



**> ISTA CERTIFIED LABORATORY**

Laboratory: ILIPACK

ISTA Member ID: 10297

Address: Av George Pompidou CS20258

Technician Performing Test: ERRASSIFI FARID

City: CASTRES

State/Prov: FRANCE

Email: farid.errassifi@iut-tlse3.fr

Zip/Postal Code: 81104

Country: EUROPE

Lab reference number for test (if applicable):

**> PRODUCT MANUFACTURER / SHIPPER**

Test Requested By: DAVID TADIOTTO

Phone: +33(0)4 68 64 73 42

Company: COLDWAY TECHNOLOGUES

Email: david.tadiotto@coldway.fr

Address: Lieu-dit Patau, route de Rivesaltes

ISTA Member?  Yes  No

City: PIA

State/Prov.: FRANCE

ISTA Member ID (if applicable):

Zip/Postal Code: 66380

Country: EUROPE

Manufacturer's License Number (if applicable):

**> TEST DETAILS ALL FIELDS IN THIS SECTION MUST BE COMPLETED**

Date Tested: 02/06/2020

Product Damage Tolerance (PDT):

Number of samples tested: 1

Package Degradation Allowance (PDA):

Number of replicate tests performed:

PDT/PDA Determined By/Date:

Gross Weight: 230 Kg

Method used to determine Pass/Fail: **visible degradation, damaged**

External Container Size (LxWxH): 1900\*1200\*800

**components, altered cooling function**

Person determining Pass/Fail result: **Laboratory director**

**> PRODUCT AND PACKAGE DESCRIPTIONS ALL FIELDS IN THIS SECTION MUST BE COMPLETED** It is strongly recommended that photographs, detailed drawings, and/or complete specifications of product and exterior and interior packaging accompany this report. If there is insufficient information supplied by the product manufacturer, please indicate the reason in the TEST RESULTS section, at the end of this report form.

**Specific PRODUCT TESTED:** Include, as applicable, product name, brand, model number, serial number and similar information that will help to identify the specific product tested.

**Product name:** ROLL 900

**Serial number:** 90869

**Brand:** Olivo

**Date of manufacture:** 10/2019

**Was the PACKAGING used during testing:**

ORIGINAL as arrived in the lab for testing

NEW re-packaged with new materials before testing

**PACKAGE Condition before testing:** List any damage or irregularities seen prior to testing.

**PRODUCT Description:** Describe product in detail. Include type of product, accessories and other identifying information, including specifics on bottles, containers and liquid or solid contents. **Logistic unit for the storage and transportation products.**  
**Fan circulation system for an even internal temperature.**

**PACKAGE Description:** Describe entire shipping unit. Description must be detailed and specific and should include type, style and material of packaging; corrugated board composition; cushion details including performance; film gauge and composition; application or package forming details; mold numbers; any pallet or skid; unitization method for unit loads; methods of closure, etc.

**Did the lab OPEN the packaged-product before testing to determine product condition?**  YES  NO

**If YES to above, list PRODUCT Condition before testing:**

List any damage or irregularities seen prior to testing.

**> ORIENTATION**

What position was the packaged-product in when the faces, edges and corners were identified:

MOST STABLE                       SHIPPING

Explain position if different than procedure recommendation:

**> ATMOSPHERIC CONDITIONING**

**Required Preconditioning (Ambient)**

Start of test:      Temperature (°C): **20.8**      Humidity (%): **50.6**

End of test:      Temperature (°C): **21.2**      Humidity (%): **49.3**

**Optional Conditioning (Controlled)**

Time of Conditioning (hours):      Temperature (°F / °C):      Humidity (%):

**> SHOCK TEST**

Method Used:     Incline-Impact                       Horizontal Sled

Sequence Number	Velocity (m/s)	Orientation of packaged-product (ex: Face 6; Edge 3-5)	
1	1.2	FACE	Face 5
2	1.2	FACE	Face 6
3	1.2	FACE	Face 4
4	1.2	FACE	Face 2
Rotational Edge Drop #1		EDGE	Edge 3-5
Rotational Edge Drop #2		EDGE	Edge 3-6

**> COMPRESSION TEST: Not used**

Method Used:     Machine                       Dead Weights and Load Spreader

Formula, with values, used to calculate Test Load:

Compensating Factor (**F**) used:

If the Compensating Factor used is NOT ISTA recommended, please explain:

Warehouse Stack (**S**) used, if applicable:

**Machine:**

Calculated Test Load (*lbf / N*):                      Actual Test Load (*lbf / N*):                      Total Test Time (minutes):

**Dead Weights and Load Spreader:**

Calculated Test Load (*lbs/kg*):                      Actual Test Load (*lbs/kg*):                      Total Test Time (minutes):

**> VIBRATION TEST**

Packaged-Product Orientation during test: **Face 3 rests on the platform**

Describe restraining devices used, if any:

Anticipated Transport Miles: **1920 Km**

Calculated Test Time in minutes: **240 min**

Use the spaces below to record frequency and PSD levels used for random vibration:

Frequency (Hz)	PSD Level, g <sup>2</sup> /Hz
1.0	0.00072
3.0	0.018
4.0	0.018
6.0	0.00072
12.0	0.00072
16.0	0.0036
25.0	0.0036
30.0	0.00072
40.0	0.0036
80.0	0.0036
100.0	0.00036
200.0	0.000018
<b>Overall Grms:</b>	<b>0.54</b>

**> SHOCK TEST**

Use the spaces below to record drop heights and orientations of each drop:

Sequence Number	Height (mm)	Orientation (ex: Edge 3-5)	
Rotational Edge Drop #1	150	EDGE	Edge 3-5
Rotational Edge Drop #2	150	EDGE	Edge 3-6

**> TEST RESULTS**

**PRODUCT Condition after testing** (if inspected):

**PACKAGE Condition after testing:**

**Pass**       **Fail**

Comments or recommendations:

Visible degradation: *all is well*

Damaged components: *all is well*

Altered cooling function: *all is well*

**Pictures:**  
**Before testing**



Pictures (Continued):  
During the test

**Shock: Incline impact “Opening the lock”**



**Shock: Incline impact “metal deformation”**





**Pictures (Continued):**  
**After test**



For review and acknowledgement of testing, submit test report and all appropriate additional documents/photos/data to:  
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