

## 1. Regarding MSL (Moisture Sensitivity Level)

MSL (Moisture Sensitivity Level) is a JEDEC standard and is intended for the phenomenon where the cubical expansion generated by the gasification of the moisture included in the product due to the moisture absorption of the product and the reflow soldering during mounting, which results in failures. The level that expresses this risk is the "MSL" (Moisture Sensitivity Level). As the level increases, the risk becomes higher; therefore, it is necessary to prevent moisture absorption when the level reaches 2 or more. For that reason, products of level 2 or higher must go through a baking process at a fixed period, and the tape reel is packaged in an aluminum pack with a desiccant.

\*If you should find anything further, please confirm JEDEC standard.

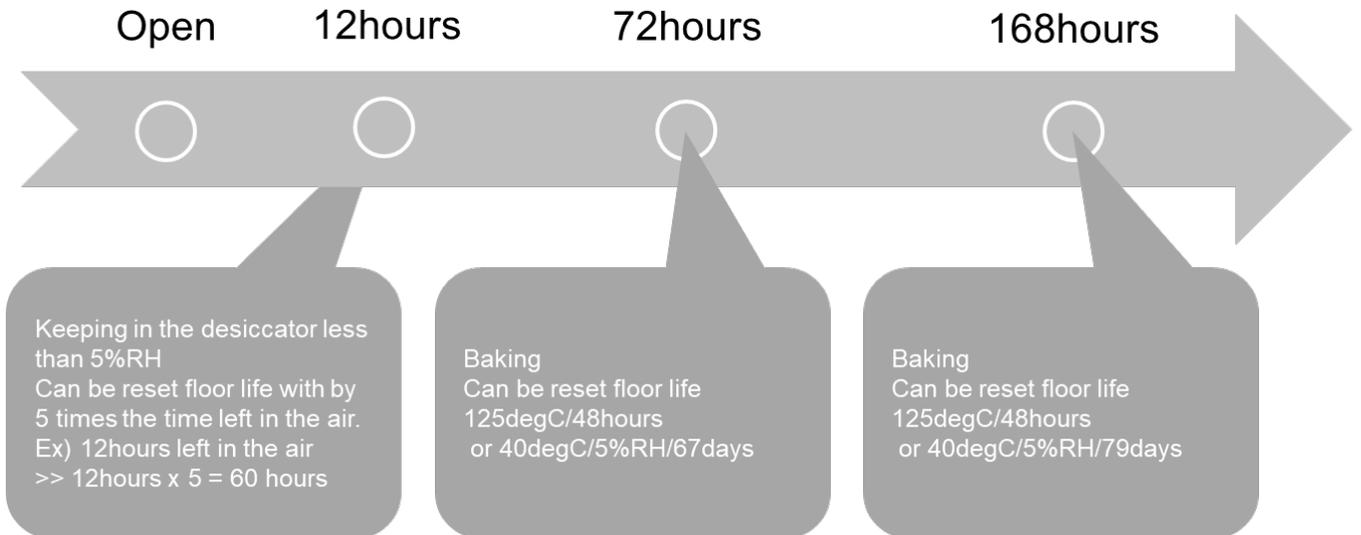
| MSL | Floor Life<br>(The moisture absorption life at 30 deg-C or less and 60%RH after opening the dry bag) |
|-----|------------------------------------------------------------------------------------------------------|
| 1   | Unlimited at 30 deg-C and 85%RH or less                                                              |
| 2   | 1 year                                                                                               |
| 2a  | 4 weeks                                                                                              |
| 3   | 168 hours                                                                                            |
| 4   | 72 hours                                                                                             |
| 5   | 48 hours                                                                                             |
| 5a  | 24 hours                                                                                             |
| 6   | Mandatory bake before use                                                                            |

## 2. MSL3 Product handling manual

- MonoBK series is MSL3
  - After open the package
    - Need to keep in the desiccator
      - Stop count down
        - MSL3 case: 168hours in 30degC/60%RH
  - When using product
    - Take product from desiccator
    - Open the package
    - Cut some products from the reel
    - Seal the package
    - Put back to desiccator
  - If exceed 168hours
  - Need to do baking process to decrease moisture
  - Baking can be allowed up to 2 times.



### 3. Floor Life



Air condition : 30degC/60%RH