An

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 453

SURFACE ACTIVE AGENTS GLOSSARY FIRST LIST

1st EDITION November 1965

COPYRIGHT RESERVED

The copyright of ISO Recommendations and ISO Standards belongs to ISO Member Bodies. Reproduction of these documents, in any country, may be authorized therefore only by the national standards organization of that country, being a member of ISO.

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 453, Surface Active Agents. Glossary. First List, was drawn up by Technical Committee ISO/TC 91, Surface Active Agents, the Secretariat of which is held by the Association Française de Normalisation (AFNOR).

Work on this question by the Technical Committee began in 1960 and led, in 1962, to the adoption of a Draft ISO Recommendation.

In October 1963, this Draft ISO Recommendation (No. 607) was circulated to all the ISO Member Bodies for enquiry. It was approved by the following Member Bodies:

Argentina Austria Canada Chile Czechoslovakia France Germany Greece Hungary Italy Japan Korea, Rep. of Netherlands New Zealand Norway Poland Portugal Republic of South Africa Romania Spain Switzerland U.A.R. United Kingdom Yugoslavia

260 OZ TZ 5

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council which decided, in November 1965, to accept it as an ISO RECOMMENDATION.

ISO Recommendation

N.S. CU

R 453

November 1965

SURFACE ACTIVE AGENTS

GLOSSARY

FIRST LIST

INTRODUCTION

The following definitions relate to systems in which liquid is present.

1. PURPOSE

The purpose of this ISO Recommendation is to define some of the general terms most frequently used in the field of surface active agents.

2. DEFINITIONS

2.1 Surface active agent

A chemical compound which, when dissolved or dispersed in a liquid, is preferentially adsorbed at an interface, giving rise to a number of physico-chemical or chemical properties of practical interest.

The molecule of the compound includes at least one group with an affinity for markedly polar surfaces, ensuring in most cases solubilization in water, and a group which has little affinity for water.

Note. - Compositions in practical use are generally mixtures of such compounds.

2.2 Polar group

A functional group, in which the distribution of electrons tends to give a considerable electrical dipole moment to the molecule. Such a group conditions the affinity for markedly polar surfaces, the affinity for water in particular and the hydrophilic character of the molecule.

2.3 Non-polar group

The organic part of the molecule, in which the distribution of electrons does not cause a considerable electrical dipole moment. Such a group conditions the affinity for organic solvents of low polarity and consequently the lipophilic character of the molecule.

____ 3 ___