

Technical instructions for the application of TURF *activ*

The liquid fertilizer **TURF *activ*** is a liquid concentrate of sugar phosphoric amide, and must not be applied to plants or soils in its concentrated form. Concentrated **TURF *activ*** has a pH value of 1.5 and, undiluted, it acts like phosphoric acid. Prior to application, **TURF *activ*** has to be diluted with water in a **minimum proportion of 1 : 10** or **even better 1 : 20**, so that it loses its acid-like character.

TURF *activ* is classified to be a dangerous good (**1805 Phosphoric acid, liquid; III, Class 8 Corrosive**). It causes irritations to the eyes and skin. When working with **TURF *activ***, be sure to wear tight safety goggles and rubber or plastic gloves.

The liquid fertilizer is easily soluble in water and will not be disintegrated any more. Careful stirring or pumping gives a homogenous mixture. It is important that, whatever device is used for the application, the water has to be filled in first. This must be done to avoid that part of the concentrate can flow into the pumping system where it can no longer mix with the water. After the mixture has been stirred thoroughly, the so-obtained **TURF *activ*** solution can be sprayed onto the soil surface.

Each kind of irrigation technique is suitable to apply the solution, ranging from a watering can over irrigation vehicles to sprinklers. Irrigation immediately after application with common quantities of water per square meter facilitates the penetration of active substances into the soil and enhances the effect. Thus, the fertilizer possibly sticking to the leaves is flushed to the soil.

In case of high temperatures (exceeding 25°C) and strong wind, it is also possible that water containing dissolved **TURF *activ*** still sticking to the leaves can evaporate and thus enrich the concentrate again. This is the reason why the correct proportion of dilution of 1 : 20 may be changed again into a proportion of 1 : 5 or even less.

If **TURF *activ* is applied in a dilution of less than 1 : 10, it is compulsory to irrigate the treated area(s) immediately afterwards.** Nevertheless, there is still a risk of slight damages to the leaves (changes of colour to yellow or brown). These slight changes of colour disappear after several days, but one should avoid any other risk.

If **TURF *activ* is applied in a dilution of less than 1 : 10,** the plant leaves are very likely to be damaged, especially if the plants had been subjected to strong mechanical stress by verticution, aeration, verti-drainage, mowing and plant diseases. Especially, if the leaf surfaces show wounds from mechanical stress, i.e. immediately after mowing, through tyre pressure or walking, liquid concentrate can penetrate into the leaves and damage the cells.

Shortly after application, molecular structures of **TURF *activ*** are anchored to the soil which are no longer mobile. **TURF *activ*** is resistant to frost and can be stored for several years without any loss in effect.

During storage, the colour of the product changes from crystal-clear to light brown due to its sugar content, when exposed to light.

The following instructions have to be obeyed:

- ⇒ All safety instructions concerning dangerous goods (**Classification 1805 Phosphoric acid, liquid; III, Class 8 Corrosive**) have to be obeyed.
- ⇒ Care must be taken that **no concentrate runs into the pumping system**. Fill in the water first, and then add **TURF activ**.
- ⇒ Prior to application, dilute the concentrate with water in the right proportion. **Minimum 1 : 10, better 1 : 20**. Stir the mixture of water and **TURF activ** well. Subsequent application improves the effect of **TURF activ**.
- ⇒ In case of lower dilution proportions, the **surface has to be intensively irrigated** immediately after application. It cannot be excluded that the colour of the plant leaves changes to brown in case of insufficient dilutions.
- ⇒ Do **not** apply **TURF activ** at air temperatures exceeding **25 °C**.
- ⇒ No application immediately after mechanical stress to which the plants have been subjected, e.g. by mowing, frequent driving, verticution etc. It is recommended, in case of **damages** to the **plant leaves**, to **wait** at least **24 hrs** before applying **TURF activ**. Do not drive over surfaces which have just been treated (tyre pressure!).