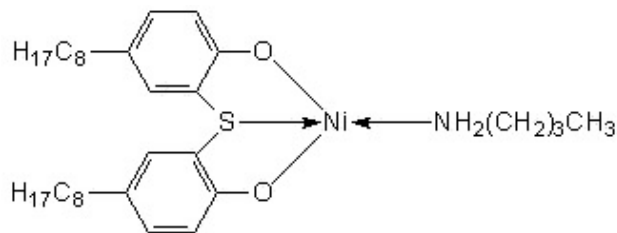


K.SORB 1084

**Nickel phenolate quencher for the UV protection
of PE agricultural films with high resistance to pesticide and acid**

<u>CHEMICAL NAME</u>	[2,2'-Thiobis(4-t-octylphenolate)]-n-butylamine-Nickel(II)
<u>CAS NUMBER</u>	14516-71-3
<u>EINECS NUMBER</u>	238-523-3
<u>CHEMICAL FORMULA</u>	C ₃₂ H ₅₁ O ₂ NNiS
<u>STRUCTURE</u>	



<u>MOLECULAR WEIGHT</u>	571 g/mol
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CHARACTERIZATION **K.SORB 1084** is a powerful protector against the sun's UV rays destructive action on the PE agricultural films products, especially if it is mandatory for the PE films a high resistance to the aggression of pesticides and acid used inside the greenhouses to protect the crops against insects and parasites.

K.SORB 1084 acts by quenching or disactivating the UV energy absorbed by the impurities (like catalyst residues) and chromophores present in the PE film, i.e. where will start the collapse of the film itself.

Used since long worldwide **K.SORB 1084**, however is no longer used today in many countries for the environmental problems associated with uncontrolled burning of the used films and the dumping of Ni-containing ashes and smokes thereof.

APPLICATION **K.SORB 1084**, as said above, is mainly used in PE agricultural films providing them a superior resistance to the halogen-and sulfur-containing pesticides (and to sulfur burning too) sprayed inside the greenhouse to protect the crops from insects and parasites.

**PHYSICAL
PROPERTIES**

Appearance	fine free flowing light green powder
Melting range	245° - 280°C
Specific gravity at 25°C	1,13 g/cm ³
Nickel Content	10,10 -10,20%
Volatiles loss (2h/100°C)	<0,80%
Toluene insoluble	<0,10%
TGA 10 mg@10°C/min under N ₂ , mass loss	5% at 270°C 10% at 293°C
Purity (HPLC)	99% min
Solubility at 25°C (g/100g solvent)	
Ethanol	1
Ethyl acetate	2,7
Toluene	60
n-Hexane	51
Chloroform	41
Water	< 0.1

PACKAGING

K.SORB 1084 is supplied in 25/20 kg net bags.

STORAGE - HANDLING

K.SORB 1084 must be stored in a dry and ventilated cool place. Maximum recommended Storage time under suitable condition (dry and cool): 2 years. Protect eyes and face and use gloves when handling the product. For detailed information on toxicity, Storage and handling please refer to the relevant Material Safety Data Sheet.

The information submitted in this publication is based on our current knowledge and experience. In view of the many factors that may affect processing and application, this data does not relieve processors from the responsibility of carrying out their own tests and experiments. Neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom K Chimica supply their own products to ensure that any proprietary rights or patents and existing laws and legislation are observed. The product has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.