# **MULTIVA®** Motion

#### Natural Analgesic and Anti-inflammatory Formulated in Highly Palatable Chews for Dogs with Moderate Articular Wear

Active ingredients (per chew): Methyl-Sulphonyl-Methane (MSM)

500 mg

**Composition** (in descending order): Brewer's yeast, methyl-sulphonyl-methane, glycerine, whey, duck aroma, rapeseed oil, soya lecithin, maltodextrin, calcium sulphate.

**Analytical constituents:** Crude protein 18.30%; crude oils and fats 9.31%; crude fibre 0.76%; crude ash 4.07%. moisture 5.25%.

#### Properties and mechanism of action:

- Methylsulphonylmethane (MSM) is a natural organic compound rich in sulphur (34% elemental sulphur). It is found naturally in many foods (certain fruits, vegetables, grains and meat) and even in human beings. It is a white crystalline substance which is odourless and has a slightly bitter taste. MSM is an oxidative metabolite of dimethylsulphoxide (DMSO).
- MSM provides sulphur which is used in the body to hold together the protein chains of connective tissue, hair and nails. Also for forming cysteine, an essential amino acid in the production of collagen, the natural repairer of the connective tissue in joints and ligaments.
- It has been discovered that the joints of horses with arthritis have lower levels of sulphur, approximately 1/3, than normal joints (Rizzo et col, 1995).
- In vitro studies indicate that MSM has anti-inflammatory and antioxidant properties (Alam SS et col, 1983; Beilke MA et col, 1987).
- In a double-blind study in people with osteoarthritis of the knee the administration of MSM resulted in a significant decrease in pain, clinical improvement and the ability to perform activities in daily life when compared to the placebo (Kim et al , 2006).
- Other studies in people and animals have proven that MSM reduces pain and inflammation, increases joint flexibility and reduces recovery time (Marañón et col, 2008; Usha et Naidu, 2004; Lawrence RM, 1998).
- The anti-inflammatory mechanism of action in MSM is independent of the Cyclooxygenase-2 inhibitors (COX-2. Ebisuzaki K., 2003).

**Indications:** To reduce pain and inflammation, and improve mobility and quality of life in dogs with moderate joint wear due to age, injury or intense exercise.

It is recommended to administer MULTIVA<sup>®</sup> Motion pre-emptively for older dogs (on reaching the equivalent of 50 human years old: 7 years in large breeds; 7.5 in medium breeds; and 8.5 in small breeds) in order to improve the pet's joint comfort, mobility and quality of life.

In dogs subjected to intense exercise (sport, work, etc.) MULTIVA® Motion, administered regularly,

helps prevent injuries by maintaining the structure and function of joints and the connective tissue thereof. Also indicated as a support in any chronic inflammatory process in dogs with a history of gastrointestinal, hepatic or renal problems, or older dogs.

Target species: Dogs.

**Safety:** A study in people which was 30 days long, using a dose of 2600 mg/day, did not reveal any side effects (Barrager et col, 2002).





### **Data Sheet**



### Features

Natural and gentle analgesic and anti-inflammatory action.

First choice for preventive use in older dogs (>7 years old), sport and working dogs...

Improves mobility and quality of life.

Ideal for prolonged use due to its lack of side effects.

Allows the use of anti-inflammatories to be reduced/eliminated.

Safe - without the side effects of NSAIDs.

Highly palatable chews - Facilitate daily intake.

Suitable for all ages and breeds.

Economical - Low cost/day.

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Studies in rats (Horváth et col, 2002) concluded that MSM is well tolerated both in acute overdose (2 g/kg in a single dose) as well as in chronic overdose (1.5 g/kg for 90 days).

**Dosage:** 1 chew per 15 kg body weight, once a day or divided into two separate doses (morning and evening).

**Warnings:** VetNova is a pioneer in the development of Chews technology to facilitate administration of supplements to cats and dogs. Unlike tablets, capsules, etc. which are administered in a "forced" manner to the mouth to ensure the product is taken, Chews should be administered freely in the pet's bowl and the pet left to take them voluntarily. Some shy cats and dogs may need a longer time to fully accept them, but once they do the daily intake is easier and more satisfactory. The following strategies can be used during the first week to facilitate initial acceptance: 1) Reduce the dose and gradually increase it, 2) Divide the daily dose into two separate doses (morning and evening), 3) Crush the chew and mix it with malt (cats), pate or any food which the pet enjoys, etc.

Keep the container tightly closed in a cool, dry place away from direct sunlight and out of reach of children and animals.

#### Presentation: 60 chews.

#### Supporting materials:

- Owner's brochure.
- Shelf display holder for owner's brochure.
- · Compilation of abstracts from published research articles.
- Selling tips (Spanish).

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### Data Sheet



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If you are interested in any of the articles listed, please do not hesitate to request them through the following contacts: vetnova@vetnova.net, +34 918 440 273, or your VetNova or Distributor Sales Representative.





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