



CERTIFICATE OF ANALYSIS

Date Completed: 5 August 2013

ALSI File No: ALSI03082

Report on: LD50 - Oil Analysis

Report to: **Globar Barrier Coatings, Inc**
1001 Calle negocio, Suite B
San Clemente, California, USA 92673

Attention: **Mr. Gordon Davies**

Date received: 18 June 2013

Sampled by: Client

PT. ALS Indonesia

Reviewed by:

Sisca Nurhafifa
Laboratory Supervisor

ALS Indonesia

CERTIFICATE OF ANALYSIS



ACUTE TOXICITY TEST DATA SUMMARY

Client : **Globar Barrier Coatings, Inc**
Test Type : Acute Oral Toxicity Test (Lethal Dose 50)
Test Initiation Date : 7th July 2013.
Additional Dose Date : None

SAMPLE

Number of Sample : ALSI03082-25633.
Sample Identification : placed in a tin.
Date Collected : 11-Jun-13
Date Received : 26-Jun-13
Physical Description : transparent yellow oil.

TEST CONDITIONS

Temperature Range (°C) : 23^o - 32^oC
Humidity (%) : 30 - 54 %
Light intensity (Lux) : 250-300lux
Photoperiod L:D (hours) : 12light-12dark

TEST SPECIES INFORMATION

Species : *Mus musculus*
Average Age : 2months
No. Test Subjects : 15 males and 15 females.
Sex : male and female.
Mean of Body Weight (BW) : 26.1g.

TEST RESULT

Dosage mg/Kg Body Weight	Initial	Deceased	Alive	% Mortality
0 (Control)	6	0	6	0.0
539	6	0	6	0.0
1,719	6	0	6	0.0
4,943	6	0	6	0.0
16,744	6	0	6	0.0

Clinical and gross necropsy observations :

No deaths and no obvious signs of morbidity were found. In the gross necropsy examinations, no changes were observed in the liver, spleen, heart, lung, kidney, intestines, mouth mucous membrane, pleura and peritoneum in all treated mice compared to those in control mice.

LD-50 TEST RESULT

:

**more than 16,744mg/Kg Body Weight* or
more than 27.0mL/Kg Body Weight.**

LD-50 Regulation PP No.18/1999 : (>15g/KgBW)

*Categorized as **Toxicity Category IV** according to EPA (1998) or **Toxicity Category 5** according to OECD (2001) and had relatively low acute toxicity but which, under certain circumstances, may pose a hazard to especially vulnerable populations (OECD 2001).

**up to day /.

METHODS :

EPA. 1998a. Health Effects Test Guidelines. OPPTS 870.1100. Acute Oral Toxicity. EPA 712-C-98-190.
ASTM. E 1163 – 98 (Reapproved 2002). Standard Test Method for Estimating Acute Oral Toxicity in Rats.

TOXICITY CATEGORIES

EPA. 1998. Health Effects Test Guidelines. OPPTS 870.1000. Acute Toxicity Testing – Background. EPA 712-C-98-189.
OECD. 2001. Harmonized Integrated Classification System for Human Health and Env. Hazards of Chemicals Substances and Mixtures.
GHS. 2008. Globally Harmonised System (GHS). Eurofer Workshop on C&L, May 28, 2008. Acute Toxicity Categories.

Remark :

Please note this analysis was subcontracted.

End of Report