The recipe segments particles that are touching each other, and individual ones. The recipe creates three main outputs: the individual particles labeled independantly, the agglomerate labeled independantly, and the 2 classified phases (individual and agglomerate).

The area of agglomerate vs individual particles is measured (see image in gallery).

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| **Step** | **Name** | **Purpose** | **Sensitive to spatial resolution** |
| 1 | Reference | Reference image. |  |
| 2 | Convert Image Type | Allows to generate a greylevel image by taking one of the RGB channel |  |
| 3 | Auto Thresholding | This step binarize the particles based on the Otsu phase separation algorithm |  |
| 4 | Closing | The step allows to generate one set of connected pixels per agglomerate set of particles | Yes |
| 5 | Border Kill | This step erases particles that touches the border of the image and thus avoid incorrect statistics during the analysis step. |  |
| 6 | Labeling | Assign a label number to each connected set of pixels. |  |
| 7 | Filter by measure range | Based on a roundness measure this step allows to separate agglomerates from single particles. Note: this is important to uncheck the re-index label option for step 9 to work correctly.  This image represents each individual particles (one label for each particle) |  |
| 8 | Image Arithmetic | Label the preceding step as one label (individual particles) |  |
| 9 | Reference change | Labeling from step 6 |  |
| 10 | Subtract image | Allows to detect agglomerates by subtracting single particle from all labeled sets of pixels |  |
| 11 | Convert Image Type | To generate a label image from the previous subtraction step. This image represents each agglomerated particles (one label for each agglomerate) |  |
| 12 | Image Arithmetic | Label the preceding step as one label (agglomerated particles) |  |
| 13 | Add Image | Combine label 12 and label 8 to see agglomerated particles versus individual particles |  |