

ECLA EUROPEAN CLASSIFICATION

C23G CLEANING OR DEGREASING OF METALLIC MATERIAL BY CHEMICAL METHODS OTHER THAN ELECTROLYSIS (polishing compositions C09G; detergents in general C11D)

C23G1/00 Cleaning or pickling metallic material with solutions or molten salts (with organic solvents [C23G5/02](#))

C23G1/02 . with acid solutions

C23G1/02B . . [N: acidic pickling pastes]

C23G1/04 . . using inhibitors

C23G1/06 . . . organic inhibitors

[N: **Note**

In groups [C23G1/06B](#) to [C23G1/06F](#) an invention is classified in the last appropriate place
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C23G1/06B [N: nitrogen-containing compounds]

C23G1/06C [N: heterocyclic compounds]

C23G1/06D [N: sulfur-containing compounds]

C23G1/06E [N: phosphorus-containing compounds]

C23G1/06F [N: compounds containing a C=C bond]

C23G1/08 . . Iron or steel

[N: **Note**

In groups [C23G1/08B](#) to [C23G1/08F](#) an invention is classified in the last appropriate place
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C23G1/08B . . . [N: solutions containing H₂SO₄]

C23G1/08C . . . [N: solutions containing H₃PO₄]

C23G1/08D . . . [N: solutions containing HNO₃]

C23G1/08E . . . [N: solutions containing HF]

C23G1/08F . . . [N: solutions containing organic acids]

C23G1/10 . . Other heavy metals

C23G1/10B . . . [N: copper or alloys of copper]

C23G1/10C . . . [N: refractory metals]

C23G1/12 . . Light metals

C23G1/12B . . . [N: aluminium]

C23G1/14 . with alkaline solutions

C23G1/16 . . using inhibitors

C23G1/18 . . . Organic inhibitors

C23G1/19 . . Iron or steel

C23G1/20 . . Other heavy metals

- C23G1/20B . . . [N: refractory metals]
- C23G1/22 . . Light metals
- C23G1/24 . with neutral solutions
- C23G1/26 . . using inhibitors
- C23G1/28 . with molten salts
- C23G1/30 . . using inhibitors
- C23G1/32 . . Heavy metals
- C23G1/34 . . Light metals
- C23G1/36 . Regeneration of waste pickling liquors

C23G3/00 **Apparatus for cleaning or pickling metallic material** (with organic solvents [C23G5/04](#); [N: apparatus for continuously conveying articles into baths [B65G](#)])

- C23G3/02 . for cleaning wires, strips, filaments continuously
- C23G3/02B . . [N: by dipping] [N9908]
- C23G3/02B2 . . . [N: the objects following a helicoidal path] [N9908]
- C23G3/02D . . [N: by spraying] [N9908]
- C23G3/02F . . [N: by a combination of dipping and spraying] [N9908]
- C23G3/02M . . [N: Details of the apparatus, e.g. linings or sealing means] [N9908]
- C23G3/02M2 . . . [N: for guiding the objects] [N9908]
- C23G3/02T . . [N: Associated apparatus, e.g. for pretreating or after-treating] [N9908]
- C23G3/02T2 . . . [N: for thermal or mechanical pretreatment] [N9908]
- C23G3/02T6 . . . [N: for removing the pickling fluid from the objects] [N9908]
- C23G3/04 . for cleaning pipes

C23G5/00 **Cleaning or de-greasing metallic material by other methods; Apparatus for cleaning or de-greasing metallic material with organic solvents**

[N: **Note**
Mixtures of organic solvents are classified according to the major component
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- C23G5/02 . using organic solvents
- C23G5/024 . . containing hydrocarbons
- C23G5/028 . . containing halogenated hydrocarbons
- C23G5/028B . . . [N: containing fluorine]
- C23G5/028C . . . [N: containing only chlorine as halogen atom]
- C23G5/028D . . . [N: containing chlorine and fluorine]
- C23G5/028D1 [N: Perhalogenated hydrocarbons]
- C23G5/028D1B [N: Ethanes]
- C23G5/028D1B33 [N: C2Cl3F3]
- C23G5/028D1B42 [N: C2Cl4F2]

C23G5/028D2	. . . .	[N: containing hydrogen]
C23G5/028D2B	. . . . .	[N: Ethanes]
C23G5/028D2B21	. . . . .	[N: C ₂ H ₃ Cl ₂ F]
C23G5/028D2B22	. . . . .	[N: C ₂ H ₂ Cl ₂ F ₂]
C23G5/028D2B23	. . . . .	[N: C ₂ HCl ₂ F ₃]
C23G5/028D2C	. . . . .	[N: Propanes]
C23G5/028D2C14	. . . . .	[N: C ₃ H ₃ ClF ₄]
C23G5/028D2C24	. . . . .	[N: C ₂ H ₂ Cl ₂ F ₄]
C23G5/028D2C25	. . . . .	[N: C ₂ HCl ₂ F ₅]
C23G5/028P	. . .	[N: characterised by the stabilising or corrosion inhibiting additives]
C23G5/028P1	. . . . .	[N: Hydrocarbons]
C23G5/028P2	. . . . .	[N: Oxygen-containing compounds]
C23G5/028P2B	. . . . .	[N: Alcohols]
C23G5/028P2B1	. . . . .	[N: aliphatic]
C23G5/028P2B2	. . . . .	[N: aromatic]
C23G5/028P2C	. . . . .	[N: Aldehydes or ketones]
C23G5/028P2D	. . . . .	[N: Ethers]
C23G5/028P2E	. . . . .	[N: Epoxy compounds]
C23G5/028P3	. . . . .	[N: Nitrogen-containing compounds]
C23G5/028P3D	. . . . .	[N: Nitro-compounds]
C23G5/028P3H	. . . . .	[N: N-heterocyclics]
C23G5/028P4	. . . . .	[N: Sulfur-containing compounds]
C23G5/028P5	. . . . .	[N: Phosphorus-containing compounds]
C23G5/032	. .	containing oxygen-containing compound
C23G5/036	. . .	having also nitrogen
C23G5/04	. .	Apparatus
C23G5/06	. .	using emulsions