

**29.22 - Oxygen-function amino-compounds (+).**

- Amino-alcohols, other than those containing more than one kind of oxygen function, their ethers and esters; salts thereof :
- 2922.11 -- Monoethanolamine and its salts
- 2922.12 -- Diethanolamine and its salts
- 2922.14 -- Dextropropoxyphene (INN) and its salts
- 2922.15 -- Triethanolamine
- 2922.16 -- Diethanolammonium perfluorooctane sulphonate
- 2922.17 -- Methyldiethanolamine and ethyldiethanolamine
- 2922.18 -- 2-(N,N-Diisopropylamino)ethanol
- 2922.19 -- Other
  - Amino-naphthols and other amino-phenols, other than those containing more than one kind of oxygen function, their ethers and esters; salts thereof :
- 2922.21 -- Aminohydroxynaphthalenesulphonic acids and their salts
- 2922.29 -- Other
  - Amino-aldehydes, amino-ketones and amino-quinones, other than those containing more than one kind of oxygen function; salts thereof :
- 2922.31 -- Amfepramone (INN), methadone (INN) and normethadone (INN); salts thereof
- 2922.39 -- Other
  - Amino-acids, other than those containing more than one kind of oxygen function, and their esters; salts thereof :
- 2922.41 -- Lysine and its esters; salts thereof
- 2922.42 -- Glutamic acid and its salts
- 2922.43 -- Anthranilic acid and its salts
- 2922.44 -- Tilidine (INN) and its salts
- 2922.49 -- Other
- 2922.50 - Amino-alcohol-phenols, amino-acid-phenols and other amino-compounds with oxygen function

The term "oxygen-function amino-compounds" means amino-compounds which contain, in addition to an amine function, one or more of the oxygen functions defined in Note 4 to Chapter 29 (alcohol, ether, phenol, acetal, aldehyde, ketone, etc., functions), as well as their organic and inorganic acid esters. This heading therefore covers amino-compounds which are substitution derivatives of amines containing oxygen functions of headings 29.05 to 29.20, and esters and salts thereof.

Diazotisable amines and their salts of this heading diluted to standard strengths for the production of azo-dyes are also included here.

Organic dyes are **excluded** from this heading (Chapter 32).

**(A) AMINO-ALCOHOLS, THEIR ETHERS AND ESTERS;  
SALTS THEREOF**

These compounds contain one or more alcohol hydroxyl groups and one or more amino groups bound to atoms of carbon. These compounds contain as oxygen functions only alcohols, their ethers or esters, or a combination of these functions. Any oxygen function found in a non-parent segment attached to a parent amino-alcohol is disregarded for classification purposes.

- (1) **Monoethanolamine** ( $\text{NH}_2(\text{CH}_2\text{CH}_2\text{OH})$ )\*. Rather viscous, colourless liquid; used for the manufacture of pharmaceutical products, soap, etc.
- (2) **Diethanolamine** ( $\text{NH}(\text{CH}_2\text{CH}_2\text{OH})_2$ ). Colourless crystals or pale liquid; used for absorbing acid gases, in tanning for softening leathers, and in organic synthesis.
- (3) **Triethanolamine** ( $\text{N}(\text{CH}_2\text{CH}_2\text{OH})_3$ ). Viscous liquid. A base used in the soap and emulsion industries, and for dressing and finishing fabrics.
- (4) **Diethanolammonium perfluorooctane sulphonate**. An ammonium salt of perfluorooctane sulfonate (PFOS) (see headings 29.04, 29.23, 29.35, 38.08 and 38.24).
- (5) **Methyldiethanolamine and ethyldiethanolamine**.
- (6) **2-(N,N-Diisopropylamino)ethanol** or N,N-diisopropylethanolamine ( $((\text{CH}_3)_2\text{CH})_2\text{NCH}_2\text{CH}_2\text{OH}$ ). Colourless to slightly yellow liquid.
- (7) **(2-Benzoyloxy-2-methylbutyl)dimethylammonium chloride**. Crystalline white powder; used as a local anaesthetic.
- (8) **Meclofenoxate**.
- (9) **Arnolol**.
- (10) **Sarpogrelate**.
- (11) **Arylethanolamines**.
- (12) **Tetramethyl- and tetraethyldiaminobenzhydrol**.
- (13) **Aminoethyl nitrate**.

**(B) AMINO-NAPHTHOLS AND OTHER AMINO-PHENOLS,  
THEIR ETHERS AND ESTERS; SALTS THEREOF**

These are phenolic compounds in which one or more hydrogen atoms have been replaced by an amino group ( $-\text{NH}_2$ ). These compounds contain as oxygen functions only phenol functions, their ethers or esters, or a combination of these functions. Any oxygen function found in a non-parent segment attached to a parent amino-naphthol or other amino-phenol is disregarded for classification purposes.

- (1) **Aminohydroxynaphthalenesulphonic acids**, e.g.,\*
  - (a) **7-Amino-1-naphthol-3-sulphonic acid** (gamma acid);
  - (b) **8-Amino-1-naphthol-3,6-disulphonic acid** (H acid).
- (2) ***o*-, *m*- and *p*-Aminophenols**.
- (3) **Amino-*o*-, *m*- and *p*-cresols**.
- (4) **Diaminophenols**.

The ethers of **amino-phenols** include :

- (a) **Anisidines\***.
- (b) **Dianisidines** (bianisidines)\*.
- (c) **Phenetidines**.
- (d) **Cresidines**.
- (e) **5-Nitro-2-propoxyaniline** (2-amino-4-nitrophenol *n*-propylether).

Hydroxy derivatives of diphenylamine and their salts are also included here.

#### (C) AMINO-ALDEHYDES, AMINO-KETONES AND AMINO-QUINONES; SALTS THEREOF

These contain the amino-group associated with the aldehyde group ( $-CHO$ ), the ketone group ( $>C=O$ ) or the quinone group (see the Explanatory Note to heading 29.14), respectively.

- (1) **Aminobenzaldehydes**.
- (2) **Tetramethyl- and tetraethyldiaminobenzophenones**.
- (3) **Amino- and diaminoanthraquinones**.
- (4) **Anthrimides**.

#### (D) AMINO-ACIDS AND THEIR ESTERS; SALTS THEREOF

These compounds contain one or more carboxylic acid functions and one or more amine functions. Anhydrides, halides, peroxides and peroxyacids of carboxylic acids are regarded as acid functions.

These compounds contain as oxygen functions only acids, their esters or their anhydrides, halides, peroxides and peroxyacids or a combination of these functions. Any oxygen function found in a non-parent segment attached to a parent amino-acid is disregarded for classification purposes.

The amino-acids classified under this heading with their esters, salts and substitution derivatives include :

- (1) **Lysine** (diamino-*n*-hexanoic acid)\*. Colourless crystals. A cleavage product of silk gum and other proteins.
- (2) **Glutamic acid**. Cleavage product of proteins. Obtained from gluten. Crystals used in medicine or in food industries.
- (3) **Glycine** (aminoacetic acid; glycocoll) ( $H_2NCH_2COOH$ ). Large, colourless, regularly shaped crystals. Used in organic synthesis, etc.
- (4) **Sarcosine** ( $CH_3NHCH_2COOH$ ). Methyl derivative of glycine; crystallises in prisms.

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- (5) **Alanine** (2-aminopropionic acid). Hard needles.
- (6)  **$\beta$ -Alanine** (3-aminopropionic acid). Crystalline.
- (7) **Phenylalanine**.
- (8) **Valine** ( $\alpha$ -aminoisovaleric acid). Crystals.
- (9) **Leucine** ( $\alpha$ -aminoisocaproic acid). Obtained by hydrolysis of proteins; white opalescent crystals. **Isoleucine**.
- (10) **Aspartic acid**. Crystalline.
- (11) ***o*-Aminobenzoic acid** (anthranilic acid). Obtained synthetically; used for the manufacture of synthetic indigo. Among its derivatives is methyl anthranilate.
- (12) ***m*-Aminobenzoic acid**.
- (13) ***p*-Aminobenzoic acid**. Used in the preparation of dyestuffs, artificial perfumes and anaesthetics; also in medicine for its vitamin activity. Its derivatives include ethyl and butyl *p*-aminobenzoates. **Procaine hydrochloride** (diethylaminoethyl *p*-aminobenzoate hydrochloride), small colourless and odourless crystals, is a local anaesthetic used by oculists and dentists.
- (14) **Phenylglycine**.
- (15) **Lisadimate**.

### (E) AMINO-ALCOHOL-PHENOLS, AMINO-ACID-PHENOLS AND OTHER AMINO-COMPOUNDS WITH OXYGEN FUNCTION

This part includes, *inter alia* :

- (1) **Tyrosine** (*p*-hydroxyphenylalanine).
- (2) **Serine** ( $\alpha$ -amino- $\beta$ -hydroxypropionic acid). A cleavage product of silk gum and other proteins.
- (3) **Aminosalicylic acids**, including **5-aminosalicylic acid** and **4-aminosalicylic acid**. Crystalline powders. **5-Aminosalicylic acid** is used in inorganic synthesis (e.g., for the manufacture of azo- and sulphur-dyes); the sodium salt of **4-aminosalicylic acid** is used in medicine for treating pulmonary tuberculosis.
- (4) **Medifoxamine** (N,N-dimethyl-2,2-diphenoxyethylamine), an amine compound with acetal function.
- (5) **Propoxycaine**.

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Certain substances of this heading, which are regarded as narcotic drugs or as psychotropic substances under international instruments, are indicated in the list appearing at the end of Chapter 29.

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#### Subheading Explanatory Note.

#### Subheadings 2922.11 to 2922.50

For subheading classification purposes, ether or organic or inorganic acid ester functions are regarded either as alcohol, phenol or acid functions, depending on the position of the oxygen function in relation to the amine group. In these cases, only those oxygen functions present in that part of the molecule situated between the amine function and the oxygen atom of either the ether or the ester function should be taken into consideration. A segment containing an amine function is referred to as a "parent" segment. For example, in the compound 3-(2-aminoethoxy)propionic acid, the parent segment is aminoethanol, and the carboxylic acid group is disregarded for classification purposes; as an ether of an amino-alcohol, this compound is classifiable in subheading 2922.19.

If the compound contains two or more ether or ester functions, the molecule is segmented for classification purposes at the oxygen atom of each ether or ester function, and the only oxygen functions considered are those found in the same segment as an amine function.

If the compound has two or more amine functions linked to the same ether or ester function, it is classifiable in the subheading that is last in numerical order; that subheading is determined by considering the ether or ester function as either an alcohol, phenol or acid function, in relation to each amine function.