Industrial coating
2K polyurethane topcoat, high solid, white
agricultural, construction and earthmoving sector (ACE)

Basis Polyurethane

	Guide Formulation of BASF		16063MS
Component A	Basonol HPE 1170 B	(1)	26.77
	Sovermol 780	(1)	18.74
	Efka FA 4609	(1)	2.81
	Efka PB 2744	(1)	1.87
	Efka SL 3777	(1)	2.95
	AKTIFIT PF 111	(2)	4.69
	Kronos 2310	(3)	42.17
	Total parts by weight		100.00
Component B	Basonat HI 2000 NG	(1)	48.27

Note

Rheology profile is not optimized. Based on film thickness requirement, a modification with additional additives is necessary.

Improving weathering performance (add on resin solid):
2 % Tinuvin 292 HP (HALS) and 1 % Tinuvin 400 (UV)

Mixing

Component A
- add ingredients of component A in the listed order while stirring with efficient agitation
- disperse 60 min at 4000 rpm with 3 mm glass pearls

Completion
- add component B with efficient agitation – 5 min at 1000 rpm
- adjust to the favored viscosity with n-butyl acetate/xylene (2:3)

Process parameters
- SATA Jet 5000B HVLP, nozzle 1.5, 1.8 bar
- flow time DIN 4 cup adjusted to 50 s

Suppliers
(1) BASF
(2) HOFFMANN MINERAL
(3) Kronos International

Münchener Straße 75 • DE-86633 Neuburg (Donau)
Phone +49 8431 53-0 • info@hoffmann-mineral.com

16063MS

Technical Data

Formulation (A+B), viscosity adjusted with n-butyl acetate/xylene (2:3)

Amount of solvent needed to adjust	g	18.2
Viscosity (flow time DIN 4 cup)	s	approx. 50
Viscosity doubling 50 → 100 s		within 2 h
Solids content	%	approx. 83
VOC	g/l	approx. 229

Properties

without catalyst

Drying time @ 23 °C		
Sand drying	h	12
Through drying	h	15.5
Pendulum hardness @ 23 °C		approx.
after 24 h		20
after 48 h		70
after 72 h		78
after 144 h		80
after 168 h	osc	79
+15 h @ 60 °C		78
on glass		
15 h @ 60		99
30 min @ 80 °C		94
20 min @ 140 °C		108
Gloss, on Gardobond 26S 60 OC		
20°, after 15 h @ 60 °C	GU	79.2
60°, after 15 h @ 60 °C	GU	90.5

Münchener Straße 75 • DE-86633 Neuburg (Donau)
Phone +49 8431 53-0 • info@hoffmann-mineral.com

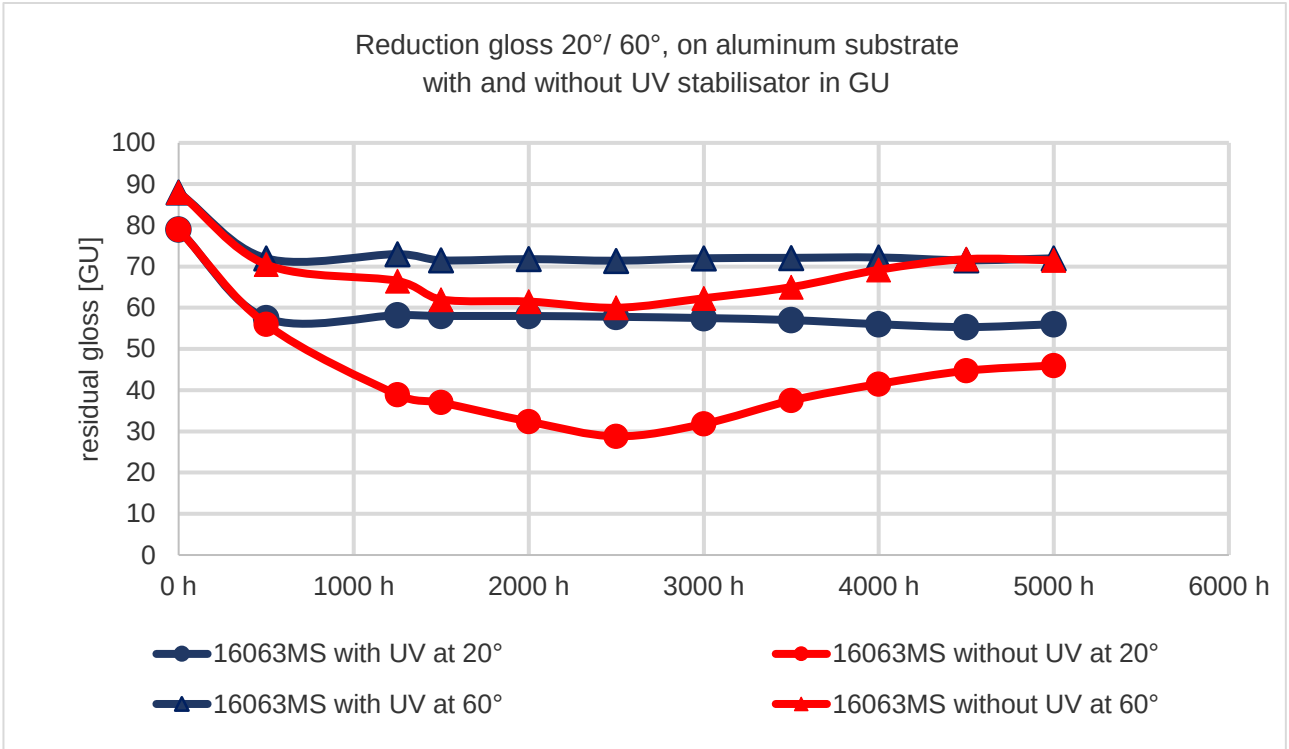
16063MS

Chemical resistance

15 h @ 60 °C, on metal substrate		direct	after 24 h
Diesel	15 h	0	0
Bio-Diesel	15 h	0	0
Hydraulic oil	15 h	0	0
Lube oil	15 h	0	0
Bio-Lube oil	15 h	0	0
Brake fluid	4 h	5	3
Radiator antifreeze	4 h	0	0
Hydrochloric acid 10 %	15 h	1	0
Sulfuric acid 40 %	15 h	0	0
Sodium hydroxide 25 %	15 h	0	0
Sodium phosphate 10 %	15 h	1	0
Tar remover	15 h	4	3

*Note: the resistance against brake fluid and tar remover can be improved by using **AKTIFIT AM** in higher dosage*

Weathering performance, measured by DIN EN ISO 16474-2
Formulation with 2 % Tinuvin 292 (HALS) and 1 % Tinuvin 400 (UV) on resin solid



Münchener Straße 75 • DE-86633 Neuburg (Donau)
Phone +49 8431 53-0 • info@hoffmann-mineral.com