

This heading is concerned with processes and apparatus for rendering harmful materials harmless, destroying chemical compounds and compositions and treatment of waste materials for which no provision is made elsewhere. It is essentially residual in nature and is chiefly concerned with the chemical destruction of individual chemical compounds, but also covers the destruction of materials and articles not characterised by the process or apparatus used or by a useful product obtained, and treatments where the process or apparatus used is not readily classified elsewhere, being known *per se* or being a multistage process or apparatus not assignable to any one heading

Explanation of subject matter and relationship with other headings

The majority of inventions involving disposal of waste materials can be characterised by the process or apparatus used or by a useful product recovered. Where that is the case, and a suitable heading exists for the process, apparatus or product, the invention is classified in that heading. The following does not provide an exhaustive list of headings which should be considered, but is intended to be indicative only:

Physical treatments—will normally be classifiable in a heading for producing the effect intended. A few multi-step processes or processes otherwise difficult to assign to any one other heading will be dealt with here, but most physical processes and apparatus will be appropriate to such headings as:

- . disintegrating solid waste—B2A, Comminuting; B3W, Shearing, punching &c metals
- . confining spray, fumes, smoke &c—B2F, Fluid discharge devices; D1F, Spinning processes; F4X, Gas distribution, liquid heating vessels &c
- . separating and sorting waste materials—B2H, Separating solids; B2J, Electrostatic and magnetic separation &c
- . . by single physical processes—*See* the heading for the treatment *eg* B1B, Distillation; evaporation; condensation; B1D, Filtering and settling; B1Q, Making extracts, solutions &c; B1R, treating gases with liquids &c; B1T, Separating particles from gases; B2P, Centrifuges
- . compaction of—
 - . . scrap metal—B3V, Miscellaneous working of metals &c
 - . . plastics scrap—B5A, Moulding plastic substances &c
 - . . domestic and like waste—B5F, Presses; B8E, Loading and unloading (for mobile compactors, rubbish pits)
 - . . moulding (*including* granulation, pelletisation, briquetting)—B5A, moulding plastic substances &c
 - . . microencapsulation—B8C, Packaging &c
 - . . incorporation in concrete, cement, mortar &c—C1H, Cement, stone &c
 - . . physical treatments of radioactive materials—G6R, Radioactive materials and processing

Chemical treatments, including catalytic and biological treatments—unless using special apparatus for which another heading exists, or directed to the production of a specific product, will generally be subject matter for this heading, subject to the exclusions below:

- . sterilising, disinfecting—
 - . . root growth media—A1E, Treating plants &c
 - . . food &c—A2D, Preserving food, animal and vegetable substances &c
 - . . in general—A5G, Disinfecting, fumigating &c
- . using a special catalyst—B1E, Catalyst compositions &c
- . pyrolysis adapted to produce a gaseous, liquid or solid fuel—C5E, Destructive pyrolysis, gas, hydrocarbons &c
- . combustion, incineration—
 - . . in specially adapted furnaces—F4B, Furnaces &c; H5H, Electric heating, microwave heating &c
 - . . in specially adapted plasma devices—H1D, Electric discharge tubes &c

Specific waste materials treated—will normally be classifiable according to the treatment or apparatus used or the product obtained or recovered, but if none of these is appropriate will be classifiable in this heading, subject to the following particular exceptions:

- . waste gases—B1W, Waste gas treatment systems
- . water or sewage or other waste liquids or slurries—C1C, Treating water, sewage &c
- . domestic refuse—C1K, Treating slags, dry refuse &c; B5F, Presses
- . chemical modification of plastics materials—C3J, Chemical after-treatment of addition polymers &c
- . radioactive waste—G6R, Radioactive materials and processing; G6C, Nuclear fission reactors &c (*for in situ* decontamination of reactors)
- . reclassification of transformers (replacing PCB transformer fluid)—H1T, Electric transformers &c

Regeneration of used materials and agents—will almost invariably be classified in the heading for the material or agent treated. The following are by way of example only:

- . catalysts—B1E, Catalyst compositions &c; B1F, Chemical contact apparatus &c
- . paper pulp liquors—D2W, Treating wood-pulp &c
- . photographic developers, fixers &c—G2X, Miscellaneous photographic processes and apparatus

Recovery or salvage from specific sources—may be classifiable in this heading if the products are not of interest *per se*, but the following special cases should be noted:

- . waste paper or rags—B2A, Comminuting, D2W, Treating wood-pulp &c
- . mechanical recovery of materials from coated products—B2E, Coated products
- . furnace waste gases—F4B, Furnaces &c
- . recovering silver and/or polymers from photographic emulsions—G2X, Miscellaneous photographic processes and apparatus
- . electric cells, batteries, accumulators &c—H1B, Electric cells of the electrochemical type
- . electric cables—H2C, Electric and optic cable installations &c

Recovering or obtaining specific materials from waste—will almost invariably be classifiable in the heading for the material; typical such subjects include:

- . animal foodstuffs—A2B, Food preparations
- . proteins—A2B, Food preparations, C3H, Proteins, enzymes and nucleic acids
- . fibres—B2A, Comminuting; D1N, Fibre preparation machines &c
 - . . animal fibres from rags—D1F, Spinning processes
- . inorganic compounds—C1A, Inorganic substances &c
- . organic compounds—C2C, Organic compounds, C2B, Organic compounds containing boron, C2J, Organometallic compounds, C2P, Organic compounds containing phosphorus, C2R, Organic silicon compounds
 - . . alcohol by fermentation—C6E, Alcoholic beverages &c
- . fertilisers—C1B, Plant growth regulants, fertilizers &c
- . plastics and monomers for plastics—C3J, Chemical after-treatment of addition polymers &c, other C3 headings
- . edible fats and oils—C5C, Animal and vegetable fats and oils &c
- . liquid hydrocarbons—C5E, Destructive pyrolysis, gas, hydrocarbons &c
- . lubricants—C5F, Lubricants &c
- . solid fuels—C5G, Fuels
- . metals—C7B, Electrolysis; C7D, Process metallurgy &c
- . paper and cellulose—D2W, Treating wood-pulp &c

Relationship with the Universal Indexing Schedules (heading U1S)

Terms from U1S are applied, subject to its indexing rules, to identify such aspects as source or location of waste treated, use of products, hazards avoided &c

Operative date for Key entries

The operative date of the terms in this heading is that of Edition N

Classifying Schedule

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| PA | . types of treatment— |
| PB | . . incineration, combustion, pyrolysis |
| PC | . . incorporation into bodies of <i>eg</i> glass, concrete, organic matrix |
| PD | . . chemical sequestration, complexing, immobilisation, leach reduction |
| PE | . . biological <i>including</i> enzymatic treatment |
| PP | . . other chemical treatment |
| PW | . . purely physical processes |
| | . . combinations of two or more of the above |
| | . . <i>See also</i> Indexing Schedule 3 |

Indexing Schedule 1

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| | type of waste— |
| | . contaminated soil— <i>See</i> term P201 <i>below</i> |
| P101 | . plastics and rubber <i>including</i> tyres |
| P102 | . domestic refuse |
| | . specific compounds or class of compounds targeted— |
| P103 | . . organic halogenated materials |
| P104 | . . heavy metals, toxic metals |
| P109 | . other specific waste |

Indexing Schedule 2

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| | useful products— |
| P201 | . soil, plant growth medium |
| P202 | . materials recyclable for their original use |
| P203 | . raw material for further processing |
| P204 | . combustible material |
| P205 | . fillers, aggregate, roadstone, landfill |
| P209 | . other specific materials |

Indexing Schedule 3—applicable with classifying term PW only

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| | types of treatment— |
| P301 | . incineration, combustion, pyrolysis |
| P302 | . incorporation into bodies of <i>eg</i> glass, concrete, organic matrix |
| P303 | . chemical sequestration, complexing, immobilisation, leach reduction |
| P304 | . biological <i>including</i> enzymatic treatment |
| P305 | . other chemical treatment |
| P309 | . purely physical processes |