

EXPERTS
FOR GROWTH



The Slow Release Fertilizer for Turf



Floranid®

- Highly efficient slow release fertilizer for turf
- Constant and homogeneous growth
- Healthy green colour and better rooting
- Better resistance against wear
- Environmentally friendly





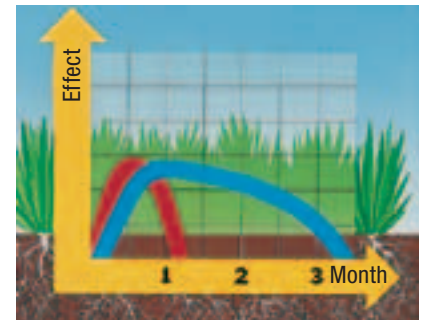
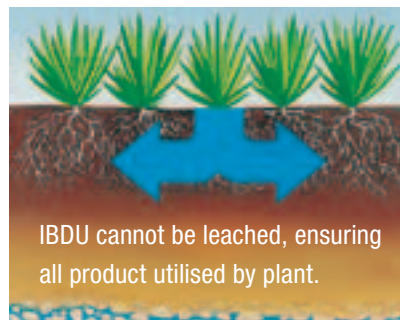
Floranid®

What is Floranid®?

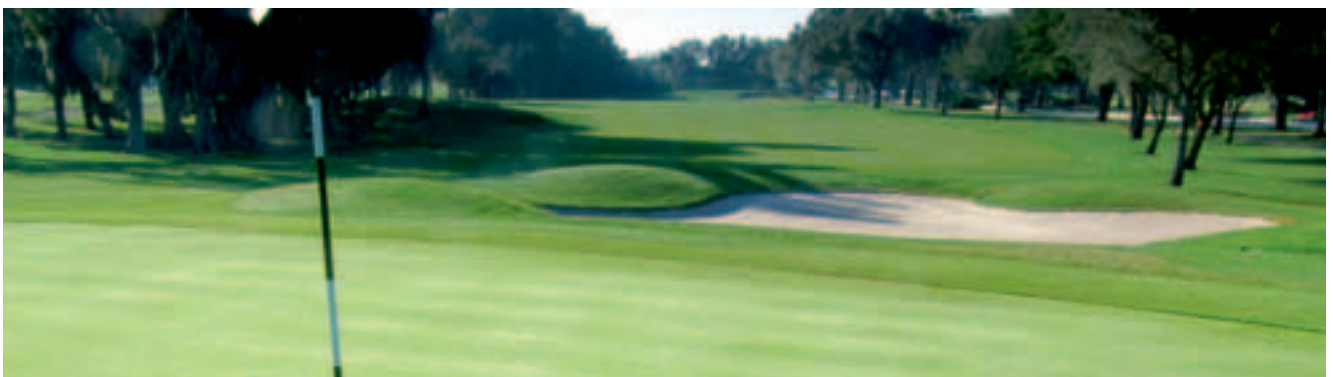
- Floranid® is COMPO's slow release fertilizer brand for turf with a longevity of about 12 weeks
- The slow release effect is based on Nitrogen from Isodur® (Isobutylidene Diurea = IBDU)
- Floranid® also contains all vital macro and micro elements at the same ratio in each granule
- Floranid® ensures excellent distribution with a small and even granular size of 0,7 – 2,8 mm (0,5 – 1,4 mm: Floranid® Eagle)



Isodur® – How does it work?



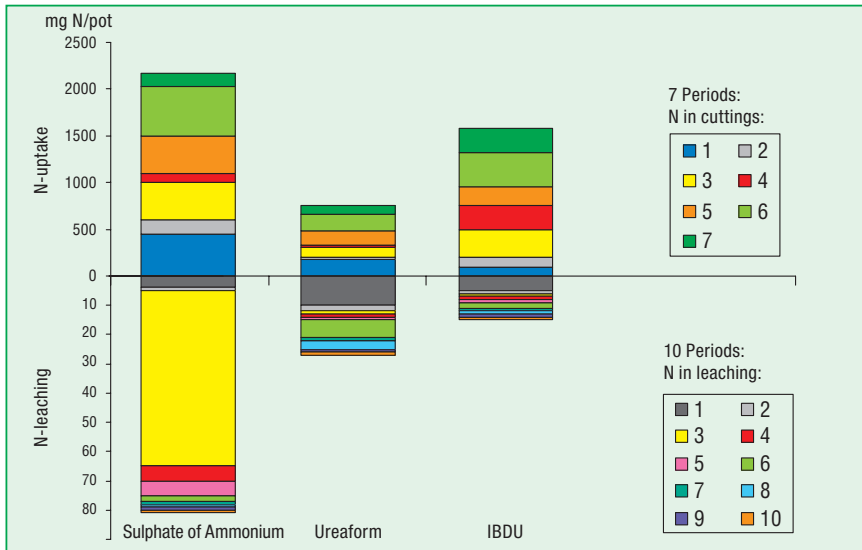
- In the first phase, Isodur® is broken down via hydrolysis into its original constituents at a rate dependent on temperature and moisture. These factors also control plant growth, so the release rate is in line with the biological demand of the plant.
- Efficient slow release effect even under difficult soil conditions, such as pure sand constructions
- In the second phase, the slow release Nitrogen is converted by micro-organism into Ammonium and Nitrate ready for plant uptake. Isodur® is 100% plant available after conversion.
- By using slow release Isodur® Nitrogen leaching is minimised and homogeneous turf growth is ensured over a period of up to 12 weeks.





Floranid® – High N-efficiency and superior Rooting

N-uptake and N-leaching of turf for different slow-release N-fertilizers (Dressel und Hähndel, 1987)



- Isodur®/IBDU show excellent results proving very constant N uptake over a long term period (upper part of the graphics) as the cuttings prove
- COMPO's Isodur®/IBDU also showed the best results by long term examination of leaching (see below part of the graphics)
- IBDU proves a higher efficiency compared to Ureaform-Nitrogen, another slow-release form of Nitrogen

(N-fertil.: 4 x 0,7 g N/pot; Sandconstruction; Aug. 85 – Nov. 1986)

- Permanent Research and Product Development



Impact on Rooting



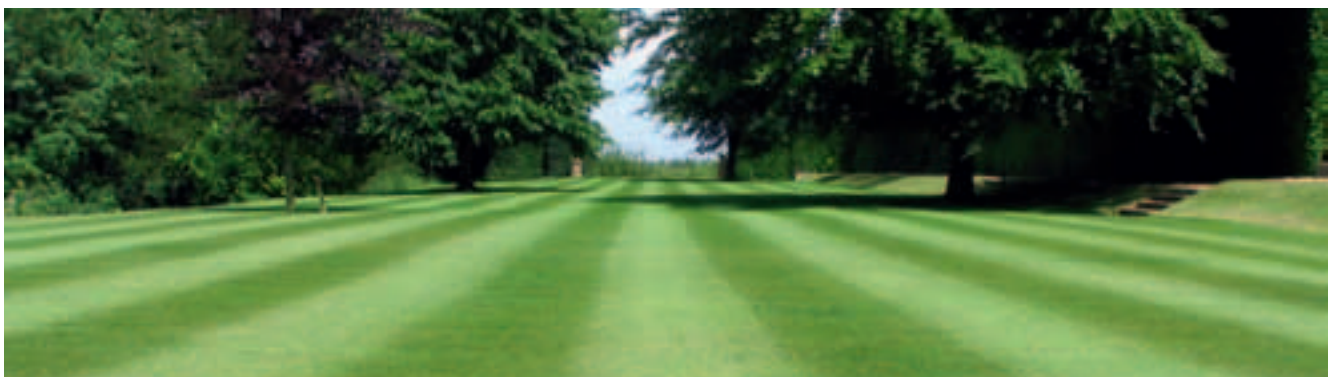
No Fertilizer



NPK Mineral Fertilizer → inferior rooting



Floranid® Permanent → very good rooting





Floranid® – No Scorching with the lowest Salinity



(D722/06/VBG/413; Limburgerhof; 24 g N/m²/a in 3 applic., in March, June, August; appl.: 18.08.; photos: 22.08.)

- No Scorching by using Floranid® Slow Release Fertilizer
- Standard Fertilizers such as Ammonium Sulphate and Urea only have short term effect and may burn the turf

Salt Index of different Fertilizers

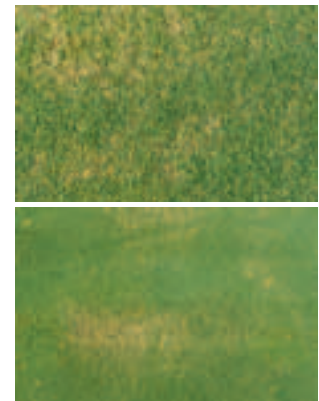
Fertilizer	% N	Salt index	Salt indices per unit N
IBDU/Isodur®	31	5	0,1
Ureaformaldehyde	38	10	0,3
Organic Material	5	4	0,8
Urea	46	75	1,7
Ammonium Nitrate	33	105	3,7
Ammonium Sulphate	21	69	3,2
Calcium Nitrate	12	53	4,4
Potassium Nitrate	14	74	5,3

- Isodur®/IBDU with the lowest salt index and least burning potential
- Salinity of 32 Nitrogen units from Isodur® is comparable with only 1 Nitrogen unit of Ammonium Sulphate
- Floranid® applications do not cause scorch, even when applied at high rates

Floranid® Eagle



Conventional fine grade Fertilizer



(D714/2006, GC Limburgerhof; application 80 kg/ha N on 30.06. on dew-moistured turf, Foto; 4.7.)

- For low cut turf (e.g. golf greens) COMPO's Floranid® Eagle range is a very safe product without any scorching hazard. The turf aspect is healthy and green lasting 8–12 weeks.
- Standard NPK fine grades lead to uneven growth with the potential hazard of scorch. Frequent applications are expensive, labour intensive and undesirable.



The Advantages

- Highly efficient Slow Release Fertilizer
- Continuous and even growth
- Better colour of turf grass and excellent ground cover
- Lowest Salt Index/No Scorching
- Healthier turf from even Nutrition
- Lowest Nitrogen leaching, even in pure sand
- Better rooting and improved resistance to wear

For speed distances

Carbohydrates:
Energy drinks



Ready to use nitrogen:
ammonium + nitrate

For marathon distances

Long lasting energy:
Pasta, rice and meat

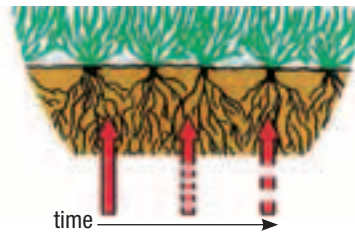


Slow release nitrogen:
Isodur®

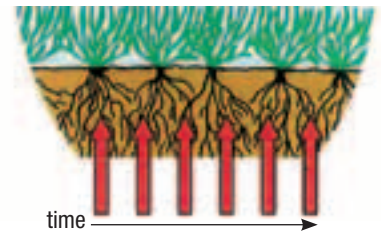
High Performance Nutrition

Like Sportsmen, turf should be fed evenly in order to avoid breakdowns

- Ammonium/Nitrate: Instant N-Nutrition
- Isodur®: Slow Release N-Nutrition (100 %)



Starter effect



Long distance effect

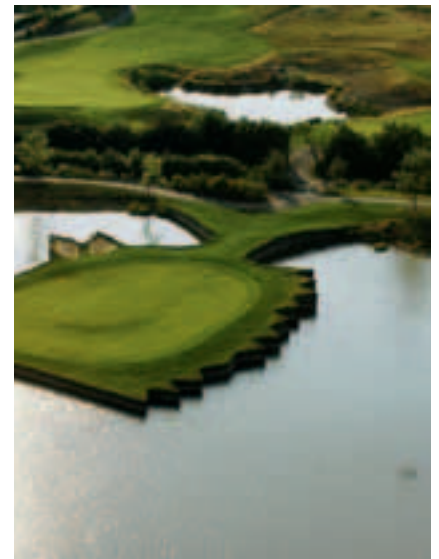
Examples of successful cases in practice



Allianz Arena,
Football Stadium,
Munich/Germany



Clairefontaine Training Center,
Training Ground of French National Soccer
Team, Clairefontaine/French



Hardenberg GolfResort,
Member of Leading Golf Courses Germany,
Northeim/Germany

Floranid® – Slow release Turf fertilizer

Product	Composition	Characteristics	Presentation	Use
Floranid® Permanent	16-7-15 (+2MgO+9%S+0,5%Fe+TE) 37% IBDU-N	Floranid® Permanent is a complete slow release fertiliser with a broad field of use in turf, landscaping and horticulture. Homogenous granules, each containing the same nutrient ratio. Turf granule size (0,7–2,8 mm) Longevity: 12 weeks depending on temperature and moisture	Bag: 25 kg Pallet size: 42 bags à 25 kg Container: 20': 21 mt	<u>Public areas, parks:</u> 30–50 g/m ² 1–3 applications per year <u>Sports, turf, playing fields:</u> 40–50 g/m ² 1–3 applications per year <u>Golf fairways:</u> 30–50 g/m ² 2–3 applications per year
Floranid® Turf	20-5-8 (+2MgO+7%S+0,3%Fe+TE) 47% IBDU-N	Floranid® Turf is a complete slow release fertiliser, specifically for turf of medium to high use. Homogenous granules, each containing the same nutrient ratio. Turf granule size (0,7–2,8 mm) Longevity: 12 weeks depending on temperature and moisture	Bag: 25 kg Pallet size: 40 bags à 25 kg Container: 20': 17,5 mt	<u>Sports turf, playing fields:</u> 40–60 g/m ² 1–3 applications per year <u>Greens:</u> 40–60 g/m ² 2–3 applications per year
Floranid® Master extra	19-5-10 (+2MgO+8%S+0,5%Fe+TE) 45% IBDU-N	Floranid® Master extra is a complete slow release fertiliser for golf greens and low cut turf. Homogenous granules, each containing the same nutrient ratio. Fine granule size (0,5–1,8 mm) Longevity: 12 weeks depending on temperature and moisture	Bag: 25 kg Pallet size: 40 bags à 25 kg Container: 20': 17,5 mt	<u>Tees:</u> 30–40 g/m ² 3–4 applications per year <u>Greens:</u> 20–40 g/m ² 4–6 applications per year
Floranid® Eagle	24-5-10 (+3%S+1,0%Fe+TE) 61 % IBDU-N	Floranid® Eagle is a complete slow release fertiliser with emphasis on nitrogen for golf greens and low cut turf. Homogenous granules, each containing the same nutrient ratio. Very fine granule size (0,5–1,4 mm) Longevity: 12 weeks depending on temperature and moisture	Bag: 25 kg Pallet size: 40 bags à 25 kg Container: 20': 20 mt	<u>Tees:</u> 30–40 g/m ² 3–4 applications per year <u>Greens:</u> 20–40 g/m ² 4–6 applications per year

Further Products:

Floranid® Club 10-5-20 (4MgO+8%S+0,5%Fe+TE)	0,7–2,8 mm
Floranid® NK 14-0-19 (+3MgO+10%S)	0,7–2,8 mm
Floranid® N32 32-0-0	0,7–2,8 mm
Floranid® Eagle K 12-6-24 (+8% S+0,4%Fe+TE)	0,5–1,4 mm
Floranid® Eagle NK 20-0-18 (+2MgO+7%S+0,3%Fe+TE)	0,5–1,4 mm
Floranid® Eagle Start 18-24-5 (+1%Fe+0,5%Mn)	0,5–1,4 mm



Folder Floranid