

Heat Reflection of up to 10-14°C

Effective insulation for both indoor & outdoor surfaces

Suitable for all water based paints

ENERGY SAVING

SubertA



### **GENERAL INFORMATION**

A high performance insulation sphere in nanotechnological dimensions designed by SUBERTA as an added feature for insulating your property. Mixed with water based paints, can be used for indoor and outdoor surfaces. Fully adheres to the applied surface and remains stable without losing its insulative features.



# PURPOSE AND DESCRIPTION

- NISPOW is a natural powder in the form of Nano Technology Thermal Insulation Spheres mixed in water based paints.
- Nispow has high performance and low thermal conductivity values.
- Further enhances the quality of the paint by eliminating heat exchange, humidity and mold issues.
- Easily applied to all types of water based paints irrespective of brand and color.
- Provides fire resistance and sound reduction.

# PRODUCT PERFORMANCE

- When applied in paint or primer, heat reflection of up to 7-9 degrees celsius.
- When applied in primer and paint, allows heat reflection of up to 10-14 degrees celsius.
- Significant energy savings.

# KFY FFATURES

- Enhances water insulation.
- Resistant to acid rain and corrosive environmental effects.
- Contributes to energy savings.
- Extends structural life.
- Fire resistant.
- No special surface preparation required.



# PHYSICAL PROPERTIES

- Solid in powder form.
- Composed of spheres of 0-3microns in diameter.
- Unit weight 0.40 kg / liter.
- Color is off-white.
- Water absorption is 0.003%.



Delivered as packed in 1 kg, 5 kg PP or 1 liter PE Bottles.



# SURFACE PREPARATION

The surfaces, on which paint will be applied, have to be cleaned of any dirt, oil, grease, loose particles and other foreign substances. It is recommended to use Nispow in primer on new surfaces.

# APPLICATION INFORMATION

Paint preparation: For the most efficient thermal insulation values, the Nispow mixture ratio in the final paint coat at a minimum of 5% and maximum 8%. The use of higher ratios may lead to surface roughness. It is recommended to add into primer for best performance. Mixed into the paint by adding slowly in an area that is not exposed to the wind as Nispow is a fine powder. The mixing operation should be made by a lowspeed hand/drill mixer.

**Primer preparation:** For the most efficient thermal insulation values, the Nispow mixture ratio in primer should be minimum 5%; while up to maximum 20% may be used depending on the desired texture. It is mixed into the paint by adding slowly in an area that is not exposed to wind as Nispow is a fine powder. The mixing operation should be made by a lowspeed hand/drill mixer.

Mode of application: The surfaces, on which paint will be applied, have to be cleaned of any dirt, oil, corrosion, grease, loose particles and other foreign substances. The paint should be mixed well prior to use. The paint should be applied with a roller or a brush, in 2 full coats. The second coat should be applied only after the first coat has dried.

# COVERAGE AREA

Although it depends on the coverage area of the used paint, 150-200 gram of paint is spent per m2 on average.

As an average 500 gr of NISPOW can be added to 18-22. It pails of primer and/ or paint.

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# CURING & SHELF LIFE - STORAGE

Although it depends on the curing period of the used paint and the environment conditions, the surface on which application has been made becomes ready for use within 1-2 hours in general. Curing time is 4-6 hours. Depending on the humidity and other environmental conditions.

# CLEANING

Following any undesired application, cleaning is possible by washing with water thoroughly before it is dried within the curing period. Meanwhile, surface cleaning may be made after the paint has cured.



# **IMPORTANT**

NISPOW may cause surface roughness when mixed in paint. Therefore, the optimum mixture ratio has been calculated as 7% as a result of the R&D studies. In case any surface roughness is not desired, we recommend to add into primer only. As a result of the R&D studies, the optimum Nispow ratio to be added to primer has been calculated at 14%. By adding 14% Nispow to the primer and 7% to the paint, it is possible to achieve the most efficient thermal insulation.



# SAFETY

Nispow does not have any known side effects. It is non-hazardous. Since it is a nano-technology product, Nispow is composed of nano-particles. Therefore, some particles can be airborne during mixing. To avoid any possible irritations, it is recommended to use eye protection and dust masks.



## GENERAL RECOMMENDATIONS

In case of skin contact, wash with soap and water. In case of eye contact, wash with plenty of water for at least 15 minutes and consult a physician if necessary.





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