



## Introduction

The customer must comply with wastewater disposal guidelines established by local regulatory agencies and industrial standards, as well as any additional requirements that might apply, such as stringencies that would apply to an office environment, but not an industrial environment.

This document describes how to treat a solution of WSS™ 150 dissolved in water with L2S™ powder, so that it solidifies and can be disposed of as solid waste. A solid waste from a solution of up to 5% can be disposed as standard landfill waste in certain countries<sup>1</sup>. For any other instance, and for a solid waste of a solution that contains more than 5% of support material, dispose according to local regulations.

## Related Documents

- SDS-06418—Safety Data Sheet for WSS150
- SDS-06418-P—Safety Data Sheet for Polymerized WSS150
- SDS-67305-P—Safety Data Sheet for a Solution of 20% WSS150 in Water
- DOC-00785—Water Profile 20% WSS150 in Water
- DOC-00786—Water Profile 5% WSS150 in Water
- DOC-06222— Evaluation of US Hazardous Waste Applicability WSS150 and L2S

## General Precautions

- Wear gloves, protective eyewear, and a dust mask (category 95/pp2) while performing this procedure.
- To prevent contamination of L2S due to humidity, make sure that its bag is sealed when not in use.

## Required Equipment

- OBJ-09152—L2S, pack of 0.5 kg
- Leak-proof containers made of high-density polyethylene. If using a dishwasher, the recommendation is that it have a 20-liter capacity.

## Solidification Process

You can solidify wastewater by mixing it—

- manually with L2S in a container (static method), or
- with L2S, immediately as it flows out from a dishwasher (dynamic method).

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<sup>1</sup> For more information, refer to DOC-06222 Evaluation of US Hazardous Waste Applicability WSS150 and L2S.

## Static Method

1. Using the GrabCAD Print™ support estimations per tray, make sure that the total amount of support material does not exceed:

- 20% in the wastewater for proper L2S functionality.
- 5% you intend to dispose as standard landfill waste (according to local regulations).

For example, if 500 grams of support are dissolved in a 10-liter water batch, then adding L2S will result in solid waste that can be disposed as standard landfill waste.



**Warning: Skin Contact Hazard**

Wastewater can cause skin irritation with prolonged contact. Put on protective gloves before handling.

2. Pour the WSS150 wastewater into the container.
3. Add L2S powder as specified in Table 1.



**Warning: Inhalation Hazard**

Inhalation of airborne particles could result in serious respiratory injury. Do not proceed before putting on an approved dust mask.

4. Close the container, and do not mix.
5. After the material solidifies, dispose as either hazardous or non-hazardous waste according to local regulations.



Use the GrabCAD Print support estimations to calculate the percentage of the support in the wastewater before adding L2S. Take in account that 25% of the support material reaches the printer waste container.

For example, for a 20-liter wastewater batch, the amount of support shown in the estimations window can reach up to 1.3 Kg. This will result in a 5% wastewater solution, since only 1Kg (75% of the support waste) will reach the wastewater.

## Dynamic Method

1. Before connecting the outlet of the dishwasher to the container, make sure that the—
  - outlet pipe can be directly attached to the container.
  - total amount of support material being removed in a single dishwasher cycle does not exceed your target wastewater concentration.

Use the GrabCAD Print material estimations to approximate the amount of support material in the print job.



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For example, for a 20-liter wastewater batch, the amount of support shown in the estimations window can reach up to 1.3 Kg. This will result in a 5% wastewater solution, since only 1Kg (75% of the support waste) will reach the wastewater.

2. Attach the water outlet of the dishwasher to the container.



**Warning: Skin Contact Hazard**

Wastewater can cause skin irritation with prolonged contact. Put on protective gloves before handling.

- Once the container is full, add 1 bag (0.5kg) of L2S.



**Warning: Inhalation Hazard**

Inhalation of airborne particles could result in serious respiratory injury. Do not proceed before putting on an approved dust mask.

- Close the container, and do not mix.
- After the material solidifies, dispose as either hazardous or non-hazardous waste, according to local regulations.



- Only after 2 or 3 dishwasher cycles, the container will be completely full.
- If the container is not completely full, add water until it is, and only then add the L2S.

Table 1: Wastewater/L2S Solutions—10-liter wastewater batch

Wastewater solution [% of WSS150]	Amount of WSS150 [Kg]	WSS150 in estimations screen [Kg]	L2S packages required [number of packages]
20%	2	2.7	2
15%	1.5	2.0	2
10%	1	1.3	1
5%	0.5	0.7	1

Wastewater/L2S Solutions—20-liter wastewater batch

Wastewater solution [% of WSS150]	Amount of WSS150 [Kg]	WSS150 in estimations screen [Kg]	L2S packages required [number of packages]
20%	4	5.3	5
15%	3	4.0	4
10%	2	2.7	1
5%	1	1.3	1

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