



NERALIT®

Endless number of possibilities



About SPOLANA

SPOLANA a.s. is one of the largest chemical manufacturing companies in the Czech Republic with nearly one hundred and twenty years of tradition. The Company headquarters is in Neratovice; production plant complex with an area of 260 hectares is located north of the capital Prague. The Company currently employs more than 700 employees.

Spolana is the only Czech manufacturer of PVC and caprolactam and produces also sodium hydroxide and ammonium sulphate.

Since 2016 Spolana is owned by Unipetrol Group.

NERALIT®

Suspension polyvinyl chloride (PVC)

Polyvinylchlorid Neralit is produced by suspension polymerization of vinyl chloride in an aqueous medium in the presence of catalysts and suspension stabilizers. The resulting product is fine white, well-pouring powder consisting of grains with narrow particle size distribution. Properties of suspension PVC Neralit – powder are dependent on the ingredients used in polymerization, on the polymerization temperature regime, on the method and intensity of mixing the suspension and on various other factors involved in the production.

Suspension PVC Neralit is shipped in powder form to processors who then adjust it for processing with additives on their own mixing - or more precisely - pelletizing equipment. Individual types of Neralit are suitable for producing a wide range of products – from hard profiles, sheets, pipes and films (foils), then electrical insulation and drainage tubes, various technical parts and packaging; to hoses, profiles, films (foils), footwear materials and cable insulation. Neralit is available in five different versions with numerical designation 581, 601, 652 and 682; their properties and uses are described on the following pages of this product brochure.

NERALIT® is a trademark of SPOLANA, a.s. Neratovice.

NERALIT® is a fine white powder, flavourless and odourless, and physiologically inert.

NERALIT® is stable when exposed to acids, alkalis, alcohols and aliphatic hydrocarbons.

It is soluble in chlorinated hydrocarbons and in some ketones. It does not dissolve in water and in many organic solvents.

Thermal decomposition of NERALIT® results in the creation of toxic products, especially hydrogen chloride and carbon oxides (and possibly also of other toxic gases, such as phosgene).

NERALIT® is not classified as a hazardous substance.

When handling or working with NERALIT®, the occupational health and safety regulations stated in Chapter VI of the corresponding company standards and on the safety sheet have to be always observed. NERALIT® is made in accordance with the valid technological, fire and safety documentation.

When using the suspension polyvinyl chloride for products that come into contact with food, the polyvinyl chloride must comply with the hygienic requirements specified for products that come into contact with food pursuant to the valid hygienic regulation issued by the Ministry of Health (see the valid certificate).



NERALIT® typ 581

Suspension polyvinyl chloride (PVC)

Pursuant to SN EN ISO 1060-1, NERALIT® type 581 is classified as: PVC-S, G 085 60 98 15.

The suspension NERALIT® type 581 polyvinyl chloride is designated for products made of hard (unsoftened) PVC. Injection, blowing, rolling (calendering) and extrusion technologies are suitable for processing the product.

| Inspection characteristic | Unit | Value | Test Method |
|--|-----------------|-------------|-------------|
| K-value | - | 57 - 59 | SOP-A-358 |
| Bulk density | g/ml | 0.57 - 0.63 | SOP-A-354 |
| Sieve analysis - residue on the sieve: | | | SOP-A-353 |
| 0.063 mm, min. | % of the weight | 95.0 | |
| 0.250 mm, max. | % of the weight | 2.0 | |
| 0.500 mm, max. | % of the weight | 0 | |
| Volatile substances, max. | % of the weight | 0.3 | SOP-A-352 |
| Impurities, max. | pcs/15 g | 3 | SOP-A-351 |
| Impurities, size over 0.250 mm, max. | pcs/50 g | 3 | SOP-A-351 |
| Vinylchloride residue, max. | mg/kg | 1.0 | SOP-A-322 |

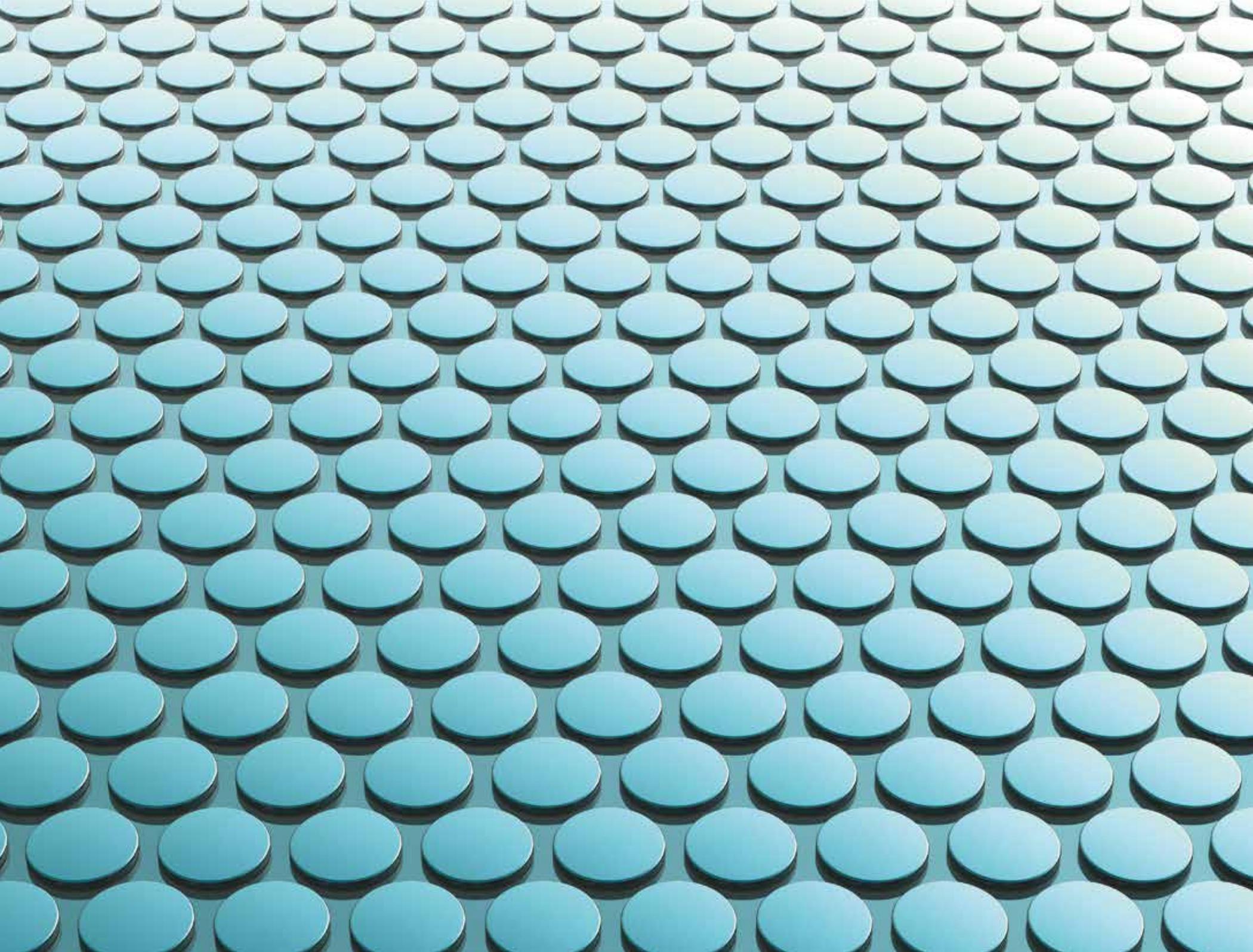


NERALIT® typ 601

Suspension polyvinyl chloride (PVC)

Pursuant to SN EN ISO 1060-1, NERALIT® type 601 is classified as: PVC-S, G 090 60 98 15.
The suspension NERALIT® type 601 polyvinyl chloride is designated for products made of hard (unsoftened) PVC. Injection, blowing, rolling (calendering) and extrusion technologies are suitable for processing the product. It allows for making transparent products.

| Inspection characteristic | Unit | Value | Test Method |
|--|-----------------|-------------|-------------|
| K-value | - | 59 - 61 | SOP-A-358 |
| Bulk density | g/ml | 0.56 - 0.62 | SOP-A-354 |
| Sieve analysis - residue on the sieve: | | | SOP-A-353 |
| 0.063 mm, min. | % of the weight | 95.0 | |
| 0.250 mm, max. | % of the weight | 2.0 | |
| 0.500 mm, max. | % of the weight | 0 | |
| Volatile substances, max. | % of the weight | 0.3 | SOP-A-352 |
| Impurities, max. | pcs/15 g | 3 | SOP-A-351 |
| Impurities, size over 0.250 mm, max. | pcs/50 g | 3 | SOP-A-351 |
| Vinylchloride residue, max. | mg/kg | 1.0 | SOP-A-322 |
| Processability | - | 1 - 3 | SOP-A-363 |



NERALIT® typ 652

Suspension polyvinyl chloride (PVC)

Pursuant to SN EN ISO 1060-1, NERALIT® type 652 is classified as: PVC-S, G 100 50 98 25.

The suspension NERALIT® type 652 polyvinyl chloride is designated for products made of softened as well as unsoftened PVC. Extrusion, rolling (calendering) and, if applicable, injection technologies are suitable for processing the product.

| Inspection characteristic | Unit | Value | Test Method |
|--|-----------------|-------------|-------------|
| K-value | - | 64 - 66 | SOP-A-358 |
| Bulk density | g/ml | 0.51 - 0.57 | SOP-A-354 |
| Sieve analysis - residue on the sieve: | | | SOP-A-353 |
| 0.063 mm, min. | % of the weight | 95.0 | |
| 0.250 mm, max. | % of the weight | 1.0 | |
| 0.315 mm, max. | % of the weight | 0.05 | |
| Volatile substances, max. | % of the weight | 0.3 | SOP-A-352 |
| Impurities, max. | pcs/15 g | 3 | SOP-A-351 |
| Impurities, size over 0.250 mm, max. | pcs/50 g | 3 | SOP-A-351 |
| Fish eyes, max. | pcs/g | 5 | SOP-A-361 |
| Plasticizer absorption at room temperature, min. | g/100 g | 22 | SOP-A-357 |
| Vinylchloride residue, max. | mg/kg | 1.0 | SOP-A-322 |



NERALIT® typ 682

Suspension polyvinyl chloride (PVC)

Pursuant to SN EN ISO 1060-1, NERALIT® type 682 is classified as: PVC-S, G 120 55 98 25.

The suspension NERALIT® type 682 polyvinyl chloride is designated for products made of hard (unsoftened) PVC. It is especially suitable for the production of pressure pipes and window profiles.

The extrusion technology on two-worm machines is suitable for its processing.

| Inspection characteristic | Unit | Value | Test method |
|--|-----------------|-------------|-------------|
| K-value | - | 67 - 69 | SOP-A-358 |
| Bulk density | g/ml | 0.53 - 0.59 | SOP-A-354 |
| Sieve analysis - residue on the sieve: | | | SOP-A-353 |
| 0.063 mm, min. | % of the weight | 97.0 | |
| 0.250 mm, max. | % of the weight | 2.0 | |
| 0.500 mm, max. | % of the weight | 0 | |
| Volatile substances, max. | % of the weight | 0.3 | SOP-A-352 |
| Impurities, max. | pcs/15 g | 3 | SOP-A-351 |
| Impurities, size over 0.250 mm, max. | pcs/50 g | 3 | SOP-A-351 |
| Vinylchloride residue, max. | mg/kg | 1.0 | SOP-A-322 |



SPOLANA a.s.
UNIPETROL Group

Spojovací street
277 11 Libiš

www.spolana.cz/en