



Comparison for Waterproof(IP68) Led Strip

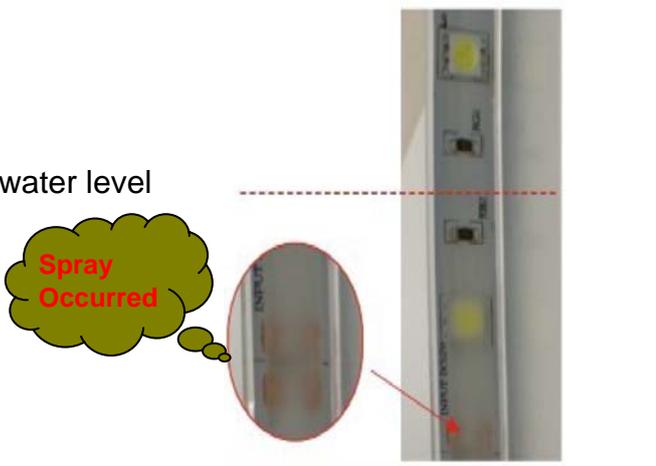
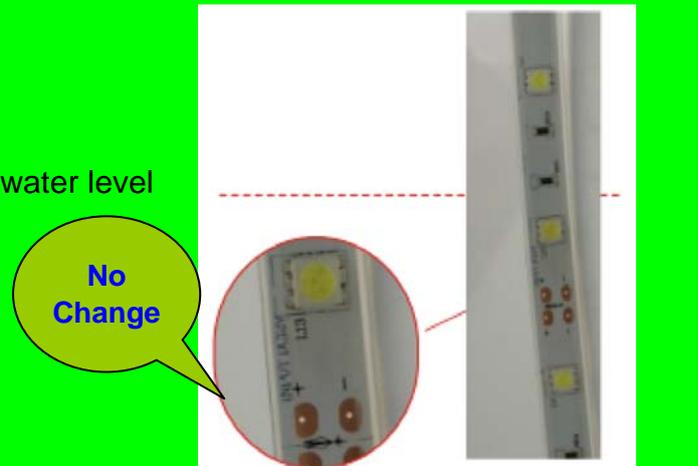
Normal waterproof LED strip in LED market	New research of Fredlighting
Material : PVC tube + Epoxy gel + Led Strip(White PCB)	Material: Silicon tube + Silicon gel + Led Strip(White PCB)
	

● Comparison of **Gel Change** in the same condition

Material	Epoxy	Silicon
Gel viscosity	3000-4000 LS	3000-12000 LS
Gel freezing Time	24-28 hrs	8-12 hrs
Ageing time	48 hrs	48 hrs
Gel Condision(-35°C)	Cracking and Fog at the surface (6 hrs)	No Change(72 hrs)
Gel Condision(120°C)	Get Yellow and Soft(2 hrs)	No Change(72 hrs)
Gel Condision(180°C)	Get Yellow ,crisp and fusion(20 min)	No Change(72 hrs)
Dipped in sea-water	Fog at the surface(72hrs)	No change
Light Transmission	82.10%	97.36%
Refractive Index	1.5	1.53

● Comparison of **Testing result** in the same condition

1. Solder changing after 24 hours in water

 <p>water level</p> <p>Spray Occurred</p>	 <p>water level</p> <p>No Change</p>
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2. Water changing after 10 days in water

Turbid

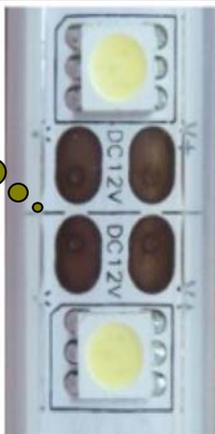


Clear

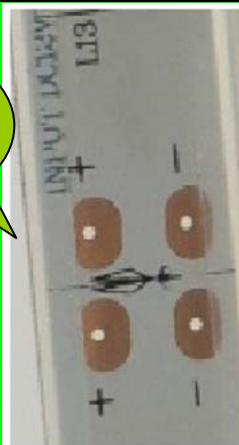


3. Weld spot changing after 3 months of using outside

Getting Brown



Still Copper



4. The whole Strip changing after 6 months of using outside

Yellow.

Was burned?~_~



Still white.

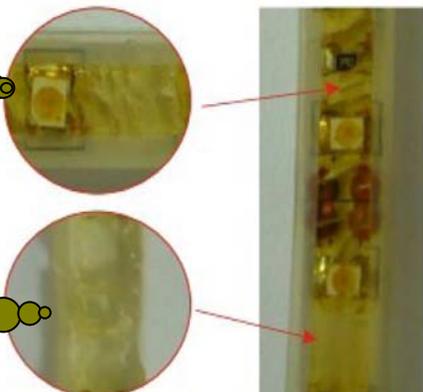
A new one?
O_^



Cracks appeared on the surface, epoxy changed

Cracks

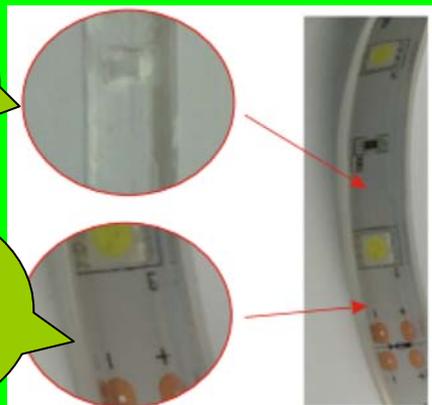
Are you Epoxy?



Silica gel still worked well

Still so flexible

Hey, Silica



5. Change after 12 months of using outside

Oh, you need Face lifting



I still can recognize you, Silica



6. Putting at -18°C

Rigid. Are you light bar?

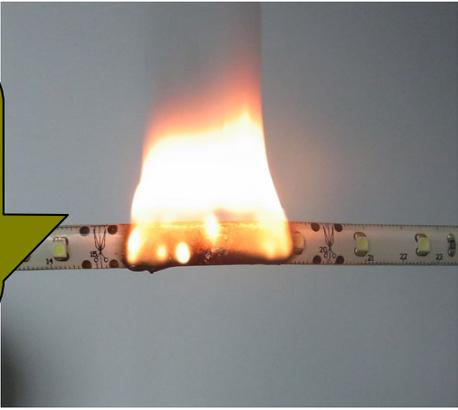


Flexible. Nice to meet you, LED Strip

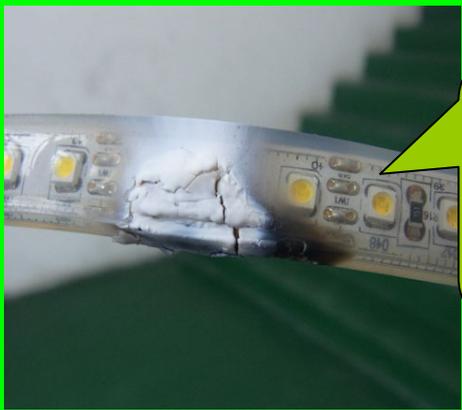


7. Combustion-supporting and Flame retardant

Please, don't.

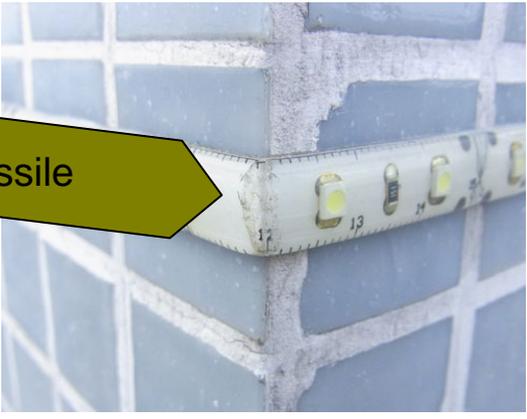


Come on, if you like



8. Intallating in the unstable climate

Fissile



No Crack



9. Flexibility

Don't bend me any more



No problem in a smaller corner



10. Environment-adaptability

It's safer for me living indoor and without water. ^_^



I like swimming with the fishes ^_^

