The following classification changes will be effected by this Notice of Changes:

<table>
<thead>
<tr>
<th>Action*</th>
<th>Subclass</th>
<th>Group(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFINITIONS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definitions New:</td>
<td>B01J</td>
<td>41/10</td>
</tr>
<tr>
<td>Definitions Modified:</td>
<td>B01J</td>
<td>39/00, 41/00, 47/00, 49/00</td>
</tr>
</tbody>
</table>

*Delete rows for actions not applicable; Add additional rows as needed.

No other subclasses/groups are impacted by this Notice of Changes.

This Notice of Changes includes the following [Check the ones included]:

1. CLASSIFICATION SCHEME CHANGES
   - A. New, Modified or Deleted Group(s)
   - B. New, Modified or Deleted Warning(s)
   - C. New, Modified or Deleted Note(s)
   - D. New, Modified or Deleted Guidance Heading(s)

2. DEFINITIONS
   - ☑ A. New or Modified Definitions (Full definition template)
   - ☐ B. Modified or Deleted Definitions (Definitions Quick Fix)

3. ☐ REVISION CONCordance LIST (RCL)
4. ☐ CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)
5. ☐ CHANGES TO THE CROSS-REFERENCE LIST (CRL)
2. A. DEFINITIONS (modified)

B01J39/00
Cation exchange; Use of material as cation exchangers; Treatment of material for improving the cation exchange properties (ion-exchange chromatography processes B01D15/36)

Definition statement

**Insert** a period at the end of the last line:

This place covers:

- processes involving solid inorganic or organic cation exchangers and uses of inorganic or organic materials as cation exchangers whereby cations are exchanged between the solid exchanger and a medium to be treated.
- the treatment of inorganic or organic materials used as cation exchangers.
- cation exchangers as stationary phases or packings for chromatography processes.

**Insert** the following new Relationships with other classification places section:

Relationships with other classification places

In groups B01J39/00 - B01J49/00, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Compositions, apparatus or processes involving at least two different types of ion exchangers, e.g. two different cation exchangers, or a cation exchanger and an anion exchanger, are classified using a combination of the corresponding classes.

For example:

- a process involving an organic cation exchanger in the strongly acidic form and an organic cation exchanger in the weakly acidic form is classified with B01J39/05 and B01J39/07.
- a process involving an inorganic cation exchanger and an inorganic anion exchanger is classified with B01J39/02 and B01J41/02.
a process involving an organic cation exchanger in the strongly acidic form and an organic anion exchanger in the weakly basic form is classified with B01J39/05 and B01J41/07.

References

Limiting references

**Delete** the comma and the second symbol in the table:

This place does not cover:

| Preparative chromatography processes involving cation exchange | B01D15/36 |

**Delete** the Special rules of classification section.
2. A. DEFINITIONS (modified)

B01J41/00
Anion exchange; Use of material as anion exchangers; Treatment of material for improving the anion exchange properties (ion-exchange chromatography processes B01D15/36)
Definition statement

Insert a period at the end of the last two bullet statements:

This place covers:

- Processes involving solid inorganic or organic anion exchangers and uses of solid inorganic or organic materials as anion exchangers whereby anions are exchanged between the solid exchanger and a medium to be treated.
- the treatment of inorganic or organic materials used as anion exchangers.
- anion exchangers as stationary phases or packing for chromatography processes.

Insert the following new Relationships with other classification places section:

Relationships with other classification places

In groups B01J39/00 - B01J49/00, in the absence of an indication to the contrary, classification is made in the last appropriate place.

Compositions, apparatus or processes involving at least two different types of ion exchangers, e.g. two different anion exchangers, or a cation exchanger and an anion exchanger, are classified using a combination of the corresponding classes.

For example:

- a process involving an organic anion exchanger in the strongly basic form and an organic anion exchanger in the weakly basic form is classified with B01J41/05 and B01J41/07.
- a process involving an inorganic cation exchanger and an inorganic anion exchanger is classified with B01J39/02 and B01J41/02.
a process involving an organic cation exchanger in the strongly acidic form and an organic anion exchanger in the weakly basic form is classified with B01J39/05 and B01J41/07.

References

Limiting references

Replace the existing table with the following:

This place does not cover:

<table>
<thead>
<tr>
<th>Preparative chromatography processes involving anion exchange</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B01D15/36</td>
</tr>
</tbody>
</table>

Delete the Special rules of classification section.
2. A. DEFINITIONS (new)

B01J41/10

Inorganic material

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Carbon, coal or tar | B01J41/18 |
2. A. DEFINITIONS (modified)

B01J47/00
Ion-exchange processes in general; Apparatus therefor (ion-exchange chromatography processes or apparatus B01D15/08)

Definition statement

Replace the current statement with the following:

This place covers:

Processes in general involving ion-exchange and apparatus therefor, comprising cationic, anionic or amphoteric ion exchange resin.

Insert the following new Relationships with other classification places section:

Relationships with other classification places

In groups B01J39/00 - B01J49/00, in the absence of an indication to the contrary, classification is made in the last appropriate place.

References

Limiting references

Delete the comma and the second symbol in the table:

This place does not cover:

| Ion-exchange chromatography processes or apparatus | B01D15/08 |

Delete the Special rules of classification section.
2. A. DEFINITIONS (modified)

**B01J49/00**
Regeneration or reactivation of ion-exchangers; Apparatus therefor (ion-exchange chromatography processes or apparatus **B01D15/08**)  

**Insert** the following new Relationships with other classification places section:

**Relationships with other classification places**

In groups **B01J39/00** - **B01J49/00**, in the absence of an indication to the contrary, classification is made in the last appropriate place.

**Delete** the Special rules of classification section.