



LODI RULES for Sustainable Winegrowing 2017

Pesticide Risk Model: PEAS INSTRUCTIONS



The EASIEST way to calculate the total Pesticide Environmental Assessment System (PEAS) **Impact Index Units** for a vineyard for the certification year (post-harvest 2016 through harvest 2017) is to do it on a per application basis, then take the sum.

1. For each pesticide applied, calculate the per acre rate that was used for that application. If a pesticide was applied only on part of the vineyard (e.g. an herbicide application), take the total amount of pesticide applied to the area sprayed and divide this number by the total vineyard acres treated to get the per acre rate. See examples below.
2. To calculate the **Impact Index** for a single application, look up the pesticide on the PEAS list (Tab 7 in the Binder or available on lodigrowers.com) and find the **Impact Index per unit** for that pesticide. The **Impact Index** listed is for one unit of the pesticide. For example, for Sulfur dust the **Impact Index** is 0.15 per pound (lb) of sulfur. If 10 lbs per acre of sulfur is applied in one dusting, the total **Impact Index Units** for that application per acre is:

$$10 \text{ lbs per acre} \times 0.15 \text{ Impact Index per unit (lb)} = 1.50 \text{ Impact Index Units per acre}$$

3. Calculate the **Impact Index Units** for each application of pesticides for the entire year from harvest to harvest, and add them all up to get the total number of PEAS **Impact Index Units** for the certification year. See below:

Spray Date	Pesticide Trade Name	Per Acre Rate	Unit of Material	Impact Index per Unit	Impact Index Units per Acre
4/13/17	Sulfur dust	10	lb	0.15	1.50
4/22/17	Sulfur dust	15	lb	0.15	2.25
5/03/17	Sulfur dust	15	lb	0.15	2.25
5/13/17	RoundUp Ultra Dry*	$0.92 \div 3 =$ 0.31	lb	0.23	0.07*
5/16/17	Sulfur dust	14	lb	0.15	2.10
5/29/17	Sulfur dust	15	lb	0.15	2.25
6/02/17	Rally 40W	3.88	oz	0.08	0.31
6/24/17	Provado Solupak 75% WP	0.63	oz	5.47	3.45
6/24/17	Acramite 50WS	0.87	lb	0.82	0.71
6/24/17	Pristine	11.49	oz	0.02	0.23
7/28/17	Gramoxone Max*	$1 \div 3 =$ 0.33	pt	3.43	1.13*
7/31/17	RoundUp Ultra Dry*	$0.63 \div 3 =$ 0.21	lb	0.23	0.05*
Total PEAS Impact Index Units for 2017					16.30 ✓

*Herbicide was only sprayed on a third of the vineyard, so the per acre rate was divided by 3 and that figure was used to calculate the per acre **Impact Index Units**

To become certified, do not exceed 50 Total PEAS Impact Index Units

NOTE: If you plan to use a pesticide that is not on the current PEAS list, please contact the Lodi Winegrape Commission ASAP (stephanie@lodiwine.com) so that the PEAS **Impact Index Unit** can be calculated and added to the list. The deadline for adding new PEAS pesticides is August 1st, 2017. **EVERY Lodi Rules participant must submit PEAS calculations to the Auditor by September 1st, 2017.**