
Sum of 7 PCBs	mg/kg DW	<0.021
Conductivity @ 20 C	uS/cm	400
Naphthalene	mg/kg	3.7
Acenaphthylene	mg/kg	<0.10
Acenaphthene	mg/kg	1.6
Fluorene	mg/kg	1.1
Phenanthrene	mg/kg	4.4
Anthracene	mg/kg	1.3
Fluoranthene	mg/kg	3.7
Pyrene	mg/kg	2.8
Benzo(a)anthracene	mg/kg	1.3
Chrysene	mg/kg	1.3
Benzo(b)fluoranthene	mg/kg	1.1
Benzo(k)fluoranthene	mg/kg	0.51
Benzo(a)pyrene	mg/kg	0.99
Dibenz(a,h)anthracene	mg/kg	<0.10
Benzo(g,h,i)perylene	mg/kg	0.73
Indeno(1,2,3-c,d)pyrene	mg/kg	0.41
Coronene	mg/kg	0.14
Benzene	mg/kg	<2.5
Toluene	mg/kg	<2.5
Ethylbenzene	mg/kg	<2.5
m&p-Xylene	mg/kg	<5.0
o-Xylene	mg/kg	<2.5

Sample Comments	
15717398	Stainless Steel Sieve
15717398	
15717399	
15717400	

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