



## Resins for functional coatings

# Synthalat A-TH 4080

60% in methoxypropyl acetate

Synthopol  
Product  
NEWS

07/2019

Polyisocyanat crosslinkable acrylic resin for multi-functional coatings e. g. with easy to clean effect

### FIELD OF APPLICATION

Synthalat A-TH 4080 is an acrylic resin that gives highly hydrophobic surfaces.

- In combination with (cyclo-) aliphatic polyisocyanates for air- and oven drying 2p-MS topcoats for metallic and plastic substrates
- In combination with melamine resins for stoving topcoats for metallic substrates
- applications in:  
aircrafts and wind energy plants, ships, yachts, OEM cars, busses, trucks, motorcycles, bikes, trains, rims, furnitures, electronics, glasses, plastics

### FUNCTIONS\*

- easy to clean
- stain resistant
- anti ice (see page 2)
- anti insect
- high appearance
- highly hydrophobic
- easy release for anti fouling
- anti graffiti
- fast polishable

### PROPERTIES\*

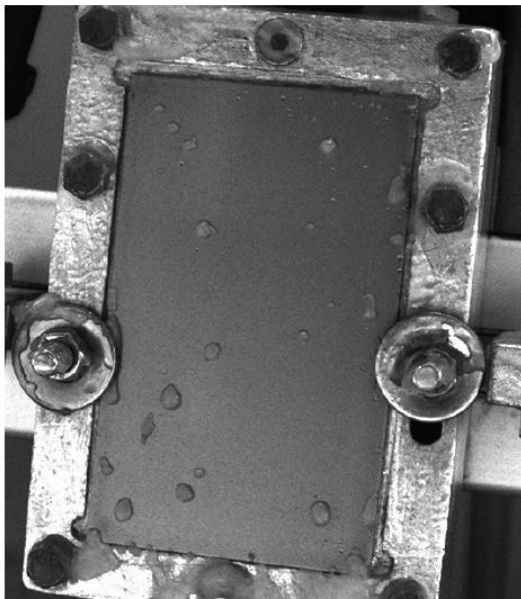
- extremely high chemical- and weather resistance
- low surface energy, even after longer UV-exposure
- very good mechanical properties
- excellent adhesion to metals and several plastics

## PROPERTIES AND TECHNICAL DATA

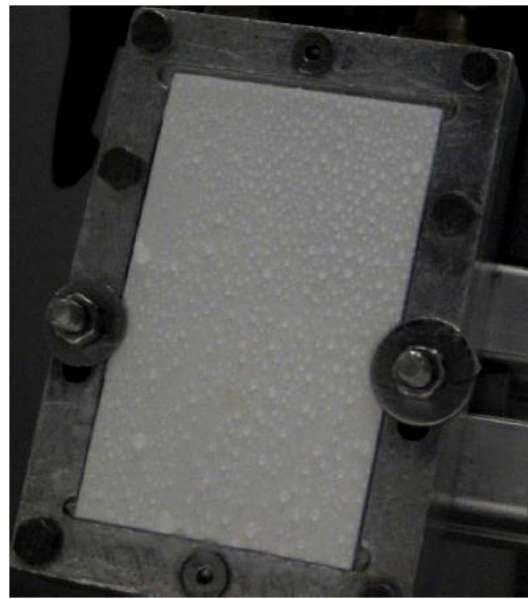
supplied as	60% in methoxypropylacetate
viscosity 23° C	1000 - 3500 mPa*s
solid content (nvc)	60 +/- 1%
hydroxy value [mg/g]	160 - 190
hydroxyl content	approx. 5.3 %
color index (Gardner)	< 2
flash point in °C	approx. 42
density in g/mL	approx. 1,01

## PROPERTIES OF THE CURED FILM

propertie	Synthalat A-TH 4080	standard 2p-hydroxyacrylic resin
contact angle water [°]	approx. 105	85 - 90
contact angle diiodmethane [°]	approx. 73	40 - 50
rolling angle water [°]	approx. 38	≥ 90
degree of icing, ice rain test	1 - 2	4 - 5
surface free energy [mN/m]	approx. 21	35 - 40



Synthalat A-TH 4080  
low ice formation, ice rain test



Competitors product  
significant ice formation, ice rain test

\* In mixtures of at least 20 % with standard resins, most functions will remain working.  
An overcoatability is not possible with amounts of more than 10 % of Synthalat A-TH 4080.

### **SAMPLING**

Synthalat A-TH 4080 is commercially available.  
Samples may be ordered through our website or  
your accustomed contact.

### **CONTACT**

If you are interested in more information about our products (guide formulations, datasheets), please contact your known person in charge from the sales or research and development department or our headquarters directly under following references:

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