

MATERIAL SAFETY DATA SHEET

Revision Date: March 15, 2007
Section 1 chemical identification
name: chemical nature : polyvinylpyrrolidone
Section 2 composition/information on ingredients
cas-no.: 9003-39-8
inci-name : pvp-K
Section 3 hazards identification
critical hazards to man and the environment: none
Section 4 first-aid measures
no special measures necessary
Section 5 fire fighting measures
suitable extinguishing madia: water spray
the following can be given off in a fire:
nitrogen, e.g.nox,
carbon dioxide, co2
hydrogen cyanide
special protective equipment: in case of fire, wear a self-contained breathing apparatus
Section 6 accidental release measures
personal precautions: avoid dust formation.
environmental precautions: no special measures necessary.
methods for cleaning up: sweep/shovel up.
Section 7 handling and storage
handling
protection against fire and explosion
avoid dust formation
take precautionary measures against STATIC DISCHARGES
the usual precaution for the handling of chemicals must be observed:
storage
keep tightly sealed
keep in a dry place
storage temperature : keep in room temperature and not higher than $45^{\circ}\mathrm{C}$
Section 8 exposure controls/personal protection
components with workplace control parameters:
product contains as residual monomers:
1- vinyl-2-pyrrolidone
personal protective equipment
repiratory protection : not necessAry ;
hand protection: not necessAry;
eve protection: not necess Arv

Section 9. - - - - - physical and chemical properties - - - - form: powder color: white odor: faint special odor melting point/melting range : more than 130°C (decomposition) flash point : more than 215°C ignition temperature: more than 425°C density (20°C): 1.2g/cm3 approx. solubility: a .solubility in water: more than 270 g/l b. solubility in other solvent : solubile in many organic solvent ph value (10% solution in water): 3.0-7.0 Section 10. - - - - - - stability and reactivity - - - - thermal decomposition: more than 130°C hazardous reactions: dust explosion hazard. Section 11. - - - - - - toxicological information - - - - acute toxicity: ld50: more than 2000mg/kg primary skin irritation (rabbit): non-irritant primary mucous membrane irritation (rabbit's eye): non-irritant additional information: in our experience and according to information available to us the products is not harmful to health provided it is correctly handled and processed according to the given recommendations. Section 12. - - - - - ecological information - - - - data not yet available. Section 13. - - - - - disposal considerations - - - - dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. observe local environmental regulations. Section 14. - - - - - - transport information - - - - - not classfied as hazardous under transport regulations Section 15. - - - - - regulatory information - - - - - european information caution: substance not yet fully tested. Section 16. - - - - - other information - - - - - -The above information is believed to be correct but does not purport to be all inclusive and shall

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Our company shall not be held liable for any damage resulting from handling or from contact with the above product.