

Evaluation Report for Category B, Subcategories 2.1, 2.3, 2.4 Application

Application Number: 2019-6150
Application: New EP Product Chemistry-Guarantee, Identity of Formulants, Proportion of Formulants
Product: Aqucar TN 250 LT Water Treatment Microbiocide
Registration Number: 33986
Active ingredient (a.i.): tris(hydroxymethyl) nitromethane
PMRA Document Number: 3180359

Purpose of Application

The purpose of this application was to register a new slimicide containing tris(hydroxymethyl) nitromethane for use in oil and gas production.

Chemistry Assessment

Aqucar TN 250 LT Water Treatment Microbiocide is formulated as a solution containing tris(hydroxymethyl) nitromethane at a concentration of 25.75%. This end-use product has a density of 0.982 g/mL at 20°C and pH of 4.59 (1% solution). The required chemistry data for Aqucar TN 250 LT Water Treatment Microbiocide have been provided, reviewed and found to be acceptable.

Health Assessments

Aqucar TN 250 LT Water Treatment Microbiocide is of slight toxicity via the oral route, and of low toxicity via the dermal and inhalation routes. It is non-irritating to the eyes and skin, and is not a dermal sensitizer.

The use of Aqucar TN 250 LT Water Treatment Microbiocide for the control of microorganisms in oil and gas production is not expected to result in potential occupational or bystander exposure over the registered use of tris(hydroxymethyl) nitromethane. No risks of concern are expected when workers follow label directions and wear personal protective equipment as stated on the label.

A dietary exposure assessment was not required for this application.

Environmental Assessment

A scientific review of the available information indicates that environmental risks associated with the uses of Aqucar TN 250 LT Water Treatment Microbiocide are acceptable when used according to the label directions.

Value Assessment

Laboratory trials were provided in support of the use of Aquacar TN 250 LT Water Treatment Microbiocide for the control of microorganisms in drilling, completion and workover fluids, packer fluids, fracturing fluids, water floods and enhanced oil recovery fluids, injection waste fluids, oil and gas water storage and transmission systems, gas storage wells and systems, hydrotesting, pipeline pigging and scraping operations and hydrocarbon production, storage and transmission systems. The data demonstrated that the Aquacar TN 250 LT Water Treatment Microbiocide was effective at controlling microorganisms at rates of 291-3383 ppm of product or 194-3383 ppm of product depending on the use. Therefore, the use of Aquacar TN 250 LT Water Treatment Microbiocide to control microbial growth in oil and gas applications is considered acceptable.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found it sufficient to support the registration of Aquacar TN 250 LT Water Treatment Microbiocide.

References

PMRA Document Number	Reference
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2708028	2016, XU75090.34: Physical and Chemical Characteristics: Color, Physical State, Oxidation/Reduction, Flammability, pH, Viscosity, and Density/Relative Density, DACO: 3.5.1,3.5.11,3.5.2,3.5.6,3.5.7,3.5.8,3.5.9
2708029	2016, XU75090.34: Explosive Properties, DACO: 3.5.12
2708034	2016, Dow Chemical Company, Formulation Type for AQUCAR TN 250 LT Water Treatment Microbiocide, DACO: 3.5.4
2708035	2016, Dow Chemical Company, Container Material and Description for AQUCAR TN 250 LT Water Treatment Microbiocide, DACO: 3.5.5
2708038	2016, XU75090.34 Developmental Antimicrobial: Determination of Long-Term Stability (3-Month Interim Report), DACO: 3.5.10,3.5.14
2708039	2016, XU75090.34 Developmental Antimicrobial: Determination of Accelerated Storage Stability, DACO: 3.5.10
3049994	2019, The Compatibility of AQUCAR TN 250 LT Water Treatment Microbiocide with Stainless Steel SS304 and SS316L, DACO: 3.5.5
3169959	2017, GLP Validation of DMC Test Method #11-173-01 for Determination of Tris Nitro in Formulations and Wash Solutions by Reverse Phase HPLC , DACO: 3.4.1
3169960	2019, XU75090.34 Developmental Antimicrobial: Determination of Long-Term Storage Stability, DACO: 3.5.10,3.5.14
2708020	2016, Acute Oral Toxicity Study: Up-And-Down Procedure in Rats
2708022	2016, Acute Dermal Toxicity Study in Rats
2708015	2016, Acute Liquid Aerosol Inhalation Toxicity Study in Crl:CD(SD) Rats
2708024	2016, Acute Eye Irritation Study in Rabbits
2708023	2016, Acute Dermal Irritation/Corrosion Study in Rabbits
2708018	2016, Local Lymph Node Assay in CBA/J Mice
2708040	2016, Efficacy of AQUCAR TN 250 LT Water Treatment Microbiocide for Oil and Gas Applications, DACO: 10.2.3.2
2708041	2016, Value Summary, DACO: 10.1
2708042	2016, Description of Pest Problem, DACO: 10.2.2
2708043	2016, Non-Safety Adverse Effects, DACO: 10.3.2
2708044	2016, Survey of Alternatives, DACO: 10.5.1
2708045	2015, Survey of Alternatives, DACO: 10.5.1
2708050	2016, Description of the Product, DACO: 10.2.1
2731526	2017, Value Summary, DACO: 10.1

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