

UTILIZATION OF THE TECHNICAL TERMINOLOGY STANDARDIZED
AT AFNOR (ASSOCIATION FRANÇAISE DE NORMALISATION)

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Abstract

The proposed paper is in two sections, viz :

1. A description is given of the guiding principles observed when laying down the standards for technical vocabularies, both for international use and in France, viz, the work of terminology committees, consultation of professional organizations, and analysis of existing terminologies for a given subject. The advantages of using standardized terminology in international exchanges and trade and in the design and operation of information systems are discussed.

2. In the second section a description is given of the AFNOR procedure for making available to each user the standardized technical terminology contained in the collection of ISO international standards and in French standards. Access is gained to the standardized terminology by means of NORMATERM, the bank of standardized terminological data set up by AFNOR. The analysis and processing of concepts is studied, and also the terminological environment which NORMATERM offers. Lastly, the means of access to NORMATERM available to the user are described, i.e. consultation of an index of terms or interrogation of the terminology bank.

The Association Française de Normalisation has always been active in standardizing technical vocabularies. In the 1939 catalogue 28 out of a total of about a thousand published standards relate to terminology. The oldest one dates from June 1920, and deals with the "Unification of the nomenclature for metallurgical products". (See Annex 1). Since that date vocabulary standards have constantly been added to the list of French standards and at present there are more than 380 (including at least 120 in French and in English) which define and classify some 22.000 terms in a wide variety of technical fields.

In addition, the general layout of French standards includes a section on "vocabulary", which is used in the technical standards to define and specify the meaning of certain terms used in the text of the standard. Nearly 10.000 terms are defined in this way.

At international level, the ISO (International Organization for Standardization) list of standards contains the same features. Out of a total of 3.000 published standards 140 relate to technical vocabularies, and most of the technical standards include definitions of one or more terms.

Before describing the way in which the AFNOR Documentation Centre uses this terminology we shall examine the guiding principles for drawing up the standards on vocabulary, and the advantages of using a standard terminology.

1 - Standard terminology

1.1 The terminology committees

The technical secretaries of the ISO committees and the AFNOR French committees follow the normal standardization practice, consulting a number of leading

experts on the subject concerned and inviting them to attend discussions.

The experts on these committees may vary in accordance with the nature of the subject covered by the terminology, and the committee for a given field may be constituted quite differently from the other standardization committees dealing with, for example, specifications or test methods.

Examples of this are provided by the vocabularies currently being examined by the ISO and AFNOR. For example:

- The nucleus of the committee dealing with the data processing vocabulary consists of a small but very active group of engineers and translators representing equipment manufacturers or official bodies. For definitions of very specific terms the group approaches one or other outside expert.
- The working party on documentation vocabulary is mainly composed of librarians and documentalists, who represent the most active information centres or major professional associations.
- The committee on bearings vocabulary is composed mainly of engineers, who represent the manufacturers, professional groups or public bodies which are users of bearings.

1.2 Principles of constructing a vocabulary

The ISO technical committee ISO/TC 37 on "Terminology - principles and coordination", has published detailed rules for the construction of vocabularies. These cover such points as the presentation of the

terminology cards, classification of the terms, the formulation of definitions, signs and symbols to be used, working methods, etc.

The corresponding standards constitute guides for the work of any committee on the standardization of vocabularies.

1.3 Choice of terms

Before embarking on their own studies most working parties review all the existing vocabularies and take one or more of those which appear most suitable as a basis for their own project. For instance, the working party on information processing vocabulary selected the dictionary of the IFIP (International Federation of Information Processing), and the working party on bearings vocabulary drew on the vocabularies compiled jointly by the Anti-friction Bearing Manufacturing Association and by the largest bearing manufacturer in the world. Lastly, the working party on documentation vocabulary based its studies on various vocabularies, such as that produced by UNESCO and also on the literature on documentation.

All sources selected are analysed and at the meetings the terms which appear to call for standardization are selected, the existing definitions are studied and, where appropriate, redrafted. Other terms are proposed by the experts and their form and definitions are studied.

What terms are selected?

Many specialized vocabularies are for the use of engineers, workshop technicians or workmen. There

should be standardization at all levels of a trade or profession, and the standardized terms must be in language which everyone can grasp. The choice of a term will depend on how frequently it is used at each professional level and which form is best understood. In general a "middle of the road" term is chosen.

1.4 Equivalence of the terms in the official languages of the ISO (English, French and Russian)

It is interesting to note that terms are not translated into the three official languages of the ISO, but that the experts concentrate on giving equivalent terms. The studies connected with the choice of a term in a given language are based on the concept.

If a neologism has to be chosen, linguists are consulted to determine whether the one chosen has been properly formed. Bodies which deal with neology are also consulted in order to determine whether a neologism has already been established. The main such body for the French language is the organization dealing with franco-québécois neology, which is monitored by AFTERM (Association Française de Terminologie).

1.5 Typology of definitions

Types of definition vary according to the subject fields studied. Sometimes the definition is a description, particularly in the case of objects, or it may be a definition in the strict sense of the term, defining an object, a role or a specific characteristic, or it may be a procedure. Sometimes the term is defined simply by means of a diagram. Lastly,

there are some standards which merely classify terms, without giving a definition or schema. This is particularly true for the various types of machine tools, and also for textile machinery and equipment when the term is a description in itself.

In the case of international standards, where the definition is given in two or three languages, it must be noted that, as in the case of the terms, these are not word-for-word translations. The text is in a different form depending on the linguistic system concerned, e.g. English and French are not constructed in the same way. The main consideration in each language is to express the concept as clearly as possible. Lastly, it should be mentioned that the vocabulary standards do not explain terms by placing them in context, as many dictionaries do. On the other hand, however, the collection of technical standards contains numerous illustrations of the use of the standardized terms in the vocabulary standards.

1.6 Advantages of using standardized terminology

1.6.1 International and other non-local trade

It cannot be denied that a single language is of prime importance in trade between different countries or even within the same country. There is the famous example of the fish which have a different name depending on whether they are caught in the North Sea, the Atlantic or the Mediterranean. To know what one is talking about in the first place simplifies the problem of communication.

1.6.2. The design and operation of information systems

The first task of an automated information system is to establish a single and unambiguous language which will give access to the system. An example of this is the thesaurus.

The automated bank of standardized terminological data which will be described in the second section of this paper was originally set up as a basis on which to construct the "standardization" thesaurus. In this case the actual standards constituted a major source of descriptors.

In multi-lingual systems documentalists who have the task of constructing a thesaurus can draw upon international standardized terminology for terms which, by their nature, are unambiguous, and which represent a concept as clearly as possible, and lastly, which have established equivalents in French, English and Russian.

The use as far as possible of standardized terminology in the different information systems is of help in exchanging data and making thesauri compatible.

2 - Use of the terminology at AFNOR

In 1971 AFNOR decided to list, classify and make available the terminological information which hitherto had been scattered amongst all the French standards. A manual card index in alphabetical order and containing all the terms to be found in the French vocabulary standards and technical standards was drawn up.

However, with the installation of a computer at AFNOR

plans could be made for processing the index automatically, and in 1973 NORMATERM,* a bank of standardized terminological data, was created.

2.1 Function of NORMATERM

The needs which the system was to satisfy had to be defined at the design stage. We decided that these needs were as follows:

2.1.1 To provide assistance in compiling the ISO 'Standardization' thesaurus, an experimental version of which had been produced by AFNOR. This thesaurus was to be bilingual (English and French), and hierarchical (generic, specific and related terms are given).

2.1.2 To retrieve standardized terms as follows:

- starting from either the English or the French;
- either from the complete form or from one of its constituent words;
- from their meaning.

2.1.3 To be able to provide indexes of terms as follows:

- either a general index covering all the file;
- or subject indexes.

2.1.4 To process the standardized terminology in the French and international standards.

* NORMATERM: NORMalisation, Automatisation de la TERMINologie.

2.2 Meeting the needs

In view of the needs as defined above, we adopted the general rule that we should work from the concept and not the term. The concept would be described by its French and English designations, its definition, its generic and specific meaning, the field in which it was used and its description.

Further, a comparative study of French and international standards has shown that more than 70% of the terms defined in the French standards are identical to the terms defined in the ISO standards. We therefore made provision for entering on the record of any concept the indexes of the French and the ISO standards containing it.

Annex 3 gives the layout of a complete indexing sheet for the record of a concept.

For interrogating the file we chose the CII MISTRAL software which we already use for our documentary search system on standards, NORIA *. We have consoles incorporating visual indicators which can be used for direct interrogation.

For compiling the indices the AFNOR data-processing department composed a special programme for use with NORMATERM.

2.3 Special features relating to certain data

2.3.1 Recording of French and English terms (fields F 36 and F 37)

* NORmalisation - Information Automatisée

We record the term in French and English which designates the concept, together with any synonyms which appear in the standards. Different types of synonymy are included, and can be located by using codes. We also use codes to give grammatical descriptions of the terms if they appear in the standard. Annex 4 gives a list of the codes used.

2.3.2 Recording of generic and specific concepts
(fields F 39 and F 40)

The generic and specific concepts pertaining to a given concept are recorded under their designation in French and are only given if they themselves are defined in the standard containing the concept.

2.3.3. Recording of the definition (field F 42)

The definition is recorded in French as it appears in the standard, with notes, examples and any remarks.

2.3.4. Recording of the classification codes (field F 33)

We record up to six classification indices in order to specify the areas in which a given concept is used. These codes are taken from a classification scheme for standardization, at present being studied within AFNOR. They are letter codes, and are mainly used for constructing subject indexes of terms.

2.3.5 Recording of the description of a concept
(field F 41)

One of the main original features of NORMATERM is that a term can be retrieved on the basis of the concept. To do this, we describe the concept using descriptors from the standardization thesaurus, which enables us to make a search for a term as if it were a document in a conventional automated information system.

2.4 Type of information available from NORMATERM

The following questions illustrate the different types of information which this system can provide.

- 2.4.1 What is the French equivalent for the English word 'Batch'? What is its definition? In which standards does it appear?
- 2.4.2 What is the English equivalent of the French term 'recherche operationnelle'? Does this English equivalent have any synonyms? What is the definition of this concept? In what standard does it appear?
- 2.4.3 What standardized English and French terms begin with prefix 'multi'? In what standards are they standardized?
- 2.4.4 Is the French term 'contrôle de la qualité' standardized both in a French and in an international standard? What is its English equivalent? How is it defined? Has it any specific usages?
- 2.4.5 Does the standard containing the French term 'canetière' also contain the German equivalent of this term?

2.4.6 What generic term is the top term for 'analyseur différentiel numérique'?

2.4.7 What name is given to the computer output device which gives a graphical representation of data?

2.4.3 Which elementary particles have been given a standardized definition in the field of nuclear energy?

2.4.9 What are the standardized terms relating to the suitability of a device for a function?

Questions 2.4.1 to 2.4.6 are entered either in the 'French term' field or the 'English term' field. Questions 2.4.7 and 2.4.8 are entered on the basis of descriptors, and question 2.4.9 by the way of classification codes.

Annexes 5 and 6 give the formulation and the replies to questions 2.4.4 and 2.4.7.

2.5 The indexes

The indexes provided by NORMATERM are bilingual, in alphabetical order and of the type which is permuted by keywords (KWOC index).

They give the French term and its synonyms, the equivalent English term and its synonyms (or vice versa); the index and the data of the standard containing the terms and the number of the concept contained in the standard.

The terms can be retrieved on the basis of each of the words constituting them, with the obvious

exception of prepositions, articles, etc.. These constituent words are known as keywords. Annex 7 gives an example of a page from these indexes.

CONCLUSION

In conclusion we give an outline of current and future means of access to NORMATERM by its users. These will fall into three categories, viz.:

1) Acquisition of indexes

As from January 1977 AFNOR will be disseminating two indexes, one French-English and the other English-French, covering all the standardized concepts in two languages contained in the French and ISO international standards relating to vocabularies (except for electricity), i.e. some 15,000 concepts. Over the next two years recipients of the two volumes will also receive a supplement updating them every six months. These supplements will include terms defined in new vocabulary standards and also terms which appear in the technical standards (French standards for which the English equivalent appears in an ISO standard, and ISO standards which have no equivalents in French standards). These indexes will be sent out in book form, and will also be available on COM microfiches.

2) Acquisition of magnetic tapes containing the whole file and all or some of the data relating to each concept. The Régie de la langue française in Quebec has acquired our file and other terminology banks have contacted us.

3) Access to the data bank. We have not yet specified in what form and under what conditions users

will have access to NORMATERM, apart from the possibilities described above. However, we already answer a large number of questions on terminological research which we receive by telephone or by letter. We intend to set up a subscription system which could cover replies to specific questions and the provision of sectoral indexes.

We hope that NORMATERM, which is the only technical terminology bank of its kind in existence in France at present, will give the maximum satisfaction, taking account of the development in technical language, to everyone who comes up against vocabulary problems, and that the work which we have undertaken will form one of the pillars of a French national terminology bank.

LIST OF ANNEXES

- Annex 1 : First vocabulary standard
- Annex 2 : Recent vocabulary standard
- Annex 3 : Complete indexing sheet relating to a concept
- Annex 4 : List of codes for representing types of synonyms and the grammatical characteristics of the term.
- Annex 5 and 6 : Examples of questions and answers using the terminal
- Annex 7 : A page of a French - English permuted index with keywords

COMMISSION PERMANENTE DE STANDARDISATION.

UNIFICATION

DE LA NOMENCLATURE DES PRODUITS MÉTALLURGIQUES.

PRODUITS SIDÉRURGIQUES.

a) Termes généraux.

Les dénominations suivantes sont adoptées :

- Fontes : produits sidérurgiques obtenus en passant par l'état liquide et non malléables;
- Aciers : produits sidérurgiques obtenus en passant par l'état liquide et malléables;
- Fers (ou fers soudés, ou fers puddlés) : produits sidérurgiques obtenus sans passer par l'état liquide et ne durcissant pas par la trempe;
- Aciers puddlés ou aciers soudés : produits sidérurgiques obtenus sans passer par l'état liquide et durcissant par la trempe;
- Fers cémentés : produits obtenus par cémentation du fer soudé;
- Aciers cémentés : produits obtenus par cémentation d'acier;
- Aciers pour cémentation : produits fondus destinés à la cémentation;
- Fonte malléable : fonte dont les propriétés ont été modifiées par recuit à haute température accompagné ou non d'une action oxydante.

a₁) Classification des aciers.

La classification des aciers est basée sur :

- 1° Le mode de fabrication :
Acier Bessemer, acier Thomas, acier Martin, acier électrique, acier au creuset.
Ces désignations ne donnent d'ailleurs aucune précision sur la qualité du produit.
- 2° La composition chimique :
Sont appelés aciers primaires, les aciers ne renfermant, en dehors du carbone, que les proportions suivantes de divers éléments :

$$\begin{aligned} \text{Mn} &\leq 1 \text{ p. } 100; & \text{Si} &\leq 1 \text{ p. } 100; \\ \text{S} &\leq 0.1 \text{ p. } 100; & \text{P} &\leq 0.1 \text{ p. } 100; \\ \text{Ni, Cr, Cu, etc.} &\leq 0.2 \text{ p. } 100. \end{aligned}$$

Sont appelés *aciers binaires*, ceux qui contiennent un de ces éléments en dose plus forte; *aciers ternaires*, ceux qui contiennent deux de ces éléments en dose plus élevée, etc.

3° La nuance caractérisée par la charge de rupture.

Mais il faut bien noter les conditions dans lesquel les doit être mesurée la résistance et le traitement à faire subir aux barreaux d'épreuve : le recuit au rouge cerise ($850^{\circ} \pm 25^{\circ}$, température maintenue pendant dix minutes au moins) suivi d'un refroidissement à l'air libre, est recommandé.

a₂) Classification des fontes.

La classification des fontes est basée sur la composition chimique.

Est considérée comme fonte primaire, toute fonte contenant :

$$\begin{aligned} \text{Mn} &\leq 5 \text{ p. } 100; \text{ Si} \leq 5 \text{ p. } 100; \text{ P} \leq 0.5 \text{ p. } 100; \\ \text{S, Cr, Ni, Cu, etc.} &\leq 0.2 \text{ p. } 100. \end{aligned}$$

Comme fonte spéciale, toute fonte contenant des teneurs supérieures d'un ou plusieurs éléments; on distinguera les fontes binaires, ternaires, etc.

a₃) Classification des fers.

La classification des fers est basée sur la résistance à la traction et l'on admettra les quatre nuances des Compagnies de chemins de fer :

$$R = 30, 32, 34 \text{ et } 37 \text{ kilogrammes.}$$

Registered French Standard	Micrographics vocabulary Section 01. General concepts	NF Z 43-101 April 1976
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FOREWORD

As the field of micrographics develops and diversifies there is an increasing danger that terms used in different undertakings, and even in different departments of the same undertaking, may be interpreted in different ways.

It is therefore necessary to have a unified language to avoid doubt and confusion in communication. A common vocabulary in particular is essential for work on standardization in the field of micrographics.

During the drafting of this standard account has been taken of the work of the International Organization for Standardization, and of the Conseil international de la langue française.

CONTENTS

	Page
1. Object and field of application	2
2. Rules	2
- choice and use of terms	2
- use of parentheses	2
- polysemants	2
- terms in bold print in the definitions	2
3. Terms and definitions	2
01.01 general terms	2
01.02 material	4
01.03 light and photometry	4
01.04 photographic processing	6
01.05 image quality	6
Alphabetical index	8

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lation rights
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76-04

Micrographics vocabulary. Section 01,

1. OBJECT AND FIELD OF APPLICATION

The object of this standard is to define general concepts relating to micrographics technology, materials and image quality in the field of photography. Its purpose is to encourage the exchange of technical information and trade between all whose work concerns micrographics.

2. RULES

Choice and use of terms

When the same concept can be expressed by synonymous terms these are listed in order of preference before the common definition.

Use of parentheses

Some terms are followed by one or more words in identical characters in parenthesis. These words are an integral part of the complete term, but may nevertheless be omitted where the resulting abbreviated term can be used in a specific technical text without ambiguity. These terms are always used in full in the text of other definitions.

Polysemants

Where certain terms can indicate an action or an operation, and also the result thereof, both definitions are listed, numbered 1 and 2. These numbers are repeated opposite the corresponding English terms, which are generally different.

Terms in bold print in the definitions

Any terms in bold print in the text of a definition are defined elsewhere in the same vocabulary. These terms appear in bold print only when used for the first time in each definition.

3. TERMS AND DEFINITIONS

01.01 General Terms

- | | | |
|----------|--|------------------|
| 01.01.01 | Reproduction | E: Reproduction |
| | 1. Action of producing copies of identical or equivalent in form by an appropriate technical process. | |
| | 2. Result of producing copies of a document. | |
| 01.01.2 | Micrographie | E: Micrographics |
| | Techniques for producing and using microforms. | |
| 01.01.3 | Microforme | E: microform |
| | Reduced image, often photographic, containing data which can only be read using an appropriate device. | |
| 01.01.4 | Microcopie | E: microcopy |
| | Microform produced on photographic material using an optical instrument. | |

LIST OF CODES REPRESENTING TYPES OF SYNONYM AND
THE GRAMMATICAL CHARACTERISTICS OF A TERM

(ABR)	=	Abbreviation
(ADJ)	=	Adjective
(ADV)	=	Adverb
/B/	=	Term used in Belgium
/CH/	=	Term used in Switzerland
(COL)	=	Collective noun
(DS)	=	Use of term in this sense not ad-
/GB/	=	Term used in U.K. vised
(INV)	=	Invariable word
(NFE)	=	Feminine noun
(NIN)	=	Invariable noun
(NMA)	=	Masculine noun
(NOM)	=	Noun (or substantive)
(NPR)	=	Proper name
(NS)	=	Scientific name
(PLU)	=	Plural
(PS)	=	Use of term in this sense to be
(QUA)	=	Qualifying condemned
(SIN)	=	Singular
(TD)	=	Use of term not advised
(TP)	=	Use of term to be condemned
(TS)	=	Synonymous term
(TV)	=	Obsolete term
/US/	=	Term used in the USA
(VER)	=	Verb
(VIN)	=	Intransitive verb
(VS)	=	Term obsolete in this sense
(VTR)	=	Transitive verb

1, ID, LJ
2, CP, /F36/CONTROLE DE LA QUALITE
3, ED, F05, F06, F32, F35, F38, F36, F37, F40, F42

STATISTICS

FIRST CRITERIA: 1 D.
ALL CRITERIA.: 1 D.
DISPLAYED.....: 1 D.
USED KEY WORDS: 1

F05 INDICE DE NORME : NF X U6-004
F06 DATE DE NORME : 19711100
F32 NUMERO NOTION : 1.1
F35 NORM. ISO EQUIV. : ISO/R 1786-1970
F38 NUM. MOT. ISO EQU. : 4.1
F36 TERME F + SYN. : CONTROLE DE LA QUALITE
F37 TERME E + SYN. : QUALITY INSPECTION #/QUALITY CONTROL.(TS)
F40 SPECIFIQUES F : CONTROLE STATISTIQUE DE LA QUALITE/CONTROLE DE RECEPTION
F42 DEFIN. NOTION : DANS UN SENS LARGE : GESTION DE LA QUALITE, C'EST-A-DIRE
ENSEMBLE DES OPERATIONS (PREVISION, COORDINATION, REALISATIONS) DESTINEES A
MAINTENIR OU A AMELIORER LA QUALITE ET A ETABLIR LA PRODUCTION AU NIVEAU LE
PLUS ECONOMIQUE QUI TIENNE COMPTE DE LA SATISFACTION DE L'UTILISATEUR,
DANS UN SENS PLUS RESTREINT : VERIFICATION DE LA CONFORMITE D'UN PRODUIT A
SA DEFINITION OU A SES SPECIFICATIONS.

ANNEXE

1, ID, LJ
 2, CP, /F41/ORGANE D'ENTREE-SORTIE ET SORTIE DE DONNEES ET REPRESENTATION
 3, CP, GRAPHIQUE
 4, ED, F05, F06, F35, F36, F37, F42, F41

STATISTICS

FIRST CRITERIA: 1 0,
 ALL CRITERIA..: 1 0.
 DISPLAYED.....: 1 0.
 USED KEY WORDS: 3

#####

F05 INDICE DE NORME : NF Z 01-011
 F06 DATE DE NORME : 19751200
 F35 NORM. ISO EQUIV. : ISO 2382/XI-1970
 F36 TERME F + SYN. : TRACEUR
 F37 TERME E + SYN. : PLOTTER
 F42 DEFIN. NOTION : ORGANE DE SORTIE QUI FOURNIT UNE REPRESENTATION GRAPHIQUE A
 DEUX DIMENSIONS DES DONNEES.
 F41 DESCR. NOTION : MATERIEL DE TRAITEMENT DE L'INFORMATION;SORTIE DE DONNEES;
 ORGANE D'ENTREE-SORTIE;REPRESENTATION GRAPHIQUE;

ANNEXE 7

INDEX PAR MOTS-VEGETTES FRANCAIS-ANGLAIS		DATE : 76 02 12	PAGE : 0304		
MOT-VEGETTE	F36	F37	INDICE	NUMERO	DATE
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EMPREINTE VIS AUTO-TARAUDEUSE A TETE FRAISEE BOMBEE A EMPREINTE CRUCIFORME		RECESSED RAISED COUNTERSUNK HEAD SELF CUTTING SCREW/RECESSED RAISED OVAL HEAD SELF CUTTING SCREW.(TS)	NF E 27-000	4.2.8	19721200
EMPREINTE OUTILLAGE DE COMPRESSION A PLUSIEURS EMPREINTES		MULTIPLE TOOL/MULTIPLE DIE.(TS)	NF A 95-001	3502	19710700
EMULSIBILITE EMULSIBILITE D'UN PRODUIT PETROLIER		EMULSIBILITY OF A PETROLEUM PRODUCT	NF M 06-001	3.23	19681200
EMULSIFIANT AGENT EMULSIONNANT/EMULSIFIANT.(TS) POUVOIR EMULSIONNANT/POUVOIR EMULSIFIANT.(TS)		EMULSIFYING AGENT/EMULSIFIER *(TS) EMULSIFYING POWER	NF T 73-000 NF T 73-000	4.4 4.4	19700600 19700600
EMULSIFICATION EMULSIFICATION		EMULSIFICATION	NF T 73-000	4.4	19700600
EMULSIFIE BITUME EMULSIFIE #BITUME EMULSIONNE *		EMULSIFIED BITUMEN	NF M 06-001	2.51	19681200
EMULSION EMULSION DE TYPE AQUEUX/L-H.(ABR) EMULSION DE TYPE HUILEUX/H-L.(ABR) PAPIER COUCHE A L'EMULSION STABILITE D'EMULSION		EMULSION AQUEOUS EMULSION/L-H *(ABR) OILY EMULSION/HOIL EMULSION *H-L *(ABR) EMULSION COATED PAPER EMULSION PERSISTENCE	NF T 73-000 NF T 73-000 NF T 73-000 NF B 01-005 NF T 73-000	2.5.1 4.4 4.4 186 4.4	19700600 19700600 19700600 19670600 19700600
EMULSIONNABLE LIQUIDE EMULSIONNABLE		EMULSIFIABLE LIQUID	NF T 73-000	4.4	19700600
EMULSIONNANT AGENT EMULSIONNANT/EMULSIFIANT.(TS) LIQUIDE EMULSIONNANT POUVOIR EMULSIONNANT/POUVOIR EMULSIFIANT.(TS)		EMULSIFYING AGENT/EMULSIFIER *(TS) EMULSIFYING LIQUID EMULSIFYING POWER	NF T 73-000 NF T 73-000 NF T 73-000	4.4 4.4 4.4	19700600 19700600 19700600
EMULSIONNE BITUME EMULSIFIE #BITUME EMULSIONNE *		EMULSIFIED BITUMEN	NF M 06-001	2.51	19681200
EM-TETE (CARACTERE)DEBUT D'EM-TETE		START OF HEADING CHARACTER/SH.(ABR)	NF Z 61-004	04.05.02	19730100
ENCADREMENT ENCADREMENT DE PORTE		DOOR FRAME	NF B 40-015	2465	19590300
ENCAMIONNEUSE ENCAMIONNEUSE		LOADING UNIT	NF M 95-400	221.221	19701000