



„Supplychain challenges in global sesame industry“

→ Avoiding wet damages during transport

CARGO & DEVICE PROTECTION

A CLARIANT BUSINESS GROUP



Hubert
Simmler-Hübenthal
Head of Sales CDP EMEIA

what is precious to you?

Top Exporting Countries of Sesame Seed

Featured below is an overview of the global export markets of Sesame Seed. Explore the archive of export volume & price information on Sesame Seed and get updated on the current export volume & price of Sesame Seed.

Note that this information and related analysis is based on the statistics of [HS code 120740 \(Oil seeds; sesamum seeds, whether or not broken\)](#). Please visit the HS code page for more detailed information.



Global trade of Sesame is growing due to demand in countries without own production and done in 20ft sea container mainly.

At destination point we
want to receive high
quality seeds in dry condition



Unfortunately,
the situation looks
like this, quite often



What happened?

Moisture inside the container condenses at the container top from vapor to liquid water, which drops down as „container rain“ and wettens the load.



As a consequence, mold starts growing, deteriorating quality



So what can We do about it?



The Solution to “Container Rain”

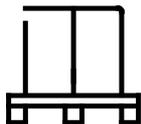
CONTAINER DRI® II CONTAINER DESICCANT



Container Dri® II is a high performance moisture absorber based on latest technology that has the main objective to eliminate “container rain” by controlling the moisture level inside the container.

Container Dri® II

HOW DOES IT WORK?



- Once in transit, Container Dri® II alters the moisture content in the air by aggressively absorbing any present water vapor (moisture) from the air. This dehumidification prevents the air from water vapor saturation. It continues absorbing through all temperature ranges and relative humidity variances.
- The water vapor (moisture) is then trapped as a thick, no-spill gel and contained within the bag until disposal (with regular waste).

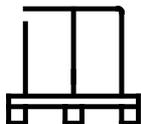
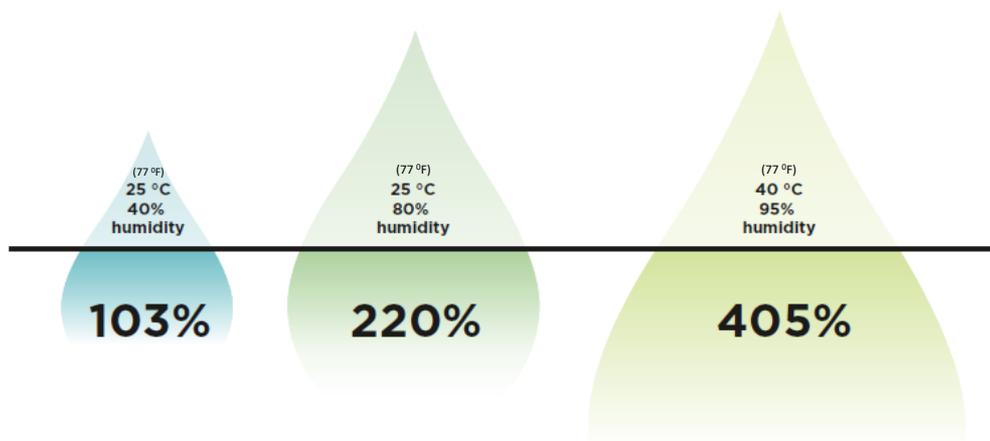


Container Dri® II

HOW DOES IT WORK?

ABSORPTION BEHAVIOR OF CONTAINER DRI® II

Moisture absorption after 400 hours as percentage of the net weight



- Container Dri II provides the highest moisture absorption of any calcium chloride-based product.
- Container Dri II absorbs up to three times its weight in water (using a significantly lower amount of gelling agents compared to other competing products)
 - *Under certain conditions Container Dri II can absorb even more than 400 percent its own weight in moisture – the higher the moisture = more aggressive absorption*





....I'm looking forward to answer your questions

Back-up slides

Global Support

With worldwide manufacturing sites in Brazil, Indonesia, Turkey, United States, and China, supported by an experienced global sales team, we will find the right solution



North America



Ryan Grauer
ryan.Grauer@Clariant.com
+1 314 489 7911

South America



Yohana Gerena Ardila
Yohana.gerenaardila@Clariant.com
+573144703711

EMEA



Hubert Simmler Huebenthal
Hubert.SimmlerHuebenthal@clariant.com
+49 151 14263145

ASIA



Meng Hwee Toh
Menghwee.Toh@clariant.com
+6566431147



Colton, CA USA



Balikesir, TURKEY



Belen, NM USA



Zhenjiang, CHINA



São-Paulo, BRAZIL

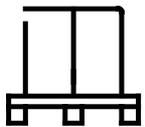
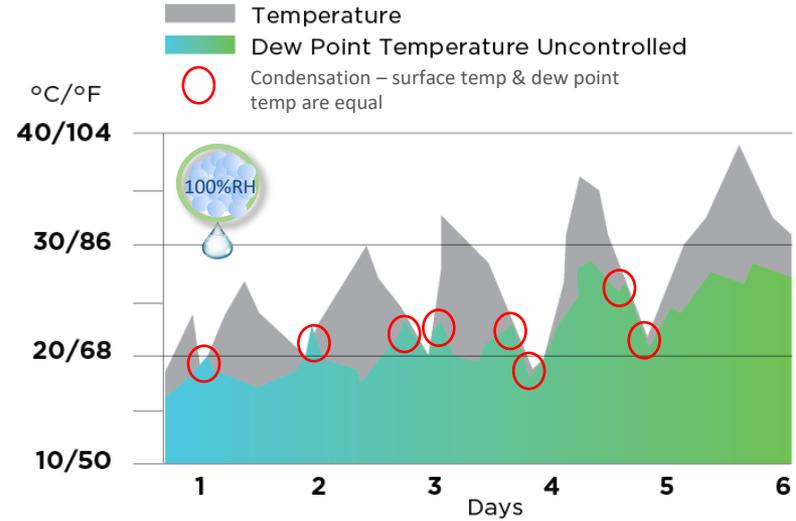
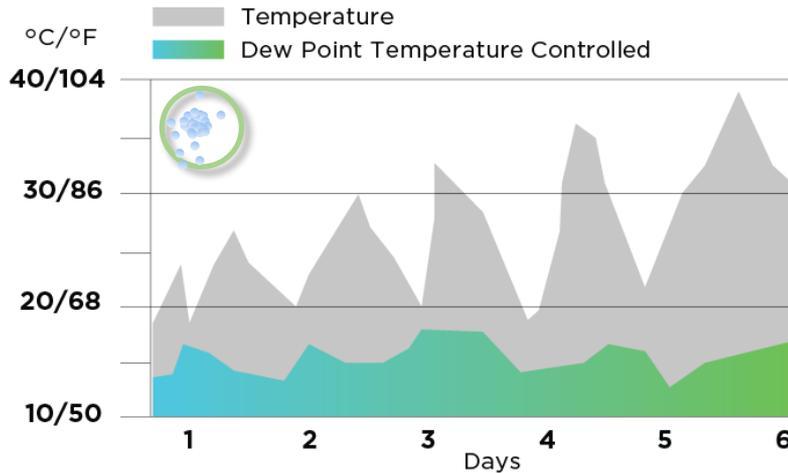


Bogor, Indonesia



Container Dri[®] II

HOW DOES IT WORK?



- By altering the moisture content in the air, the dew point temperature is kept below the surface temperature.
- Therefore, Dew point temperature will not be reached. The air will not have a chance to become “saturated”.

Container Dri II will help maintain a stable Relative Humidity inside the shipping container throughout the journey.



Recommended amount of **Container Dri® II Desiccants** for protection of coffee, cashew, peanuts, sesame:

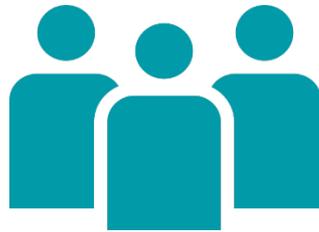
Departure Africa		Destination CD II pcs. per container			
CONTAINER DRI® II product configuration	absorber weight /pc.	TC 20'		TC 40'	
		EU / USA	ASIA	EU / USA	ASIA
2-Strip 250G with Hook	0,250 kg	10 - 12	15 - 18	20 - 24	30 - 34
Hanger 1200G	1,2 kg	-	-	4 - 5	6 - 8

Standard / minimum recommendation is valid for

- up to 40 days transit time
 - temperature at destination $\geq 10^{\circ}\text{C}$
-

Intermodal Transport

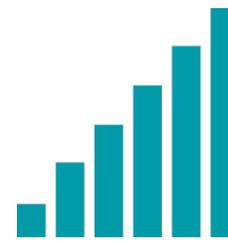
ECOTAIN® - SUSTAINABILITY



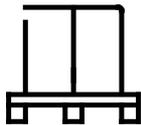
PEOPLE



PLANET



PERFORMANCE



ECOTAIN®

- IDENTIFIES BEST-IN-CLASS SUSTAINABILITY AND PERFORMANCE EXCELLENCE TO CUSTOMERS
- PRODUCTS ARE SCREENED AGAINST 36 CRITERIA ACROSS THREE DIMENSIONS
- CONTAINER DRI® II DELIVERED A POSITIVE BENEFIT IN ALL THREE SUSTAINABILITY DIMENSIONS - SOCIAL, ENVIRONMENTAL AND ECONOMIC



Intermodal Transport

ECOTAIN® - SUSTAINABILITY

PEOPLE



SAFE USE, TRANSPARENCY AND INFORMATION

- Dimethyl Fumarate Free (DMF) – non-toxic
- Safe and easy to handle
- No SVHC (Substances of very high concern)



ADDRESSING MEGATRENDS AND SOCIETAL NEEDS

- Avoids waste, re-work and re-production of goods damaged by moisture
- Protection of food during transport to prevent loss and waste
- Helps to maintain quality of food and food ingredients



PLANET



RAW MATERIALS AND SUSTAINABLE SOURCING

- Use of renewable raw materials



RESOURCE EFFICIENCY AND ENVIRONMENTAL PROTECTION

- Best-in-class moisture absorption allows lower dosage, higher loading efficiency and lower waste on the receiving end
- Dispose with normal industrial waste



PERFORMANCE



INTEGRATED SUSTAINABLE BUSINESS

- Clariant packaging specialists support packaging designers to develop most effective solution for avoiding moisture damage to cargo



PERFORMANCE ADVANTAGES

- Best-in-class moisture absorption
- Product configurations to meet various customer needs and applications

