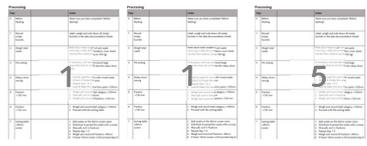


## Introduction

Waste sorting analysis is a process of identifying and categorizing its quantities in different types of waste generated in a particular area or community. It helps in identifying the sources of waste, the most significant contributors to waste generation, and the potential for reducing waste, ultimately leading to more effective waste management practices. Waste samples are collected from different sources such as households, commercial areas, industrial areas, and public places. The collection is done randomly to ensure a representative sample. Waste samples are segregated into different categories (>120mm; >4mm; >1mm; <1mm + liquids) and fractions like plastics, organics, paper or metal, weighed, and recorded according to the *Waste Sorting Reference Sheet*. Further analysis like plastic identification can follow the waste sorting.

## Before Starting

Step			notes
0	Pre-preparation		Make sure you have read and understood all safety and processing descriptions.
1	Documentation printout		Make sure you have documentation printouts: 1x Waste Sorting Reference Sheet (1 page) 1x Sum up sheet (4 pages) 5x Data documentation sheet (8 pages)
2	Safety equipment		Wear nitril gloves + cut-resistant gloves, overalls, safety shoes, -glasses and masks. Make sure the first aid kit is available.
3	Prepare sorting site		Clean up the sorting site. Prepare all "Materials and Equipment" and unload the waste
4	Permission		Make sure you have access to the waste treatment plant (key).

## Materials and Equipment

- Safety equipment
- 28 no. of Buckets
- Vessel for dry samples (transport to the lab)
- Small balance (up to 4kg)
- Floor balance (up to 100kg)
- Sorting station (120mm, 40mm, 10mm)
- Markers to label poly bags
- Big labels for the buckets
- 4 small brooms

## Processing

Step			notes
0	Before Starting		Make sure you have completed "Before Starting".
1	Record empty buckets		Label, weigh and note down all empty buckets in the data documentation sheets
2	Weigh total waste		Note down total weight of wet waste receiving in data documentation cover sheet. Use the floor balance (up to 100 kg).
3	Pre sorting		If necessary, sort out and record large impurities that do not fit onto the sorting table
4	Screen >120 mm		<ol style="list-style-type: none"> <li>1. Add waste on the 120mm screen sieve</li> <li>2. Distribute &amp; spread the waste with a scoop</li> <li>3. Manually sort and weigh all fractions</li> <li>4. Repeat step 1-3</li> <li>5. If lower screens are fully loaded, proceed with step 5 or 6.</li> </ol>
5	Screen >40 mm		<ol style="list-style-type: none"> <li>1. Continue with the 40mm screen sieve</li> <li>2. Spread the waste with a scoop</li> <li>3. Manually sort and weigh all fractions</li> <li>4. Restart sorting 120mm (step 4)</li> </ol>
6	Screen >10mm		<ol style="list-style-type: none"> <li>1. Continue with the 10mm screen sieve</li> <li>2. Spread the waste with a scoop</li> <li>3. Manually sort and weigh all fractions</li> <li>4. Restart sorting 120mm (step 4)</li> </ol>
7	Fraction <10mm		<ol style="list-style-type: none"> <li>1. Clean the drip tray and collect in a bucket</li> <li>2. Weigh and record fraction &lt;10mm + liquid</li> </ol>

Step			notes
8	Data Documentation		<p>Check your documentation for completeness</p> <ul style="list-style-type: none"> <li>• Sum up sheet</li> <li>• Cover sheet data documentation</li> <li>• Data documentation sheets</li> </ul>
9	Sampling		<p>Make sure you have drawn all the samples that are needed (check sum up sheet).</p>
10	Dispose of waste		<p>Make sure you did take <u>all backup samples</u> and data collection is complete! → Dispose of the remaining waste accordingly</p>
11	Pack up		<p>Perform all maintenance steps</p>
12	Waste Lab Sample register		<p>Share information with lab attendant for updating sample register</p>