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PLASTICULTURE
 GROWING
 RELIABILITY & STRENGTH



PLASTICULTURE

Gundle®

API

Grow with Gundle API for a secure future
 Gundle Products offer free on site service to ensure compliance with the specification
 in all aspects to achieve correct installation and complete security.



PLASTICULTURE

PEACE OF MIND
RELIABILITY *Strength*

INTRODUCTION TO THE GUNDLE API RANGE OF PLASTICULTURE PRODUCTS

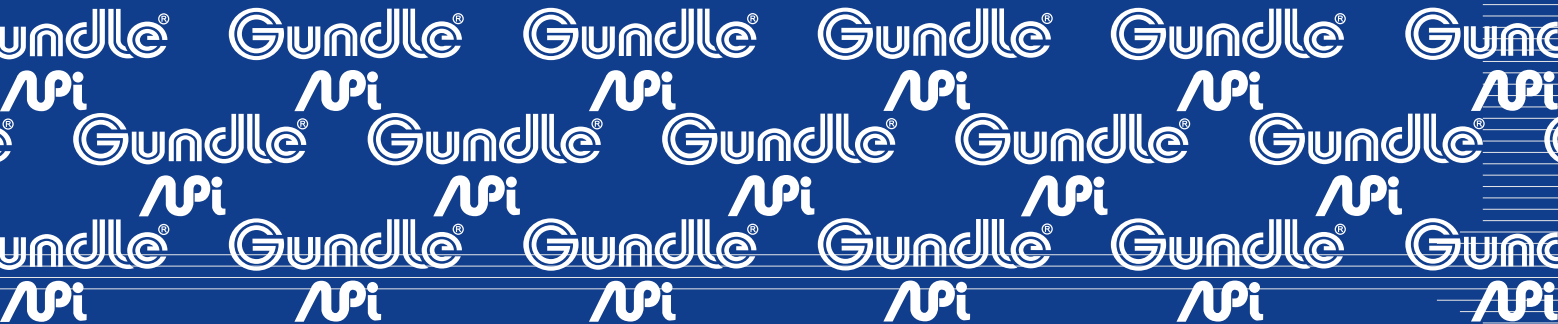
Gundle API has been the market leader in the field of Plasticulture for the past quarter of a century. It was the first company to manufacture agricultural films such as Greenhouse Films, Plastic Mulch, Hydroponic Membranes, Wide Width Silage and a diverse range of other agricultural films. Today Gundle API is still the only manufacturer of most of the plastic membranes used in South Africa.

Over the years Gundle API has built up a proud name for quality and service. Our products have set the standard in the industry for quality and performance and are supported by one of the most sophisticated laboratories in the country. We are also ISO 9000 certified and our products carry the SABS mark where this is a requirement.

Gundle API customers can safely rely on the track record we have built up over the past 30 years. We also have a national staff of specialized sales people who provide on site service when required.



PLASTICULTURE





EVADEK



BENEFITS OF EVADEK

Greenhouse film manufactured to suit South African environmental conditions.

Gundle uses the latest technology in UV Stabilizers to give your film longer life.

Addition of light diffusion agents can increase uniformity and quality of plants.

Antifogging agents control water droplets (condensation) for greater light transmission and diffusion, and less spread of disease.

Better climate control with the addition of infrared inhibitors (IR).

UV Blockers reduce the transmission of harmful UV rays to the plants, reducing the chances of a Botrytis problem and giving you a suitable light composition for your crop.

EVADEK films are available in widths from 2 to 9 metres, length determined by requirements and thickness ranging from 150 micron to 250 micron depending on requirements.

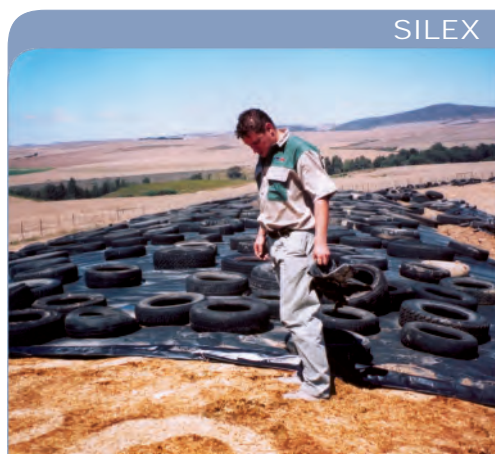


EVADEK

EVADEK ULTRADEK TINIVIN			
	TEST VALUES		
	STANDARD EVADEK GREEN TINT	"NEW" ULTRADEK EVADEK 40 D	TINIVIN
THICKNESS (um)	200	200	200
TENSILE STRENGTH, MD (N/mm ²)	13.63	29.54	13.86
TENSILE STRENGTH, TD (N/mm ²)	13.63	28.40	14.77
ELONGATION AT BREAK, MD (%)	756.02	1458.84	1451.88
ELONGATION AT BREAK, TD (%)	1235.54	1633.85	1658.94
TEAR RESISTANCE, MD (N/mm)	156.25	155.00	148.75
TEAR RESISTANCE, TD (N/mm)	143.75	155.00	137.50
DART DROP, surface (g)			
DART DROP, faults (g)			
TOTAL TRANSMISSION (%)	74.7893	55.7053	64.6875
DIFFUSED TRANSMISSION (%)			
IR EFFECTIVELY (%)			
PUNCTURE RESISTANCE (N/mm)	73.00	95.00	



SILEX



SILEX SHEETING

BLACK OR WHITE PLASTIC SHEETING

Ensures exclusion of air and preservation of fodder crops. **SILEX** is a specially formulated high quality silage cover. Long lasting **SILEX** has greater puncture and tear resistance and maintains an effective air/rain tight seal and ensures less damage to the silage. The UV Stabilizer ensures a longer storage life for your silage fodder.

A variety of widths up to 8 metres to suit specific bunker or trench silos (No joining is required, resulting in less time and labour for covering).

Feed your animals with top quality fodder, well preserved by **SILEX**.

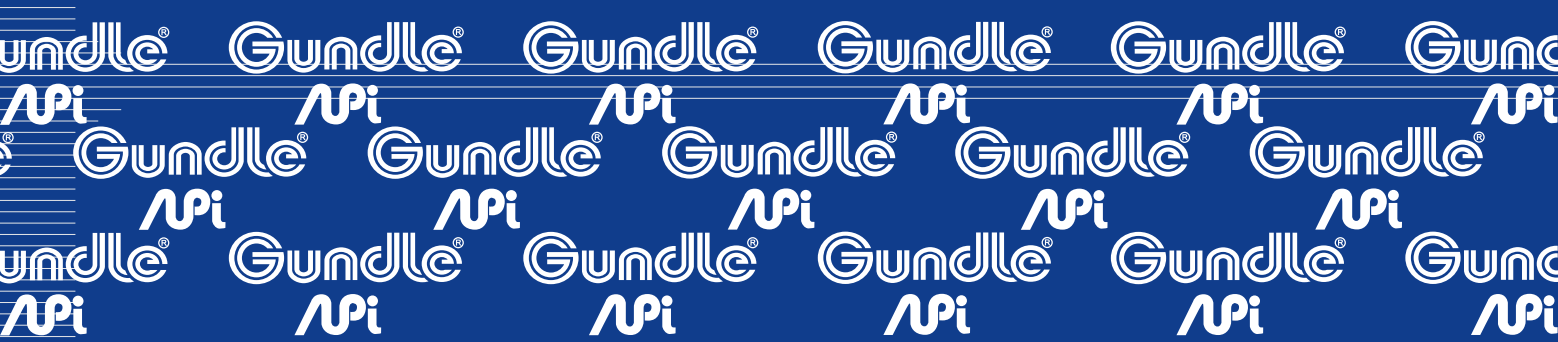
SILEX - preserving your silage for the future.

SILEX SHEETING SIZES

PRODUCT	SIZE
SILEX BLACK SHEETING	150um x 4m x 30m
150 micron	150um x 6m x 30m
With UV Stabilizer	150um x 8m x 30m
	150um x 8m x 50m
JUMBO SILEX BLACK SHEETING	150um x 2m x 100m
150 micron	150um x 4m x 100m
With UV Stabilizer	150um x 6m x 100m
	150um x 8m x 100m
SILEX BLACK SHEETING	250um x 4m x 30m
250 micron	250um x 6m x 30m
With UV Stabilizer	250um x 8m x 30m



SILEX



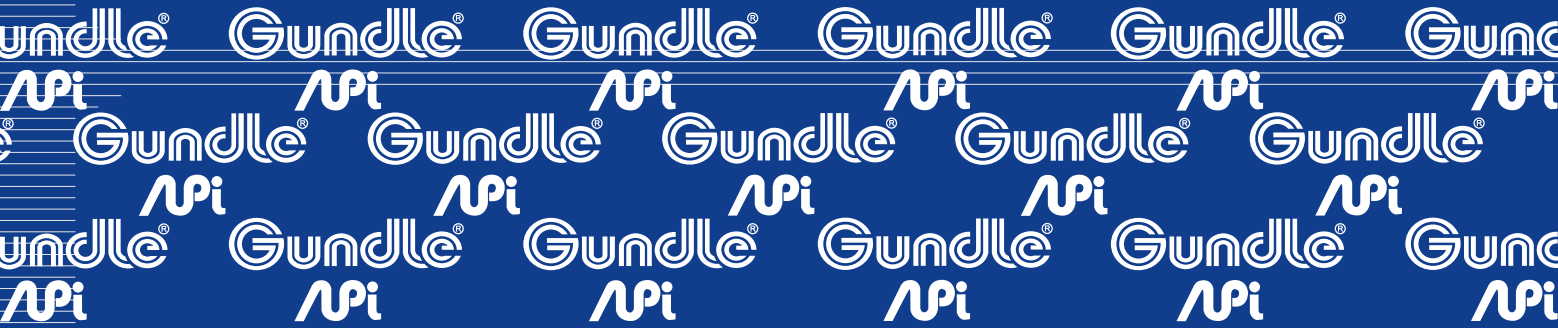
GUNMULCH



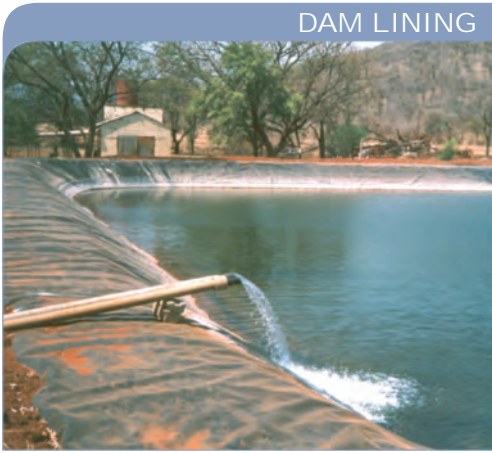
BLACK OR CLEAR MULCH AND BLACK-WHITE OR BLACK-SILVER CO-EXTRUDED

South Africa's most technically advanced plastic mulch. Ensuring optimum growth and improved yield. Soil moisture conservation ($\pm 40\%$ savings) which in turn gives low soil moisture variation in the root zone, therefore reducing plant stress. Improvement of root structure promotes more active root growth. Black mulch eliminates light, preventing the photosynthetic process in weeds. Elimination of weeds also contributes to accelerated growth and higher yields through less competition for existing soil nutrients. Clear mulch raises soil temperatures for excellent post winter germination. Optimum conditions ensure earlier and larger crops.





FARM DAM LINING



DAM LINING

FARM DAM LINING

BENEFITS OF DAM LINERS

Dam Lining engineered for proven quality and cost effective solutions in to the Agricultural, Industrial, Mining, Leisure and Waste Disposal sectors.

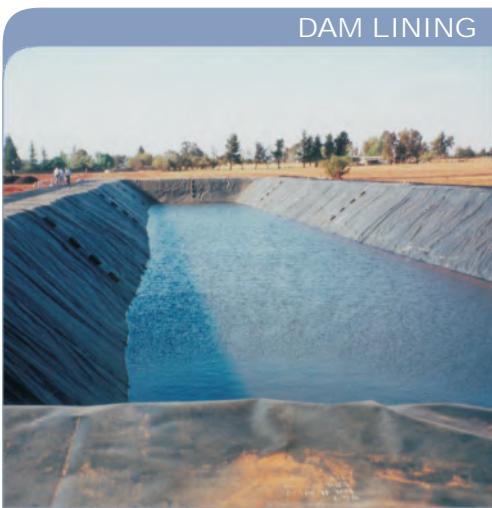
The Dam Lining is formulated from different polymers (HDPE, LDPE, EVA etc.) to meet the requirements of the specific applications.

The ultra violet stabilized Dam Lining was developed to suit a wide range of climatic conditions, and provides flexibility and durability in various applications.

The Dam Lining has excellent welding capabilities with either the extrusion or wedge welding systems, ensuring effective jointing of membranes.

Width: 6,8 metres

Length: 50 metres



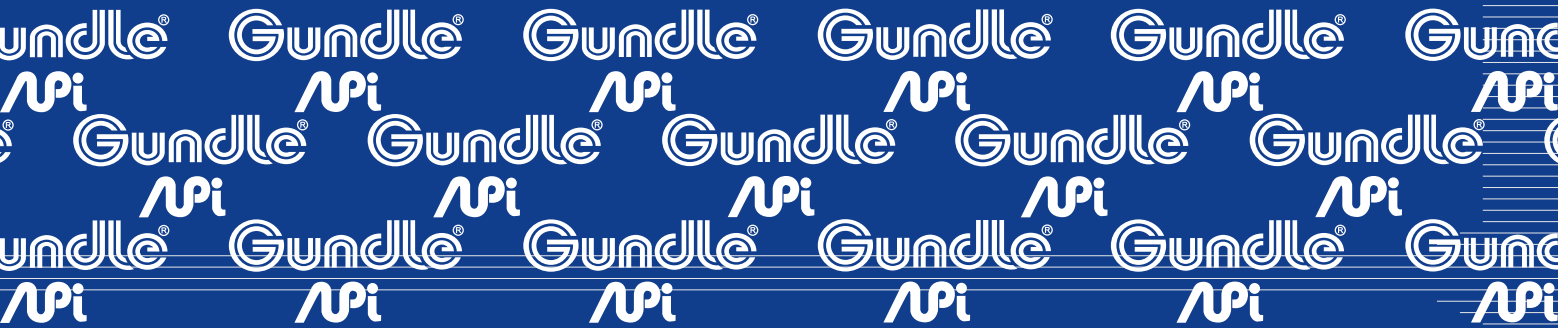
DAM LINING



DAM LINING

HIGH DENSITY POLYETHYLENE (HDPE) GEOMEMBRANESMOOTH SI (METRIC) UNITS

PROPERTIES	TEST METHOD	0.75mm	1.00mm	1.25mm	1.50mm	2.00mm	2.50mm	3.00mm	TESTING FREQUENCY (minimum)
THICKNESS - mils (min. ave.) * lowest individual of 10 values	D5199	nom. (mil) 10%	nom. (mil) 10%	nom. (mil) 10%	nom. (mil) 10%	nom. (mil) 10%	nom. (mil) 10%	nom. (mil) 10%	per roll
DENSITY (min.)	D1505/D 792	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	90,000kg
TENSILE PROPERTIES (1) (min. ave.) * yield strength * break strength * yield elongation * break elongation	D 638 TYPE IV	11 kN/m 20 kN/m 12% 700%	15 kN/m 27 kN/m 12% 700%	18 kN/m 33 kN/m 12% 700%	22 kN/m 40 kN/m 12% 700%	29 kN/m 53 kN/m 12% 700%	37 kN/m 67 kN/m 12% 700%	44 kN/m 80 kN/m 12% 700%	9,000kg
TEAR RESISTANCE (min. ave.)	D 1004	93 N	125 N	156 N	187 N	249 N	311 N	374 N	20,000kg
PUNCTURE RESISTANCE (min. ave.)	D 4833	240 N	320 N	400 N	480 N	640 N	800 N	960 N	20,000kg
STRESS CRACK RESISTANCE (2)	D 5397 (App.)	200 hr	200 hr	200 hr	200 hr	200 hr	200 hr	200 hr	per GRI Gm10
CARBON BLACK CONTENT - %	D 1603 (3)	2.0 - 3.0%	2.0 - 3.0%	2.0 - 3.0%	2.0 - 3.0%	2.0 - 3.0%	2.0 - 3.0%	2.0 - 3.0%	9,000kg
CARBON BLACK DISPERSION	D 5596	note (4)	note (4)	note (4)	note (4)	note (4)	note (4)	note (4)	20,000kg
OXIDATIVE INDUCTION TIME (OIT) (min. ave.) (5) (a) STANDARD OIT OR (b) HIGH PRESSURE OIT	D3895 D 5885	100 min. 400 min.	100 min. 400 min.	100 min. 400 min.	100 min. 400 min.	100 min. 400 min.	100 min. 400 min.	100 min. 400 min.	90,000kg
OVEN AGING AT 85°C (5), (6) (a) STANDARD OIT (min. ave.) % RETAINED AFTER 90 DAYS OR (b) HIGH PRESSURE OIT (min. ave.) % RETAINED AFTER 90 DAYS	D 5721 D 3895 D 5885	55 % 80 %	55 % 80 %	55 % 80 %	55 % 80 %	55 % 80 %	55 % 80 %	55 % 80 %	per each formula
UV RESISTANCE (7) (a) STANDARD OIT (min.ave.) OR (b) HIGH PRESSURE OIT (min.ave.) % retained after 1600 hrs (9)	D 9895 D 5885	N.R. (8) 50%	N.R. (8) 50%	N.R. (8) 50%	N.R. (8) 50%	N.R. (8) 50%	N.R. (8) 50%	N.R. (8) 50%	per each formula





RYDEK



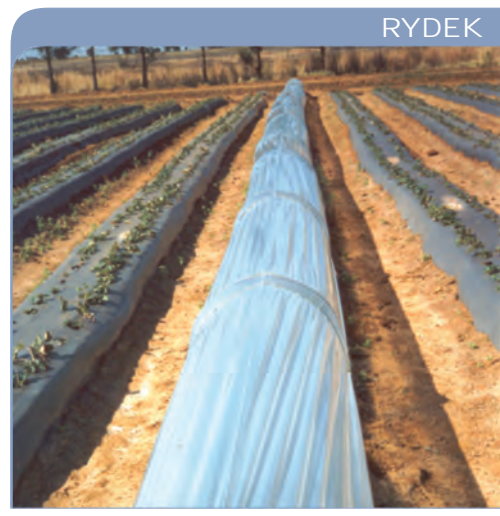
RYDEK

RYDEK ROW COVERS

RYDEK reduces frost damage.
RYDEK is formulated for short season applications. This method is preferred due to easy replacement where crops that require protection for only one season.
Wire loops should not be placed further than 750mm apart as any planned saving in this respect could result in total loss due to wind damage.
Crops grown with great success under **RYDEK** include lettuces, radishes, tomatoes, strawberries, watermelons, beans, squash, asparagus, melons and various flowers.
RYDEK is particularly suitable for the protection of seed beds for tobacco, vegetables, flower plants and for the propagation of cuttings.
Yield is increased by 40 - 100% when using **RYDEK**.

RYDEK ROW COVERS WITH UV MINI TUNNELS

- Rydek White 30um x 2m x 500m
- Rydek Clear 75um x 2m x 500m



RYDEK



RYDEK

HYDROLINER



HYDROLINER



HYDROLINER



HYDROLINER

GUNDLE HYDROLINER

Ultra Violet stabilized for long life under full exposure to the sun.

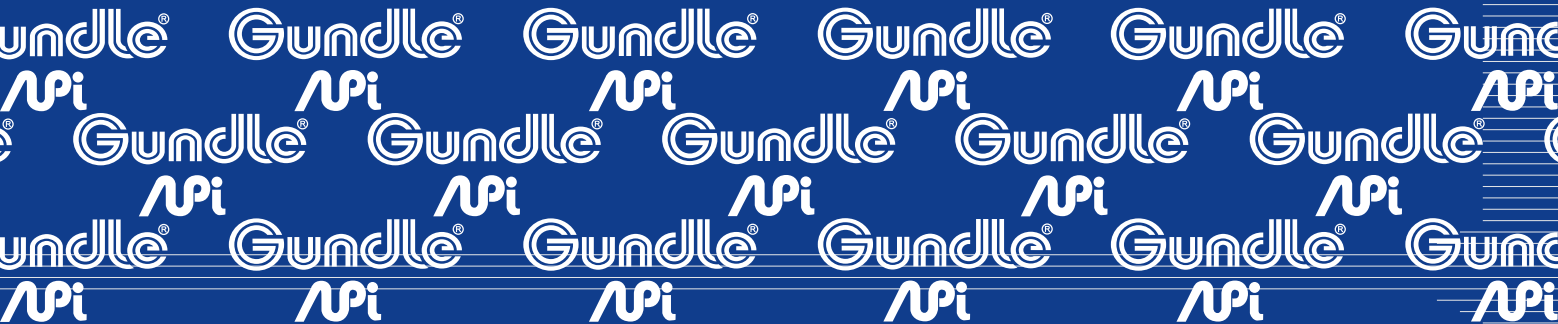
Specially formulated to allow greater puncture resistance. Hydroliner allows you to grow crops in the medium of your choice e.g.: Granite chips, vermiculite, etc.

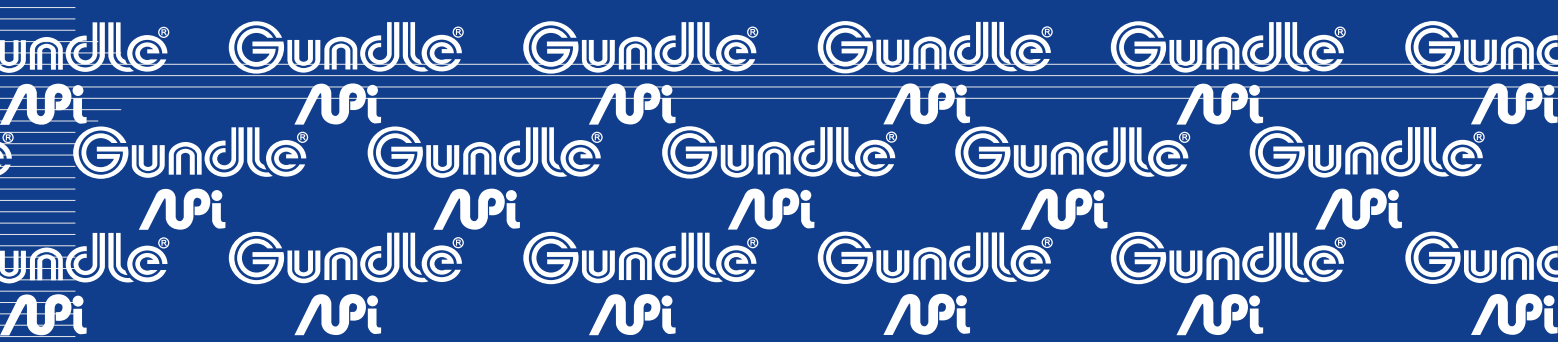
Soilless culture ensures a clean crop.

No land preparation.

Optimum uptake of water and nutrients results in an even crop.

Product can be supplied in widths of 500mm to 2000mm and 500 micron thickness. Lengths to suit customer requirements.





PLASTICULTURE

PEACE OF MIND
RELIABILITY *Strength*

GUNDLE API - OTHER PRODUCTS

- General Purpose 250um black sheeting made to the SABS 952 1985 specification. Available in widths of 1m to 6m in 30m roll lengths.
- Non-SABS black sheeting in thickness of 100um, 150um and 250um. Available in widths of 1m to 6m and roll lengths of 30m.
- Cucumber Shrink
- Fumigation Sheeting
- Brick Covers
- Pond Liners
- Pool Covers
- Clear Nursery Covers
- Ground Covers
- Truck Liners
- Damp and Waterproof sheeting for construction applications
- Mini Tunnels



TRUCKLINER



GENERAL COVERING



UT WHITE



GAUTENG

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DURBAN

Tel: (031) 263 0777 Fax: (031) 263 0789

CAPE TOWN

Tel: (021) 535 2135 Fax: (021) 535 2332

PORT ELIZABETH

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BLOEMFONTEIN

Tel: (051) 432 4547 Fax: (051) 432 4453

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