



TECHNICAL DATA SHEET

UNIDYNE TG-5574

Water and Oil Repellent

1. Features

- TG-5574 is a short-chain based fluorochemical and a PFOA Free* product that is newly developed polymer.
- Imparts excellent water and oil repellency to cotton and cotton/synthetic blended fabric substrates, even though with textile auxiliaries.
- Enhanced environmental performance.
(*Less than 5ppb)

On excellent water and oil repellency even though with textile auxiliaries such as softner,etc., the decreasing performance of the fabric finished by fluorochemical with textile auxiliaries have been issued due to low resistance of fluorochemical polymer from outside circumstance change with textile auxiliaries.

TG-5574 could solve such issues on fabric by its newly developed polymer.

2. Physical Properties

Appearance	Off white emulsion
Ionic characteristics	Weak cationic
pH	2.1 - 6.0
Specific gravity at 25°C (77°F)	1.10
Solubility	Readily miscible in cold water

Recommended storage conditions between -5°C and 40°C (23°F and 104°F).

3. Application Guide

Standard Recipe

Fabric Type	WPU %	Chemical	Conc. (g/L)	Dry/Cure Conditions
Cotton, Cotton /Polyester(blended)	30 - 80	TG-5574	20 - 60	Dry&Cure: 150 - 170°C for 1 - 3 min
		Cross-linker*	5 - 15	
		Softner	10 - 30	

* Recommended cross-linker are blocked isocyanate .

4. Performance Guide

<Treating Conditions>

Recipe:

FC: 50g/L (as 30% solid product)

Cross-linker: 10g/L (Blocked Isocyanate, MDI)

Softner: 20g/L (aminosilicon)

pH:

5.0 (by Citric acid)

WPU:

Cotton/Polyester(blended) =56%, 100% Cotton=52%, Polyester=36%

Dry&Cure:

170°C for 2min(100% Cotton,Cotton/Polyester(blended))

170°C for 1min(Polyester)

<Durability>

Tumbler,AATCC-35

			TG-5574	Competitor N	Competitor A
Watr repellency AATCC-22	100% Cotton undyed	HL0	100	95	90
		HL5	90	75	70
		HL10	75	60	60
		HL15	60	60	60
	Cotton/Polyester (blended) 65/35 undyed	HL0	100	95	95
		HL5	75	75	70
		HL10	75	70	70
		HL15	60	60	50
	Polyester Gray	HL0	100	100	100
		HL5	100	100	85
		HL10	100	100	70
		HL15	100	100	70
Oil repellency AATCC-118	100% Cotton undyed	HL0	4	1	0
		HL5	4	1	0
		HL10	4	1	0
		HL15	3	1	0
	Cotton/Polyester (blended) 65/35 undyed	HL0	4	1-2	0
		HL5	4	1-2	0
		HL10	4	1-2	0
		HL15	4	1-2	0
	Polyester Gray	HL0	4	1	0
		HL5	4	1	0
		HL10	3	0-1	0
		HL15	3	0-1	0

5. Safety Precautions

Reference the Safety Data Sheet for details regarding the safe use and disposal of this product.