

# Lubricants, industrial oils and related products (class L) — Classification —

## Part 1: Family A (Total loss systems)

ICS 75.100

## National foreword

This British Standard reproduces verbatim ISO 6743-1:2002 and implements it as the UK national standard. It supersedes BS 6413-1:1983 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PTI/7, Lubricants and process fluids, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
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### Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii to iv, pages 1 to 4, an inside back cover and a back cover.

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### Amendments issued since publication

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# INTERNATIONAL STANDARD

# ISO 6743-1

Second edition  
2002-09-01

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## Lubricants, industrial oils and related products (class L) — Classification —

### Part 1: Family A (Total loss systems)

*Lubrifiants, huiles industrielles et produits connexes (classe L) —  
Classification —*

*Partie 1: Famille A (Graissage perdu)*



Reference number  
ISO 6743-1:2002(E)



## Foreword

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ISO 6743-1 was prepared by Technical Committee ISO/TC 28, *Petroleum products and lubricants*, Subcommittee SC 4, *Classifications and specifications*.

This second edition cancels and replaces the first edition (ISO 6743-1:1981), which has been technically revised.

ISO 6743 consists of the following parts, under the general title *Lubricants, industrial oils and related products (class L) — Classification*:

- *Part 1: Family A (Total loss systems)*
- *Part 2: Family F (Spindle bearings, bearings and associated clutches)*
- *Part 3: Family D (Compressors)*
- *Part 4: Family H (Hydraulic systems)*
- *Part 5: Family T (Turbines)*
- *Part 6: Family C (Gears)*
- *Part 7: Family M (Metalworking)*
- *Part 8: Family R (Temporary protection against corrosion)*
- *Part 9: Family X (Greases)*
- *Part 10: Family Y (Miscellaneous)*
- *Part 11: Family P (Pneumatic tools)*
- *Part 12: Family Q (Heat transfer fluids)*
- *Part 13: Family G (Slideways)*
- *Part 14: Family U (Heat treatment)*

**BS ISO 6743-1:2002**

- *Part 15: Family E (Internal combustion engine oils)*
- *Part 99: General*

# Lubricants, industrial oils and related products (class L) — Classification —

## Part 1: Family A (Total loss systems)

### 1 Scope

This part of ISO 6743 establishes the detailed classification of family A (Total loss systems) which belongs to class L (Lubricants, industrial oils and related products).

This part should be read in conjunction with ISO 6743-99 (see [1] in the bibliography).

### 2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO 6743. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 6743 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 3448:1992, *Industrial liquid lubricants — ISO viscosity classification*

### 3 Explanation of symbols used

**3.1** The detailed classification of family A has been established by defining the categories of products required for the main applications of this family.

**3.2** Each category is designated by a symbol consisting of a group of letters, which together constitute a code.

NOTE The first letter of the code (A) identifies the family of the product considered, but the second letter taken separately has no significance of its own.

The designation of each category may be supplemented by the addition of viscosity grades according to ISO 3448.

**3.3** For categories AY, AN and AB, products are designated by numerical grades according to their viscosity (VG) as given in ISO 3448. This form may be complete, e.g. ISO-L-AN 32, or abbreviated to L-AN 32.

NOTE For category AC, additional categories will be defined in a specification standard in the course of development (see annex A), corresponding to low-temperature operability.

### 4 Detailed classification

The detailed classification is shown in Table 1.

**Table 1 — Classification of lubricants, industrial oils and related products (class L) — Family A (Total loss systems)**

Code letter	General application	More specific application	Composition and properties	Symbol ISO-L	Typical applications	Remarks
A	Total loss systems	Code letter	Mildly refined mineral oils	AY	Rough applications, axles, railway points, etc. <sup>a</sup>	Some products of this category may contain components which could be harmful to health and environment
			Refined mineral oils	AN	Lightly loaded parts (rolling bearings, gears), plain bearings in hydrodynamic regime	
			Refined mineral oils containing bitumen or additives to improve certain properties, e.g. adhesiveness, extreme pressure, anti-corrosion	AB	Open gears, wire ropes, mechanical chains <sup>b</sup>	
			Oils, either of mineral, animal, vegetable or synthetic origin, containing suitable additives to impart the necessary properties	AC	Chains of chain saws	
<p><sup>a</sup> For those implying direct discharge into the environment, the lubricant has to comply with the regulation in force in each country.</p> <p><sup>b</sup> For some applications, such as open gears, wire ropes, exposed chains, railway points, rail curves and plain bearings, etc., soft to fluid lubricating greases may be used. The classification and specifications of such greases will be addressed separately.</p>						



## Annex A (informative)

### Additional sub-categories for category AC

For product category AC, additional sub-categories will be defined in a separate International Standard, addressing the specifications of the products. The sub-categories will correspond to various levels of low-temperature operability, oxidation stability and environmental acceptability (toxicity and biodegradability).

At the time of publication of this part of ISO 6743, the specification standard for category AC is in the course of development, at the preliminary stage and will be referenced as ISO 11679:—<sup>1)</sup>, *Lubricants, industrial oils and related products (class L) — Family A (Total loss systems) — Specifications for lubricants for saw chains and guide bars of chain saws*.

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1) To be published.

## **Bibliography**

- [1] ISO 6743-99:2002, *Lubricants, industrial oils and related products (class L) — Classification — Part 99: General*



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