

DERMAL IRRITATION TESTING DATA

Summary of Dermal Irritation Testing on Heartland Energy Group, Ltd. "Oil Safe AR®"

The Method used in Protocol Design was the Modified Draize method as described in OECD Guidelines for the Testing of Chemicals, Sec. 404, Paris 1981 (revised: 1992)

In each animal, the sum of the skin values for erythema at 1, 24, 48 and 72 hours for exposed areas was added to the similar sum of the values for oedema formation. The primary irritation index for each animal was the sum of the two summary values divided by 3 (i.e. the average of the three readings). The primary irritation score and its standard deviation are the mean value and standard deviation of the primary irritation indices of the three animals.

A 0.5 mL portion of the test article Oil Safe AR® was topically applied to the intact skin of a group of three rabbits by patch application. The test article stayed in contact with the skin for a 4 hour period.

The test sites were evaluated at 1, 24, 48 and 72 hours following the exposure period. The test article showed no erythema or oedema on all animals at one hour after the exposure period. At 24 hours after the exposure period, no erythema was observed on all animals and slight oedema was observed on all animals. Essentially all animals recovered to normal by the end of the 72 hour observation period.

NOTE: Oil Safe AR® was applied at pure, undiluted strength.

Classification of Primary Irritation Scores:

0-0.9	Non-Irritant
1.0-1.9	Very Mild Irritant
2.0-3.9	Mild Irritant
4.0-5.9	Moderate Irritant
6.0-8.0	Severe Irritant

Based on these results, the test article was classified as follows:

Primary Irritation Score 1.7 ± 0.1

Classification: Very Mild Irritant

Based on the above findings, the test article Oil Safe AR® is **classified/very mild irritant** according to the Canadian TDG (Transportation of Dangerous Goods Act).

Based on the above findings, the test article, Heartland Energy Group, Ltd. Oil Safe AR® is classified as **VERY MILD IRRITANT** according to OSHA, US D.O.T. Testing protocols as per 29CFR.

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