

NEW

CattleZen™

delivers two pheromones in a single dose for fast-acting,
long-lasting calming. So you can both breathe easier.

**SUPPRESS
THE STRESS
WITH EVERY BREATH**



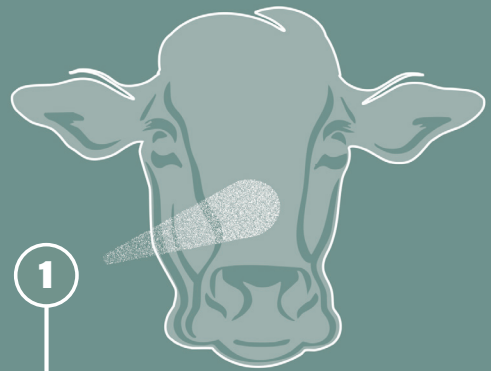
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Stress response in cattle
is **physiological**

STEP 01.

Apply **CattleZen**
on the skin above the muzzle



Apply **CattleZen** topically above the muzzle to be locally assimilated by the vomeronasal organ located in the nasal cavity.

Why Cattle Producers Trust CattleZen



Enhanced cattle welfare and safety

Minimizes the impact of stressful events, and improves safety for both animals and handlers



Patented blend of two pheromones

Delivers fast-acting and sustained calming through the animal's sensory system

Cattle are exposed to many stress factors.
Any of the following stress factors can have a negative effect on cattle of any age.

Common stress factors

in **cattle-dairy operations**

- ② weaning
- ② dehorning
- ② banding and castration
- ② branding
- ② vaccination

in **stocker/feedlot operations**

- ② commingling
- ② transport/arrival
- ② processing
- ② reimplantation
- ② revaccination
- ② sorting

These practices trigger a **threat perception** in the animal which exacerbates stress levels and negative physiological responses. So, how can we effectively downgrade the threat level in cattle?

Brain power

Threat perception resides in the brain but its effects ripple through the body affecting the cattle's welfare.

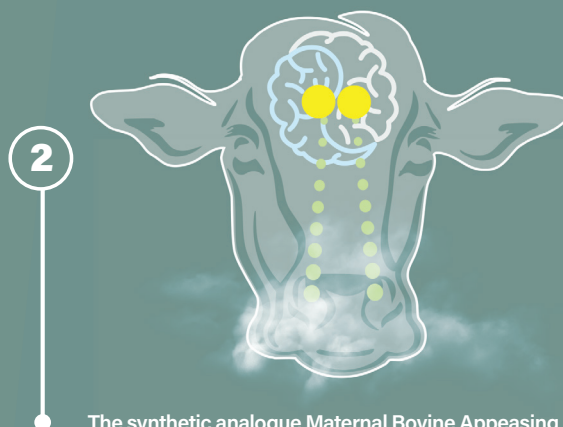
The amygdala plays a key role in determining the perception of whether the situation is safe or dangerous. The animal reacts quickly to potential threats in its environment. This response is physiological. Threat perception activates the hypothalamic-pituitary-adrenal (HPA) axis thus leading to increased release of the glucocorticoid hormone cortisol from the adrenal glands and increased release of the catecholamines epinephrine and norepinephrine.

Thus, threat perception in cattle results in elevated inflammation, immunosuppression, increased risk for BRD, decreased DMI, weight loss, energy inefficiency, increased morbidity and mortality.



Response to mBAS
is also physiological

STEP 02. Calming pheromones are inhaled by the animal



The synthetic analogue Maternal Bovine Appeasing Substance and 2M2B calming pheromone blend is then inhaled to stimulate the vomeronasal gland to desensitize regions of the amygdala and the hypothalamus (areas indicated by the two yellow dots) to decrease the perception of threat when calves are exposed to stressful situations (areas represented by the two yellow dots).



Easy, effective, single-site application

High-concentration, lower-volume dose for strong detection and consistent results



Supports performance and profitability

Affordable stress-management solution that supports more consistent feed intake, improved health and performance

Maternal Bovine Appeasing Substance (mBAS) and **2M2B calming pheromone** mimic naturally occurring pheromones that are secreted by the skin of the mammary gland of lactating animals, providing a soothing, calming effect by eliminating stress in all treated cattle.

CattleZen is a blend of the synthetic analogue of Maternal Bovine Appeasing Substance (mBAS) and 2M2B calming pheromone that is administered topically above the muzzle to be locally assimilated by the vomeronasal organ located in the nasal cavity.

CattleZen's mBAS + 2M2B mediated stimulation of the vomeronasal gland desensitizes regions of the amygdala and the hypothalamus, thus decreasing the perception of threat by the animal.

This reduction in threat perception leads to:

- ② reduced flight behaviour
- ② lower levels of cortisol
- ② maximized performance
- ② decreased inflammation
- ② minimized morbidity and mortality

Conclusion

When possible, prioritize cattle welfare by applying **CattleZen** prior to stressful events to help them respond better to stress and thus enhance the operation by supporting performance and maximizing profitability.

Help mitigate the negative impacts of cattle stress. Choose CattleZen.

For more information

Visit CattleZen.com to **FEEL THE CALM**

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CattleZen™

NDC: 86174-600-01
Patents 9750691 and 9044395



**Enhanced cattle
welfare and safety**



**Patented blend
of two pheromones**



**Easy, effective,
single-site application**



**Supports performance
and profitability**

Prioritize cattle welfare simply by helping them respond better to stressful events while improving the production and profitability of your operation.

Application of CattleZen



2 The synthetic analogue Maternal Bovine Appeasing Substance and 2M2B calming pheromone blend stimulates the vomeronasal gland to desensitize regions of the amygdala and the hypothalamus (areas indicated by the two yellow dots) to decrease the perception of threat when calves are exposed to stressful situations (areas represented by the two yellow dots).

BENEFITS

Post-weaning calves become visibly calmer. Less perception of stress also promotes better response to vaccination by increasing antibody production. And healthier, calmer calves will show, on average, a higher daily rate of gain.

CattleZen™

Available in a 250 and 1000 mL multidose bottles.

For more information

Visit CattleZen.com to FEEL THE CALM



CattleZen is a topically administered Maternal Bovine Appeasing Substance (mBAS) and 2M2B calming pheromone blend that is locally assimilated by the vomeronasal organ located in the nasal cavity.

ACTIVE INGREDIENT

CattleZen contains 140.05 mg/mL (14.05%) of Maternal Bovine Appeasing Substance analogue and 2M2B calming pheromone blend.

INDICATIONS

CattleZen is recommended for use on healthy cattle for maintenance of balanced behaviour and prior to environmental stressors such as handling, transportation, temperatures extremes, mixing animals, vaccination and ear tagging.

DOSAGE AND ADMINISTRATION

Cattle

For cattle weighing greater than or equal to 200 lb, **apply a total dose of 5 mL** to the skin above the muzzle.

For cattle weighing less than 200 lb, **apply a total dose of 3 mL** to the skin above the muzzle.

Apply as a single dose.

Always shake bottle before application.

STORAGE

Store at room temperature (10 °C - 30 °C).
DO NOT REFRIGERATE OR FREEZE.

**ONE SINGLE
DOSE.**

**ON A SINGLE
SPOT.**



**Choose CattleZen,
new from Solvet.**

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