

RO-208™

a new generation of 2 different and unique
siloxane chemistries-based surfactants,
low-foaming and with zero residue.

RO-208™
is used as tank mix compatibility,
acidifying agent and a penetrator.

RO-208™
improves scientifically the efficiency
through better penetration,
wetting and spreading properties, improv-
ing deposition and drift reduction.

RO-208™ key advantages:

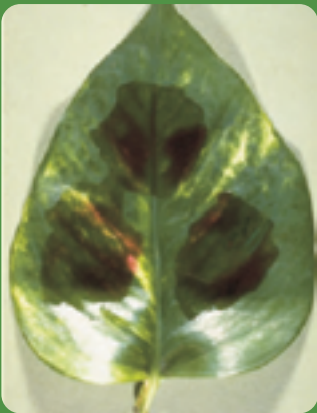
- Both components of RO-208™ are surface-active
- First component acts quickly on water and hydrophilic activities
- Second component acts slowly on oils and hydrophobic actives
- Second component helps penetration of biological membranes
- Good reduction of surface tension (good adhesion of spray to surfaces)
- Super spreading
- Forms very little foam
- Clear transparent stable liquid formulation.



How does RO-208TM work:



Before



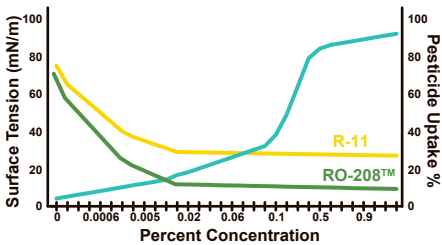
After

RO 208TM acts as a penetrator by 2 mode of action:

- 1. Distributing on the leaf waxy layer and driving chemicals through this natural layer. The result is a faster and more efficient uptake and response from spray chemicals.
- 2. Its unique strong chelating property binds the chemical to the rind of Hydroxyl ions and pushes the pesticide or the fertilizers to the target location

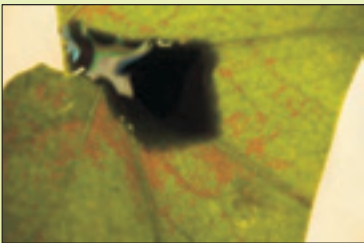
RO-208TM surface tension:

Surface Tension & Pesticide Uptake vs. Surfactant Concentration

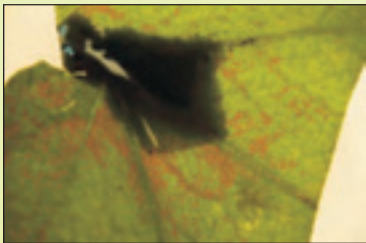


	Concentration (aq. solution)	Spreading 50ul of on PP (mm)	Surface Tension (mN/m)
Water	-	0.8	72
Methylated rape seed oil	0.5%	1.0	33
Other simple Non-Ionic adjuvants	0.1%	27.5	22
RO-208 TM	0.1%	47.4	25

Visual presentation of how RO-208TM actually penetrate the crop leaf epidermis:



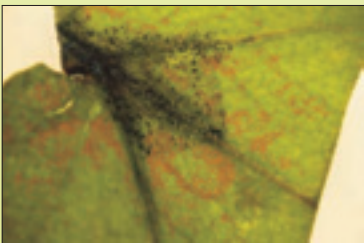
RO-208TM initial application



RO-208TM 4 minutes after application



RO-208TM 8 minues after application



RO-208TM 15 minutes after application



RO-208TM underside photo of the leaf 1 hour after application

BUFFERING:

RO-208™ has acidification properties which prevent degradation of certain agrochemicals that may be caused due to solution high or low pH.

RO-208™ neutralise the dissolved salts that inhibit the water ability to change pH. This in effect softens the water and helps to overcome phytotoxicity problems.

RO-208™ also improves the level of beneficial nutrients that are absorbed by plants. The increased elemental absorption through roots and leaves is due to a great level of available micro-nutrients in tank mixes.

YOUR WATER QUALITY AND ALKALINITY

The quality and physical properties of water have a direct influence on some pesticide performance. High levels of dissolved salts can keep alkaline water buffered at a high pH which may adversely affect some chemicals. In some cases, a direct reaction occurs causing a complete breakdown known as alkaline hydrolysis.

WHAT IS ALKALINE HYDROLYSIS?

When the pH of water exceeds 7 the concentration of hydroxyl ions (OH-) becomes high enough to break down bonds within the chemical structure. This breakdown inhibits the performance of some pesticides. These include herbicides, insecticides, fungicides and growth regulators. Hard water (above 200-250 ppm of dissolved ions) will also be improved by using this product. It has the secondary benefit of softening the water - another cause of loss of activity in many chemicals.

RO-208™ Summary:

- Surfactant blend consisting of 100% siloxane chemistry
- Two modes of action (one part has an impact on the aqueous phase, and the other part on the oil phase and helps penetration of systemic a.i. through biological membranes)
- Both components improve biological efficacy of pesticides
- Does not foam; may suppress foam formation of pesticides
- Spreading is sufficient so that no spray spots are formed on flowers and fruits
- Provides higher degree of rainfastness
- Aimed mainly for the fruit and vegetable segment, with fungicides & insecticides outdoors and under protected conditions (greenhouse) - also works very well with herbicides
- RO 208™ does not cause phytotoxic symptoms on plants
- No hazardous symbol concerning European rules: toxicologically benign.

Straight Surfactant



RO-208™ Surfactant

Spreading of 0.2% Dithane Ultra (mancozeb WG 80%) through RO-208™

0.05% RO-208™ before drying

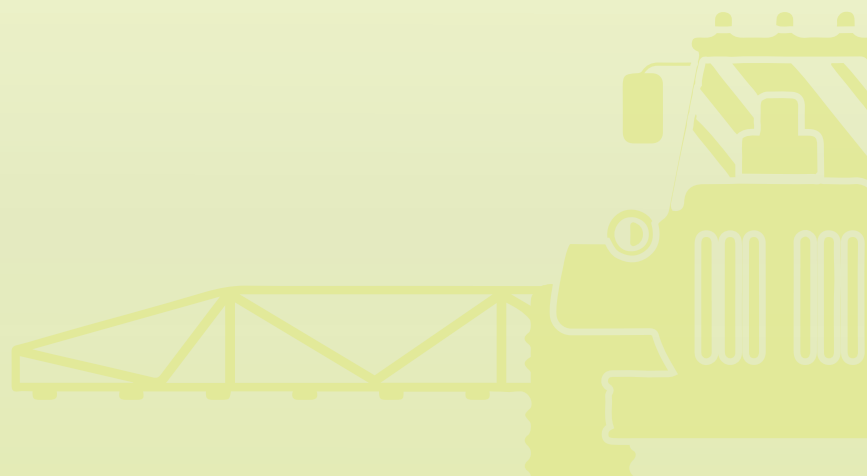


0.05% RO-208™ after drying





RO-208™



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