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UNDERWRITERS' LABORATORIES OF CANADA

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File CEx1225 Application No. 18865 October 25, 1995

REPORT

on

WETTING AGENT

Firefreeze Worldwide, Inc. Rockaway, New Jersey

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DESCRIPTION

PRODUCT COVERED:

Wetting Agent, Cold Fire.

GENERAL CHARACTER AND USE:

The wetting agent is a chemical compound which, when added to water at a 0.15 percent concentration, reduces the solution's surface tension, increases its penetrating and spreading abilities and provides emulsification and foam characteristics.

The wetting agent, when added to water at a 0.15 percent concentration, is effective on Class A and Class B fires at a discharge rate of up to 80 litres/min. per sq. metre. It may be used in accordance with the Standard of the National Fire Protection Association for Wetting Agents, NFPA No. 18.

The wetting agent is suitable for use at or above 2°C.

MARKING:

Each container of listed wetting agent is eligible to bear a label which reads:

Underwriters' Laboratories of Canada
Listed
Wetting Agent
No. ______ C

together with the Listee's name and address.

PACKAGING:

The wetting agent is packaged in the following:

- l plastic 19 Litre Container "WINPAK"
- 2 plastic 208 Litre Drum "HEDRUM"

Both containers are manufactured by Hedwin Corporation, Baltimore, Maryland.

THE INVESTIGATION

The object of this investigation was to determine compliance of this product with the current requirements of Underwriters' Laboratories of Canada for this class of product as included under ULC Subject C175.

This wetting agent has been previously investigated by Underwriters Laboratories Inc., under Project No. 94NK2487, File EX4660. During that investigation, the following tests were conducted with acceptable results:

- 1. Concentrate Physical & Chemical Tests
- 2. Action on Typical Fire Hose
- 3. Fire Extinguishment Class A
- 4. Fire Extinguishment Class B
- 5. Container Aging
- 6. Container Strength.

A review of the data obtained indicated that a further complete test program was not necessary to establish a listing.

The following identification tests were conducted at Underwriters' Laboratories of Canada on samples of the product.

TEST RECORD

CHEMICAL IDENTIFICATION:

METHOD

<u>Qualitative Infrared Analysis</u> - An infrared spectrum was obtained using an infrared spectrophotometer.

<u>oH Determination</u> - The pH of a 0.15 percent concentration of the solution and the concentrate alone was determined using an Accument pH meter, 915, at a temperature of 16°C.

Action After Freezing - Aqueous solutions of the wetting agent in a 0.15 percent concentration were frozen for 1 h and then warmed to 16°C. Observations for separation of the wetting agent after warming up were made.

<u>Viscosity</u> - The viscosity of the wetting agent was determined at 16°C by use of a Brookfield Viscometer, Model RUT.

RESULTS

The following results were obtained:

- 1. Infrared Spectrum See Appendix A.
- 2. pH 6.30 100 percent. 6.76 - 0.15 percent.
- 3. Action After Freezing No Separation or Layering.
- 4. Viscosity 71 cps

CONCLUSIONS

CONFORMITY:

On the basis of the foregoing, the design, construction and performance of the product covered by this Report are judged to be in compliance with the current requirements of Underwriters' Laboratories of Canada as included under ULC-Subj. C175.

The wetting agent may be used in accordance with the requirements of the Standard of the National Fire Protection Association for Wetting Agents, NFPA 18.

LISTED - Label Service

The ULC label or listed marking on a product is the only evidence provided by Underwriters' Laboratories of Canada to identify products which have been produced under the Listing and Follow-Up Service.

See General Information Section under above Guide No. in the ULC List of Equipment and Materials, Volume I, General (and Supplements thereto).

TESTS BY:

REPORT BY:

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