**Bacterial Reverse Mutation Study of Project 19**

**SUMMARY AND CONCLUSION**

Mutagenic potential of the test substance, Project 19, was assessed in a bacterial reverse mutation assay using Salmonella typhimurium TA100, TA1535, TA98, and TA1537 and Escherichia coli WP2uvrA. The test was conducted by the pre-incubation method in the presence and absence of S9 mix.

A dose-finding test was conducted at doses of 1.5, 5, 15, 50, 150, 500, 1500, and 5000 µg/plate. Based on the results of the dose-finding test, microbial toxicity was observed at the doses of 1500 µg/plate or more for all test strains in the presence or absence of S9 mix. Both before and after incubation, precipitation was observed on the agar plates at the doses of 5000 µg/plate in the presence or absence of S9 mix.

Based on the results of the dose-finding test, the highest dose in the main test was set at 1500 µg/plate for all test strains in the presence and absence of S9 mix; the following doses were used in this test: 23.4, 46.9, 93.8, 188, 375, 750, and 1500 µg/plate.

The number of revertant colonies in the test substance-treated groups was less than twice that in the corresponding negative (solvent) control in any test strains regardless of the presence or absence of S9 mix in either the dose-finding test or the main test.

In conclusion, Project 19 did not induce gene mutation in bacteria under the conditions of this study.