

# SE14™

## MOISTURE RETAINER

# DILUTION, MIXING AND COMPATIBILITY GUIDE

### TECHNOTE SERIES



## PRE-DILUTION

Due to the viscosity of SE14™, it has the potential to be slow to pump, especially in cold conditions. This can be overcome by pre-diluting with water at a minimum ratio of 1:1 prior to use. The lower the percentage of SE14™ being mixed, the faster it goes into solution.

1. When SE14™ is diluted with water, the temperature of both water and SE14™ affects the dilution time. The solution creates heat as the SE14™ molecules disperse in the water. When both products are 20° prior to mixing, the diluted product increases to ~27°, but goes into solution successfully. When both products are 30° prior to mixing, it increases to ~37° and this causes a white gel/Clag glue type substance to appear. In time, this will go into solution. When both products are mixed at 10°, the diluted solution increases to ~15° and takes time to fully disperse. Hence, the temperature of SE14™ prior to mixing should be 20°-25°.
2. Once diluted in water, product can be stored for up to six months without the need for agitation.

## PRE-MIXING TO MAKE 50:50 DILUTION WITH WATER

1. Pre-fill clean IBC with 500L water.
2. While providing gentle recirculation, add SE14™ via gravity feed to water in IBC.
3. Ensure when recirculating/returning mixed solution, it is below surface level of original water (ie, below 500L mark).



## TIPS

1. Keep SE14™ in shed until pre-diluting or, if cold, put in sun prior to mixing. Electric blankets have been used around IBCs to maintain warmth. Pre-diluting in warmer conditions is good practice, as the SE14™ flows easier.
2. When mixing, always add SE14™ SLOWLY to the water while recirculating.
3. Mix and recirculate until all SE14™ has completely dispersed in the water.
4. Pre-dilute well before use to avoid potential delays at seeding.

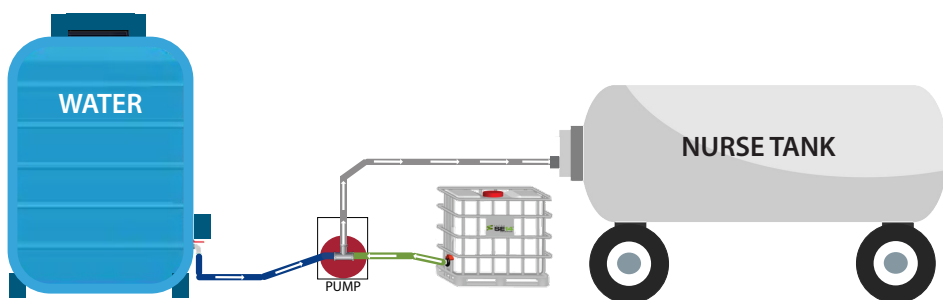


WHEN PRE-MIXING, ALWAYS  
ADD SE14 TO WATER.  
NEVER ADD WATER TO SE14.



## MIXING WITH WATER PRIOR TO PUMPING INTO NURSE TANK

An alternative to pre-diluting well before sowing begins is to dilute when cartage tanks are being filled. Using a twin pump intake, whereby separate hoses are attached to the bottom of an SE14<sup>TM</sup> IBC and a water source, the venturi created allows for the pumping of SE14<sup>TM</sup> and water simultaneously.



1. Draw water into pump prior to opening the SE14<sup>TM</sup> valve.
2. A diluted mix of SE14<sup>TM</sup> is pumped into the cartage tank.



Venturi Adaptor

The large cam lock connector at right, near red tap, is for hose from pump. The connector at left goes to tank on truck or liquid cart. The outlet (top) with red tap goes to shuttle. The tap on inlet of liquid stream into the device can divert liquid to the 2" bypass of the venturi for quick fill or via the venturi for extraction of SE14 from the IBC.

## TIPS

1. Banjo or FMSA venturi pumps can be used when filling nurse or airseeder tanks.



2. Chemical handlers also can be used with nurse tanks – pump water through bottom of chemical handler to nurse tank and introduce SE14<sup>TM</sup> via gravity into top of chemical handler.

## ADDING SE14<sup>TM</sup> TO LIQUID CARTS

1. Half fill liquid cart with water and/or UAN.
2. Commence agitation.
3. Add pre-diluted 1:1 SE14<sup>TM</sup> mixture.
4. Add trace elements, fungicides or other crop protection/nutrition products.
5. While agitation continues, top-up with required water or UAN.

## TIPS

1. Ensure liquid delivery is set-up to deliver SE14<sup>TM</sup> as close to seed as possible – *LIQUID PLACEMENT IS KEY.*
2. Use minimum 50L/ha water rate – higher the better.

## COMPATIBILITY

Successful compatibility tests have been carried out with the following products:

- UAN
- EverGol Prime
- Impact (250g/L Flutriafol)
- Uniform
- Various oxide and chelated trace elements (Cu, Zn, Mo, Mn).

## TIP

As with all products, if unsure of the compatibility of a mixture, conduct a jar test prior to mixing larger volumes.