# TRACK YOUR CONDITIONS TO MANAGE HEAT STRESS



### **SWINE TEMPERATURE-HUMIDITY INDEX (THI)**

	105	00	02	02	0.4	0.0	07	00	00	01											
ŀ	105	80	82	83	84	86	87	89	90	91	00	0.0	04								
	100	78	79	80	82	83	84	85	86	87	88	90	91								
	99	78 77	79	80 79	81	82	83	84	86	87 86	88	88	90 89	00							
ŀ	98	77	78 78		80	82	83 82	84	85	85	87	88		90	01						
	97 96	76	77	79 78	80 79	81 80	81	83 82	84 84	84	86 86	87 87	88 88	90 89	91 90	91					
			77	78																	
	95 94	76 75	76	77	79 78	80	81	82	83 82	84 83	85	86 85	87 86	88	89 88	90 89	90				
H						79	80	81			84			87				00			
ŀ	93	75	76 75	77	78 77	79	80	80	81	82	83	84	85	87	87	88	89	90	00		
(F)	92 91	74 74	75 75	76 76	76	78 77	79 78	80 79	81	82 81	83 82	84	84 84	85 of	86 86	87 86	88 87	89	90 89	90	91
						77			80			83		85				88			
O N	90 89	73 73	74	<b>75</b> 74	76 75		78 77	79 78	79 79	80 80	81	82 81	83 82	84	85 84	86 85	87 86	87 86	88	89 88	90
_			74			76					80			83					87		89
Y	88	72	73	74	75	76	76	77	78	79	80	81	81	82	83	84	85	85	86	87	88
<u> </u>	87	72	73	73	74	75	76	77	77	78	79	80	81	81	82	83	84	85	85	86	87
EMP	86	71	72	73	74	74	<b>75</b>	76	77	78 77	78	79 78	80	81	81	82	83	84	84	85	86
=	85	71	72	72	73	74	<b>75</b>	75	76		78		79	80	81	81	82	83	84	84	85
	84	70	71	72	72	73	74	<b>75</b>	75	76	77	78	78	79	80	80	81	82	83	83	84
ŀ	83 82	70	71	71 71	72	73	73 73	74	<b>75</b>	75 75	76	77 76	78 77	78	79	80	80	81	82	82	83 82
ŀ			70		71	72	72	73	74		75			77	78	79	79	80	81	81	
ŀ	81		70	70 70	71	71	72	73	73	74	<b>75</b>	<b>75</b>	76 75	77	77 76	78 77	78	79 78	80	80	81
	80			70	70	71	71	72	73	73 73	74	74		76			78	77	79	79	80
	79				70	70		72	72		73	74	74	75	75	76	77		78	78	79
	78					70	70	71	71	72	72	73	74	74	75	75	76	76	77	78	78
	77	 					70	70	71	71	72	72	73	73	74	74	<b>75</b>	75	76	76	77
ŀ	76	 						70	70	70	71	72	72	72	73	74	74	74	75	76	76
	75									70	70	71	71	72	72	73	73	74	74	75	75
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100

**HUMIDITY (%)** 

## **HUMAN HEAT INDEX**

110	136										
108	130	137									
106	124	130	137								
104	119	124	131	137							
102	114	119	124	130	137						
100	109	114	118	124	129	136					
98	105	109	113	117	123	128	134				
96	101	104	108	112	116	121	126	132			
94	97	100	103	106	110	114	119	124	129	135	
92	94	96	99	101	105	108	112	116	121	126	131
90	91	93	95	97	100	103	105	109	113	117	122
88	88	89	91	93	95	98	100	103	106	110	113
86	85	87	88	89	91	93	95	97	100	102	105
84	83	84	85	86	88	89	90	92	94	96	98
82	81	82	83	84	84	85	86	88	89	90	91
80	80	80	81	81	82	82	83	84	84	85	86
	40	45	50	55	60	65	70	75	80	85	90
	108 106 104 102 100 98 96 94 92 90 88 86 84 82	108       130         106       124         104       119         102       114         100       109         98       105         96       101         94       97         92       94         90       91         88       88         86       85         84       83         82       81         80       80	108       130       137         106       124       130         104       119       124         102       114       119         100       109       114         98       105       109         96       101       104         94       97       100         92       94       96         90       91       93         88       88       89         86       85       87         84       83       84         82       81       82         80       80       80	108       130       137         106       124       130       137         104       119       124       131         102       114       119       124         100       109       114       118         98       105       109       113         96       101       104       108         94       97       100       103         92       94       96       99         90       91       93       95         88       88       89       91         86       85       87       88         84       83       84       85         82       81       82       83         80       80       80       81	108       130       137         106       124       130       137         104       119       124       131       137         102       114       119       124       130         100       109       114       118       124         98       105       109       113       117         96       101       104       108       112         94       97       100       103       106         92       94       96       99       101         90       91       93       95       97         88       88       89       91       93         86       85       87       88       89         84       83       84       85       86         82       81       82       83       84         80       80       80       81       81	108       130       137         106       124       130       137         104       119       124       131       137         102       114       119       124       130       137         100       109       114       118       124       129         98       105       109       113       117       123         96       101       104       108       112       116         94       97       100       103       106       110         92       94       96       99       101       105         90       91       93       95       97       100         88       88       89       91       93       95         86       85       87       88       89       91         84       83       84       85       86       88         82       81       82       83       84       84         80       80       80       81       81       82         40       45       50       55       60	108       130       137         106       124       130       137         104       119       124       131       137         102       114       119       124       130       137         100       109       114       118       124       129       136         98       105       109       113       117       123       128         96       101       104       108       112       116       121         94       97       100       103       106       110       114         92       94       96       99       101       105       108         90       91       93       95       97       100       103         88       88       89       91       93       95       98         86       85       87       88       89       91       93         84       83       84       85       86       88       89         82       81       82       83       84       84       85         80       80       80       81       81       82       82	108       130       137         106       124       130       137         104       119       124       131       137         102       114       119       124       130       137         100       109       114       118       124       129       136         98       105       109       113       117       123       128       134         96       101       104       108       112       116       121       126         94       97       100       103       106       110       114       119         92       94       96       99       101       105       108       112         90       91       93       95       97       100       103       105         88       88       89       91       93       95       98       100         86       85       87       88       89       91       93       95         84       83       84       85       86       88       89       90         82       81       82       83       84       84       85 <td>108       130       137         106       124       130       137         104       119       124       131       137         102       114       119       124       130       137         100       109       114       118       124       129       136         98       105       109       113       117       123       128       134         96       101       104       108       112       116       121       126       132         94       97       100       103       106       110       114       119       124         92       94       96       99       101       105       108       112       116         90       91       93       95       97       100       103       105       109         88       88       89       91       93       95       98       100       103         86       85       87       88       89       91       93       95       97         84       83       84       85       86       88       89       90       92</td> <td>108       130       137         106       124       130       137         104       119       124       131       137         100       109       114       119       124       130       137         100       109       114       118       124       129       136         98       105       109       113       117       123       128       134         96       101       104       108       112       116       121       126       132         94       97       100       103       106       110       114       119       124       129         92       94       96       99       101       105       108       112       116       121         90       91       93       95       97       100       103       105       109       113         88       88       89       91       93       95       98       100       103       106         86       85       87       88       89       91       93       95       97       100         84       83       84</td> <td>108       130       137         106       124       130       137         104       119       124       131       137         100       114       119       124       130       137         100       109       114       118       124       129       136         98       105       109       113       117       123       128       134         96       101       104       108       112       116       121       126       132         94       97       100       103       106       110       114       119       124       129       135         92       94       96       99       101       105       108       112       116       121       126       132         90       91       93       95       97       100       103       105       109       113       117         88       88       89       91       93       95       98       100       103       106       110         86       85       87       88       89       91       93       95       97       100</td>	108       130       137         106       124       130       137         104       119       124       131       137         102       114       119       124       130       137         100       109       114       118       124       129       136         98       105       109       113       117       123       128       134         96       101       104       108       112       116       121       126       132         94       97       100       103       106       110       114       119       124         92       94       96       99       101       105       108       112       116         90       91       93       95       97       100       103       105       109         88       88       89       91       93       95       98       100       103         86       85       87       88       89       91       93       95       97         84       83       84       85       86       88       89       90       92	108       130       137         106       124       130       137         104       119       124       131       137         100       109       114       119       124       130       137         100       109       114       118       124       129       136         98       105       109       113       117       123       128       134         96       101       104       108       112       116       121       126       132         94       97       100       103       106       110       114       119       124       129         92       94       96       99       101       105       108       112       116       121         90       91       93       95       97       100       103       105       109       113         88       88       89       91       93       95       98       100       103       106         86       85       87       88       89       91       93       95       97       100         84       83       84	108       130       137         106       124       130       137         104       119       124       131       137         100       114       119       124       130       137         100       109       114       118       124       129       136         98       105       109       113       117       123       128       134         96       101       104       108       112       116       121       126       132         94       97       100       103       106       110       114       119       124       129       135         92       94       96       99       101       105       108       112       116       121       126       132         90       91       93       95       97       100       103       105       109       113       117         88       88       89       91       93       95       98       100       103       106       110         86       85       87       88       89       91       93       95       97       100

### **HUMIDITY (%)**

EMERGENCY > 84	Severe stress — life threatening conditions. Minimize handling stress, make water readily available and keep animals in good air circulation.
DANGER 79-83	<b>Moderate to severe stress.</b> Temperature and humidity readings in this range are not only dangerous to confined livestock, but there is a need to adopt additional measures to avoid severe losses. Danger for people depending on age, exposure and activity.
ALERT 75-78	Mild to moderate stress. Practice caution and heat abatement in this range, especially during handling, loading or before animals reach their destination. Caution for people depending on age, exposure and activity.
MILD 70-74	

# HOT TIPS TO ABATE HEAT:

## WATER

Make drinking water available in multiple locations in every pen. Ensure water is clean, cool and palatable, which means cleaning waterers frequently and making sure pipes aren't exposed to the hot sun.

# FANS & SPRINKLERS

Keep additional methods of cooling, such as fans and sprinklers, accessible for all pigs, especially when space is tight.

# **REDUCE PIG DENSITY**

Reduce pig density by 5-10% during heat stress conditions.



## kemin.com/swineheatstress