European Maritime Safety Agency

User Manual

Central Hazmat Database

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List of Abbreviations

CHD	Central Hazmat Database
Directive 2002/59/EC	Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC, as amended
EMSA	European Maritime Safety Agency
FAL	International Convention on Facilitation of International Maritime Traffic 1965, as amended
Hazmat	Dangerous or polluting goods
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
IGC	International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
IMDG	International Maritime Dangerous Goods Code
IMO	International Maritime Organisation
IMSBC	International Maritime Solid Bulk Cargoes Code
MAP	Maritime Applications Portal
MAR-CIS	MARine Chemical Information Sheet
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973, as amended)
NSW	National Single Window

1. Introduction

1.1 Purpose of the document

This document constitutes the Central Hazmat Database (CHD) User Manual which provides a general description of the CHD application and describes the functionalities that are available to the users accessing the CHD application through the EMSA Maritime Applications Portal.

1.2 Scope and description of the CHD

The objectives of the CHD are to:

- improve the data quality of dangerous and polluting goods notifications,
- minimise the administrative burden for ship reporting parties, and
- support Member States emergency services in providing effective response to maritime incidents.

These objectives can be achieved if the CHD is used as a reference and a verification tool during the reporting process, both at national and central level, as follows:

As a reference -

- Industry stakeholders and reporting parties can easily search for the correct details of dangerous or polluting goods,
- the administrative burden of ship reporting parties can be minimised when submitting dangerous or polluting goods information if a copy of the content of the CHD is integrated with the national single window (NSW), and
- competent authorities can access the MAR-CIS database to get information which is necessary to effectively respond to a maritime casualty involving ships carrying hazardous noxious substances.

For verification -

- competent authorities and EMSA services can cross-check and validate the correctness of the information on dangerous or polluting goods notified to the NSW and the SafeSeaNet system.

The CHD contains:

- A list of dangerous or polluting goods that have to be notified in accordance with Directive 2002/59/EC, as amended, and FAL Form 7, and relevant details from the IMO Conventions and Codes - as identified in the Guidelines on Hazmat reporting to SafeSeaNet (IMDG, IMSBC, IGC, IBC and MARPOL Annex 1), and
- A link to the relevant entries in the MAR-CIS database.

Information in the CHD may not always be a complete and an accurate version of the original material in the IMO Conventions and Codes as the latter may have subsequently been amended. Users of the CHD should also refer to the Guidelines on Reporting Hazmat in SafeSeaNet (which can be downloaded from the ‘About’ page of the CHD). They should in particular note that, as stated in Chapter 10, mismatches may result when cross-checking the reported data with the CHD content. Such instances should be brought to the attention of the data provider for verification.

1.3 Users

SafeSeaNet users may access the CHD through the password protected section of the EMSA MAP and would benefit from all the functionalities of the CHD. Other users (referred to as Guest users in this document) could access the CHD through the public section of MAP but as highlighted in this document they would have restricted functionalities.

2. Main Application's menu

2.1 Header Section

Users are able to navigate across the various pages of the CHD by using the top-level menu. The available items depend on the user's access rights and include the following:

1. Search (CHD Homepage); Refer to 4
2. About; Refer to 3
3. Download CHD Dataset; refer to 2.3
4. Activate/Deactivate e-mail notifications; Refer to 2.4
5. View Versioning information; Refer to 2.5

2.2 Footer Section

This section is always visible and provides the following information:

1. Personal data protection clause
2. Upcoming information version (to be displayed only if an upcoming version has been scheduled)

2.3 Download CHD Dataset

The application provides the user with the ability to download the whole CHD dataset for the user to "browse" within the entire database content. The CHD dataset can be downloaded in three different formats:

- XLSX
- CSV
- PDF

Figure 1: Download CHD Dataset

Notes:

Excel functionality provides a more flexible approach, since the user will use the excel that is designed to handle large amount of data in a "offline" mode, combining the sorting and filtering options.

Guests can only download the CHD dataset only in PDF.

If a CHD record is associated with a MAR-CIS datasheet, the exported file will provide visual indication for this link for all users, except the Guests.

2.4 Activate/Deactivate e-mail notifications

The user may enable/disable the e-mail notifications reception by clicking on the e-mail icon located on the main menu and via a toggle button:

i. ON
ii. OFF (default e-mail notification setting)

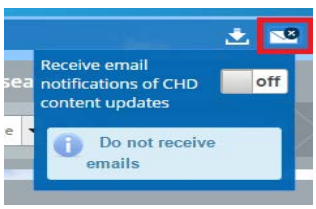

Figure 2: E-mail notifications

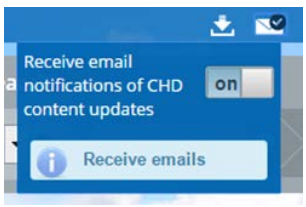

Figure 3: E-mail notifications - toggle

According to the state of the current functionality the e-mail icon may have the following visual indicators:

a. “X” icon, if the e-mail warning notification is “OFF”
b. “check” icon, if the e-mail warning notification is “ON”

CHD-Users may receive two kinds of e-mails:

- E-mail(s) regarding the update of the CHD
  - The email will include the IMO Codes which will be updated and when they will be updated
- E-mail(s) regarding the update of individual HAZMAT product(s)
  - The email will include the HAZMAT product(s) which will be updated and when it (they) will be updated

2.5 CHD application versioning

The application provides the user with the ability to view the current CHD application’s version. The version number is composed of the following details:

- CHD (Static text informing the user of the name of the application)
- IMO Code (The latest updated IMO Code – if more than one IMO Code is updated than the IMO Codes are separated with “_”
- The date when the update took place
- Current version’s number

Figure 4: CHD Application versioning

3. About Page

The application provides the user with the ability to view a page explaining the background and content of the CHD displayed in the “About” page, by clicking the respective menu item. The page provides also links to reference documentation such as Legal references and Operational references (User Manual, Hazmat guidelines etc.).

User may click on the desired link in order to download the respective information.

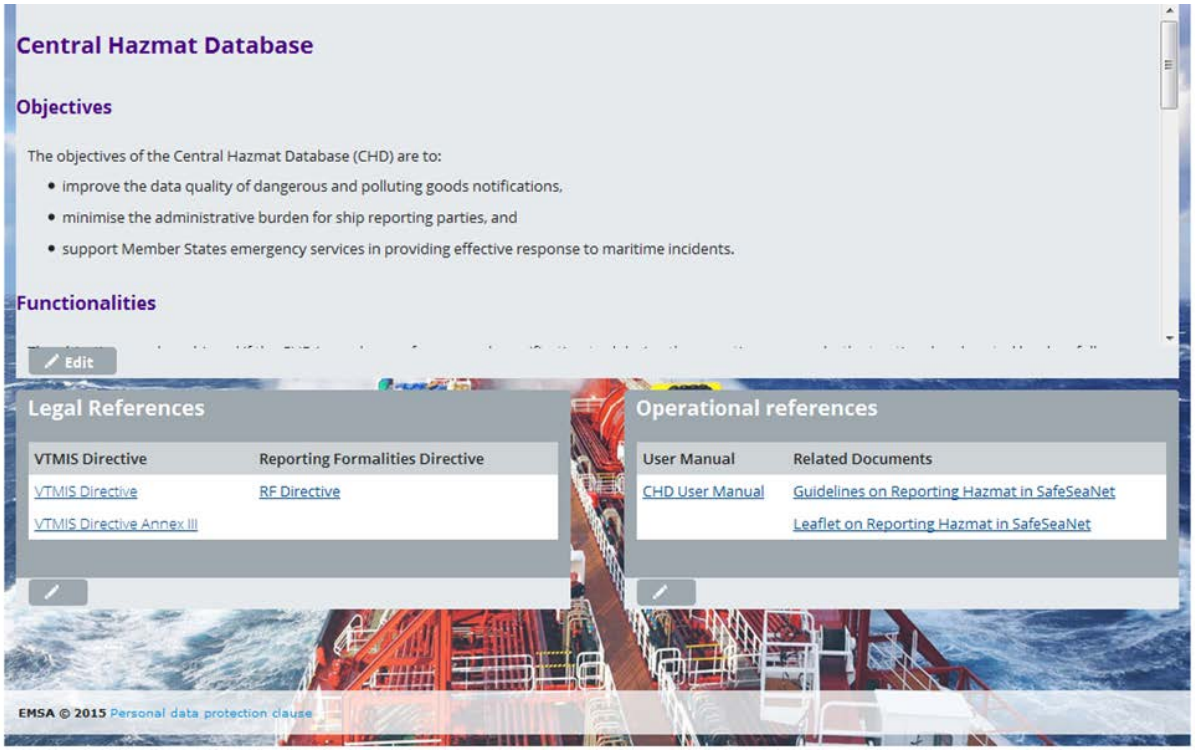

Figure 5: "About" page

4. Search – Homepage

4.1 Search functionalities

The default homepage is the Search page and displays the following:

1. General Search: Search by one data attribute
2. Step-by-Step Search: Search by selecting mode of carriage, type of product carried in bulk (if relevant), type of liquid (if relevant) and then the textual reference
3. Search results table with the following columns (by default):
    a. DG classification
    b. Textual reference
    c. Mode of Carriage
    d. Type of product carried in bulk
    e. Type of liquid
    f. IMO Hazard class
    g. UN Number
    h. Additional information
    i. MAR-CIS

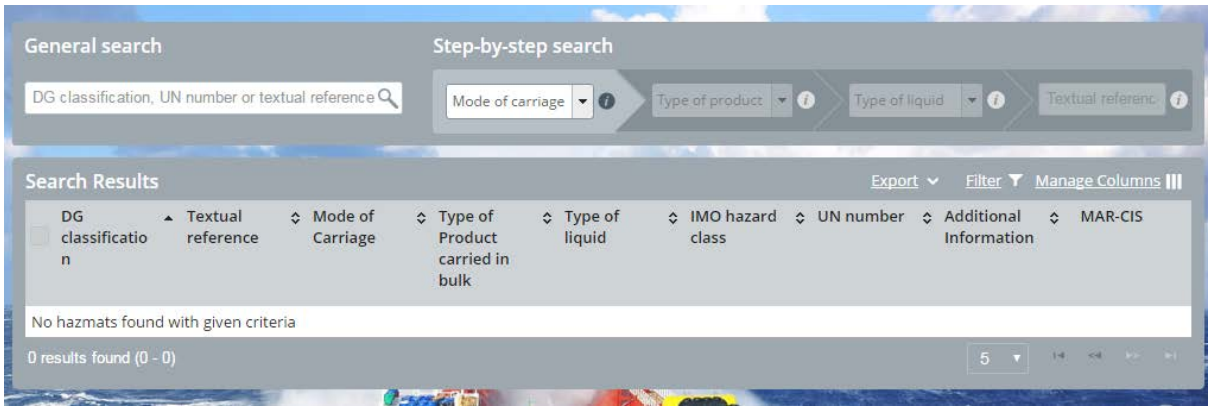

Figure 6: CHD Search page

4.1.1 General Search

The User is able to use the General search in order to retrieve the desired data. The entered search criteria targets the following data attributes:

a. HazmatID
b. DG classification
c. Textual reference
d. Mode of Carriage
e. Type of Product carried in bulk
f. Type of Liquid
g. IMO hazard class (only code)
h. UN number
i. Packing group (only code)
j. Subsidiary risks (only code)
k. Flashpoint
l. Marine Pollutant (only code)
m. Pollution category (only code)
n. EmS (only code)
o. Additional Information

A few important notes are:

- This search function is not case sensitive
- Results would appear immediately as the user starts typing a search criterion and there is an equivalent match in the fields/attributes mentioned above (every letter that is included in the field/attribute), as long as it is at the beginning, middle or end of the search field/attribute

- The General search cannot be used together with the Step-by-Step search. During the General search any search criteria in the Step-by-Step search will be deleted

4.1.2 Step-by-Step search

Step-by-Step search is an alternative functionality for retrieving the desired Hazmat products. This functionality guides the user towards the usage of four steps, grouped as follows:

- Mode of Carriage
- Type of product
- Type of liquid
- Textual reference

The User begins with selecting the “Mode of Carriage”. The remaining fields are gradually enabled based on the user’s option on the previous field.

A few important notes are:

- In each step the application displays the search results (for example if user selects the mode of carriage “Bulk” the application will display immediately all products with the respective mode of carriage). The results are further filtered as user enhances the search criteria
- Tooltips are available for each “Step”, providing a brief description to the User
- The General Search cannot be used together with the Step-by-step search. During the Step-by-step search any criteria inputted in the General search will be deleted.

Step-by-step fields’ behaviour is described hereafter:

State	Mode of Carriage	Type of product	Type of liquid	Textual reference
1	Bulk	ENABLED	DISABLED	DISABLED
2	Bulk	Liquid	ENABLED	DISABLED
3	Bulk	Liquid	Oil	ENABLED
4	Bulk	Liquid	Chemicals or noxious	ENABLED
5	Bulk	Gas	DISABLED	ENABLED
6	Bulk	Solid	DISABLED	ENABLED
7	Packaged	DISABLED	DISABLED	ENABLED

Table 1: Step-by-Step Search

For example if the user selects: Mode of Carriage: Bulk and Type of product: Liquid (State 2 – Table 1) the application activates the two options (State 3 and 4 Table 1), as shown in **Figure 7:Step-by-Step selection**.

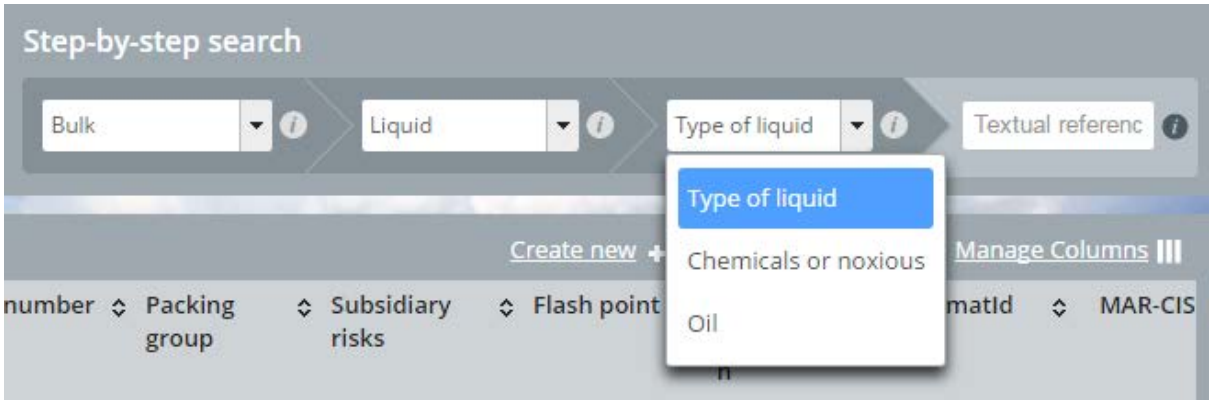

Figure 7:Step-by-Step selection

4.1.3 View Search results

According to the entered search criteria, the application displays the results. The entered criterian are highlighted in bold.

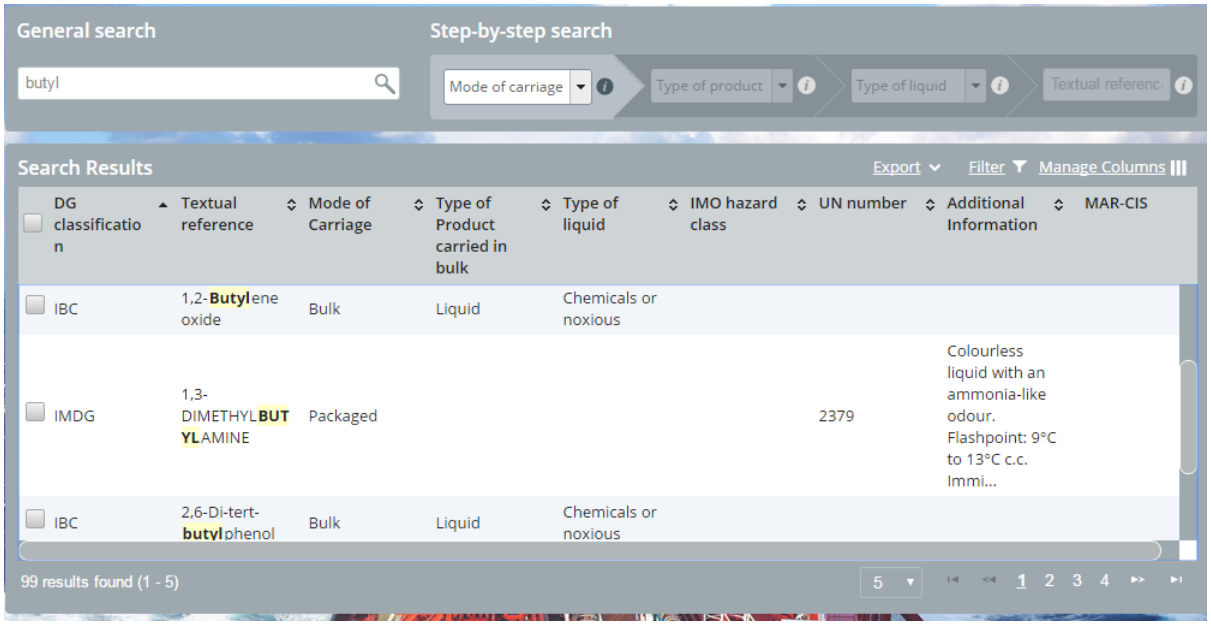

Figure 8: Search Results: General Search

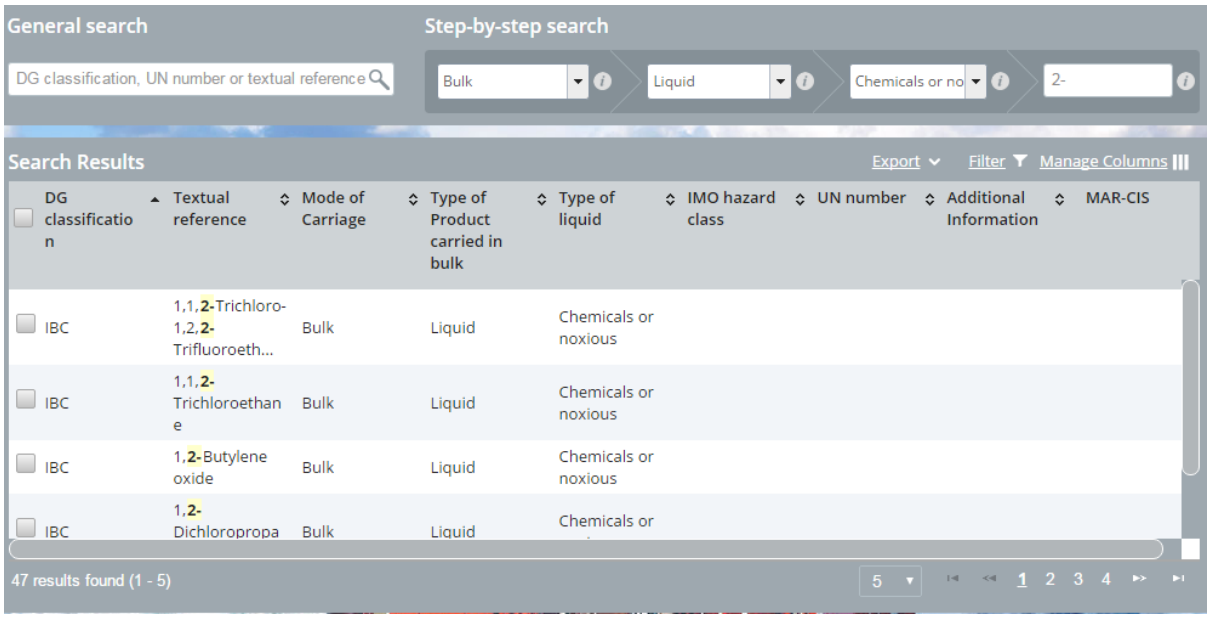

Figure 9: Search Results: Step-by-Step

For example in Figure 8, User performed a General search with the text “butyl”. The application displayed all results matching the user’s input regardless in which IMO Code it belongs to but in Figure 9, the displayed displayed all results matched to the Step-by-Step search criteria and the textual reference “2-“.

4.1.4 Pagination

After the user has performed the search, the application displays by default five (5) Hazmat products. The user may increase the number of items displayed by using the pagination functionality of the CHD (drop list located bellow the table of results) which has the following options:

- 5 items per page (default number of items)
- 10 items per page
- 20 items per page
- 50 items per page

- 100 items per page
- 200 items per page

Figure 10: Pagination

Figure 10 displays the pagination options along with the indication of results. Furthermore, additional navigation between the result pages is allowed by clicking the navigation links (First, Previous, Next, Last).

4.1.5 Export

The CHD application offers users the ability to export the displayed results in various formats:

- Excel (XLSX)
- PDF
- CSV

Guest users can only export results in PDF format.

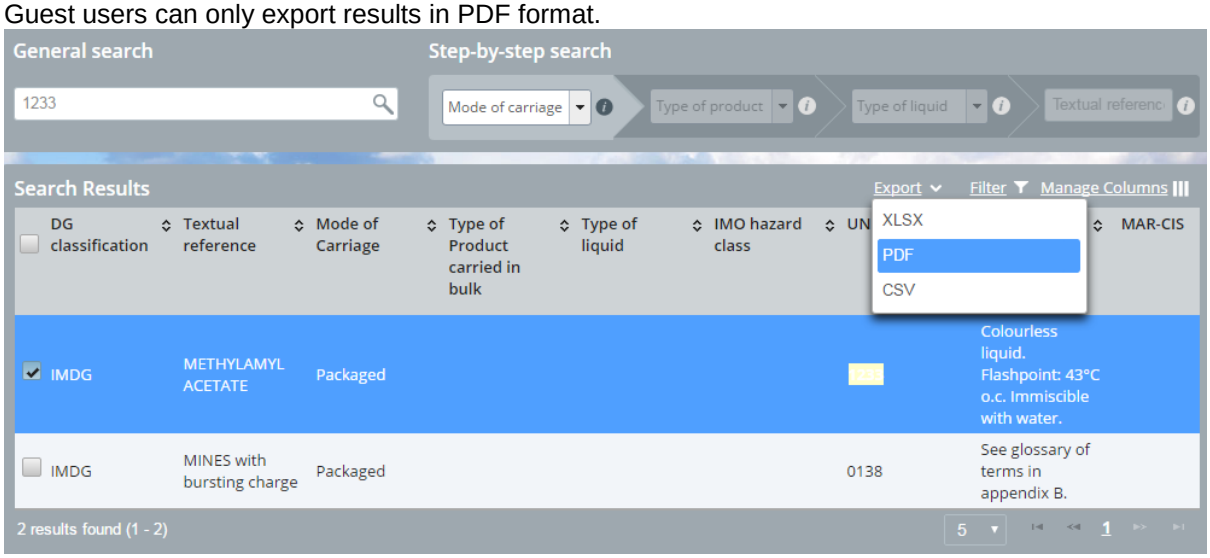

Figure 11: Export Search Results

The user may select one, more or all items of the specific page for export by ticking the checkbox of the desired item or the checkbox next to DG classification to select all the items presented in the specific page (as chosen in accordance with the process described in 4.1.4 Pagination) and then click on the export button. Afterwards the application presents the available export formats and with further user selection, the application exports the table of results to the desired format.

Note:

If the user wishes to "browse" within the entire database content, please refer to 2.3

If a CHD record is associated with a MAR-CIS datasheet, the exported file will provide a visual indication of this link for all users, except for Guest users.

4.1.6 Sorting

The user can sort the column information, by clicking the arrows which are on the right of the title text. Each click switches from ascending/descending order, on that particular column and sorts the entire data table accordingly.

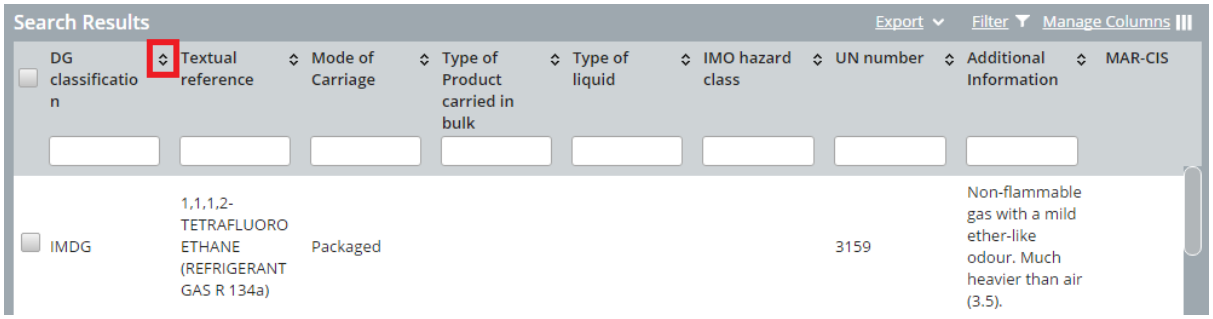

Figure 12: Sorting

4.1.7 Filter

The user may filter the information shown in each column by clicking the “Filter” button (Figure 13).

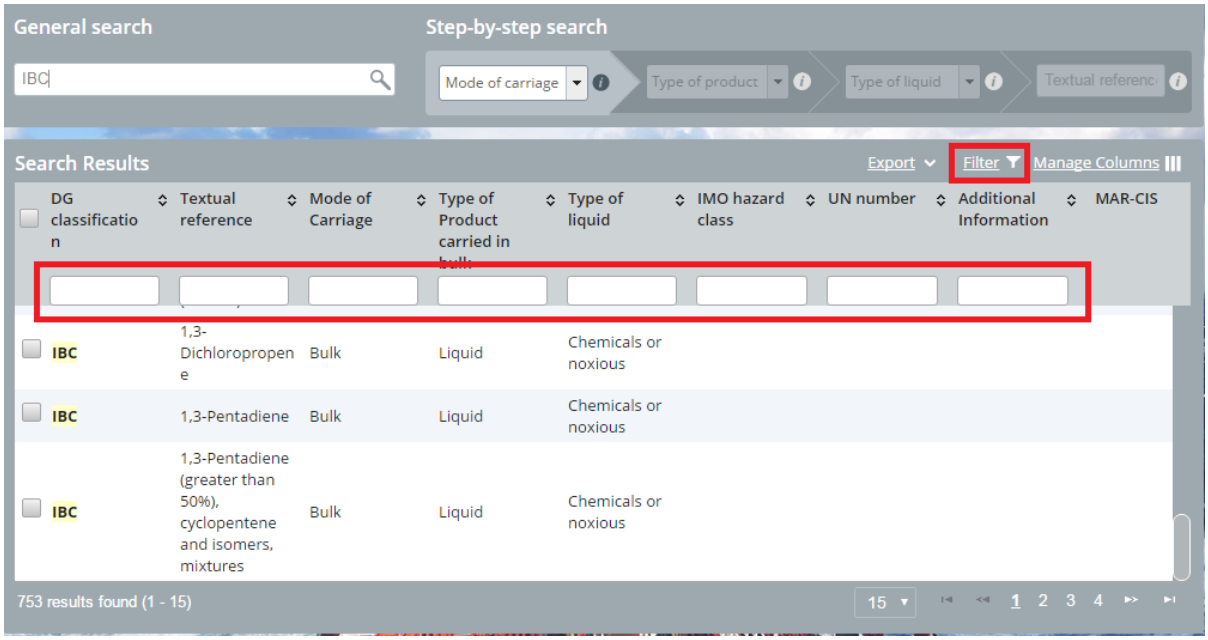

Figure 13: Filter

The user may filter the results by entering the desired text into one or more filter boxes (Figure 14).

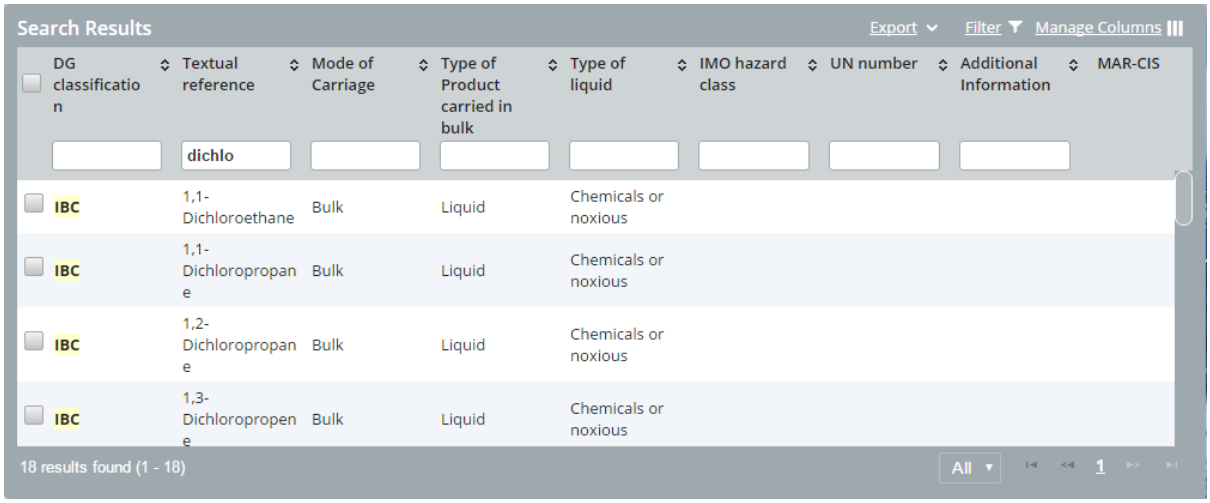

Figure 14: Filter Example

4.1.8 Manage Columns

The user can manage the visible columns, by clicking the “Manage columns” button.

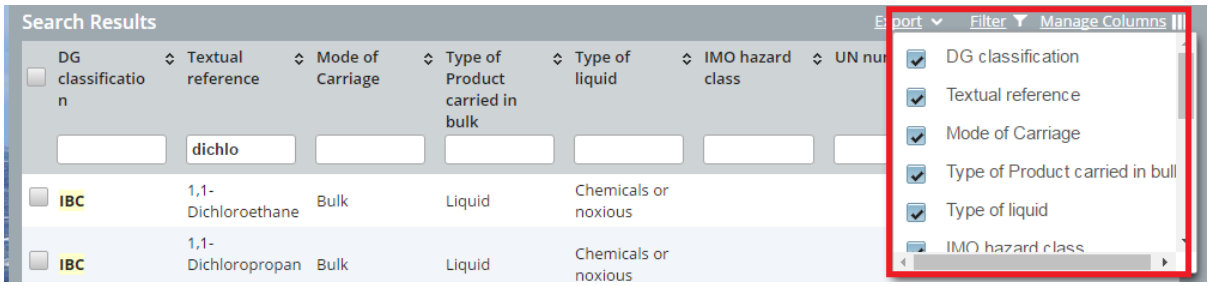

Figure 15: Manage Columns

User may add/remove columns by selecting/de-selecting the desired columns. The available columns are the following:

- DG classification (visible by default)
- Textual reference (visible by default)
- Mode of Carriage (visible by default)
- Type of Product carried in bulk (visible by default)
- Type of Liquid (visible by default)
- IMO hazard class (visible by default)
- UN number (visible by default)
- Packing group
- Subsidiary risks
- Flashpoint
- Marine Pollutant
- Pollution category
- EmS
- Additional Information (visible by default)
- HazmatID

For example, a user removed some default columns and added the “Pollution category” and “HazmatID” columns (Figure 16)

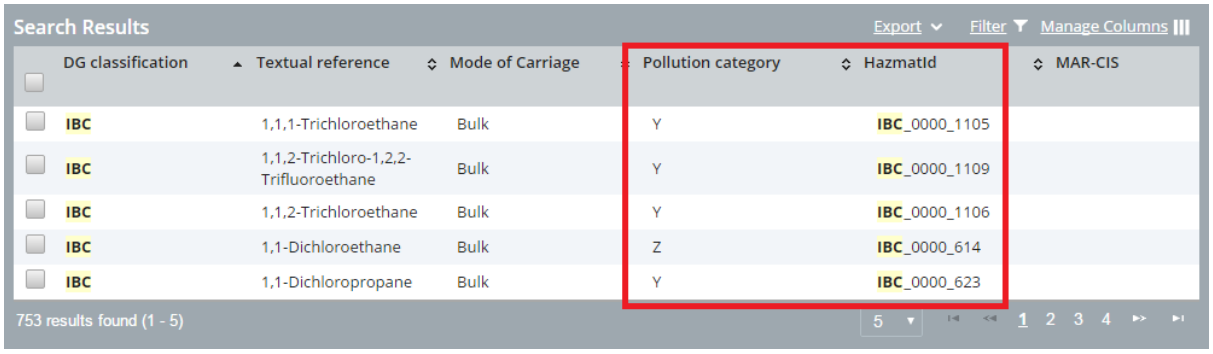

Figure 16: Manage Columns example

4.1.9 Obtain MAR-CIS Datasheet via search results

The user (except Guest users) may access an associated MAR-CIS datasheet(s) of a Hazmat product (if applicable), by clicking the respective button located in the MAR-CIS column. The application redirects User to the MAR-CIS application in a new tab/window. If the user performed this action for the first time during a session, the MAR-CIS Disclaimer acceptance is displayed. After accepting the Disclaimer the associated MAR-CIS datasheet is displayed. The user would also be able to use all MAR-CIS functionalities.

At any time, the user is able to return to the CHD application, by clicking on the respective browser’s tab or window.

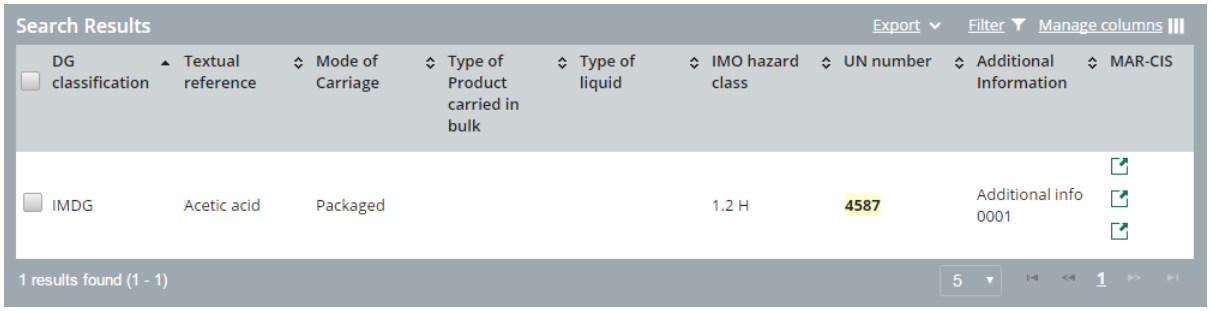

Figure 17: Obtain MAR-CIS datasheet via Search Results

4.2 View Hazmat product details page

The user can view the Hazmat product details page along with the MAR-CIS related fields (if applicable), by clicking on a Hazmat product row (apart from checkbox and MAR-CIS icon/button). The application opens the detailed view page of the respective Hazmat product. The following fields are included:

a. HAZMATID
b. DG classification
c. Textual reference
d. Mode of Carriage
e. Type of Product carried in bulk
f. Type of Liquid
g. IMO hazard class (both code and textual reference)
h. UN number
i. Packing group (both code and textual reference)
j. Subsidiary risks (both code and textual reference)
k. Flashpoint
l. Marine Pollutant (both code and textual reference)
m. Pollution category (both code and textual reference)
n. EmS (both code and textual reference)
o. Additional Information
p. Reason for record update (optional field)
q. An icon/button to direct User to the associated MAR-CIS datasheet[1]. Refer also to 4.2.1
r. An icon/button to direct the User to the "History of changes" of the respective Hazmat product. Refer to 4.2.2
s. A link to go back to search results page

Note: The MAR-CIS icon/button is displayed only if:

- *There is at least one MAR-CIS Datasheet associated to a Hazmat product*
- *The user is not a guest user*

MAR-CIS Related Fields

Hazmat product details page also displays the following MAR-CIS related fields depending on the IMO Code:

a. Stowage category
b. Stowage code
c. Handling code
d. Segregation
e. Ship type
f. Tank type
g. Tank vents
h. Gauging
i. Tank environmental control
j. Vapour detection
k. Fire protection
l. Emergency equipment

[1] This icon is not available in the present version.

m. Textual description
n. Angle of repose
o. Bulk density
p. Stowage factor
q. Size
r. Hazards
s. Stowage and segregation
t. Hold cleanliness
u. Weather precautions
v. Loading:
w. Precautions
x. Ventilation
y. Carriage
z. Discharge
aa. Clean-up
bb. Special emergency equipment to be carried:
cc. Emergency procedures
dd. Emergency action in the event of fire
ee. Medical first aid

A few important notes are:

- In case the user clicks on the Back button, the user will see the results of the previous search action, keeping the same pagination options, manage column options, sorting option and discarding any filtering options
- IMO Code relevant fields (field titles in bold black) with no values are displayed empty
- IMO Code non-applicable fields (i.e. fields stemmed from other IMO Codes) are displayed as inactive (e.g. grey out)

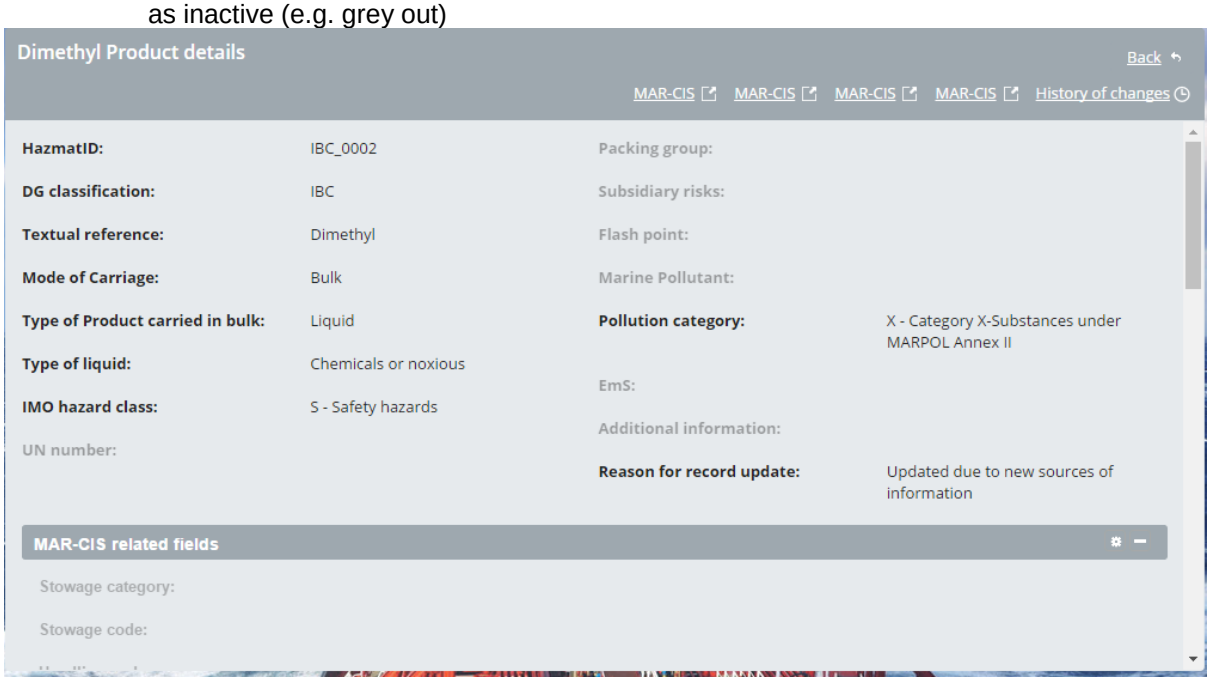

Figure 18: Hazmat product details

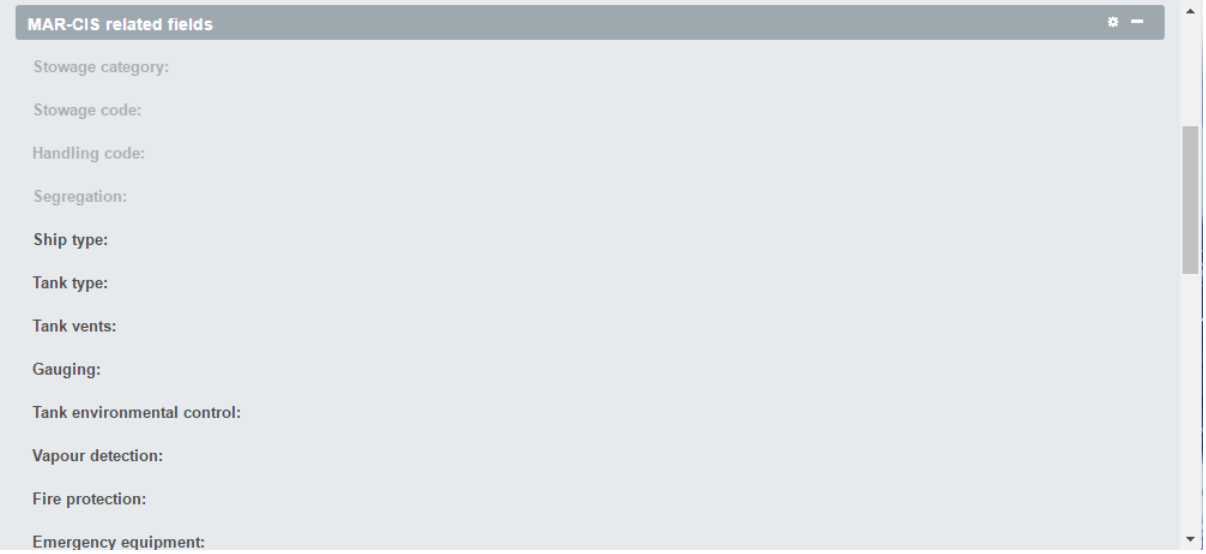

Figure 19: Hazmat product details - MAR-CIS related fields

4.2.1 Obtain MAR-CIS Datasheet via Hazmat product details page[1]

The user (except guest users) may view an associated MAR-CIS datasheet of a Hazmat product also through the Hazmat product details page.

The functionality is same as per section 4.1.9. One CHD product may be linked to many MAR-CIS datasheets. In such a case the Hazmat details page, will have as many buttons as the datasheets (e.g. 3 Datasheets / 3 icons-buttons). Please refer to the figure below:

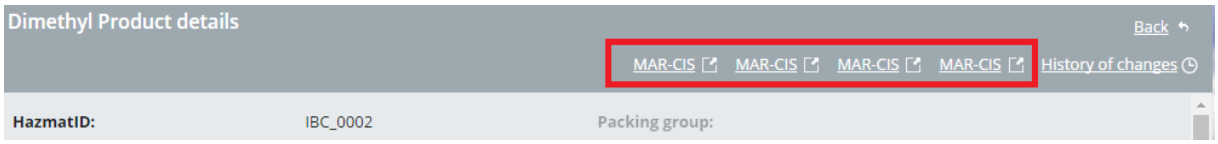

Figure 20: Hazmat product details - Obtain MAR-CIS Datasheet

4.2.2 View History of changes via Hazmat product details page

The application provides the user with the ability to retrieve CHD data changes by clicking the “View History of changes” button. The information is grouped by the date on which the product was updated (i.e the dates on which the product is updated in the online version). The following columns are displayed:

- Reference Number
- Textual reference
- “Update On”: Dates on which the product is updated on the online version, i.e. the scheduled cut-off date
- Reason for record update, the “formal” reason of updating the Hazmat product; optional field

User may view the exact changes made to a Hazmat product by clicking on the arrow of the first column. The following fields will be displayed in a nested view:

- Altered field (label of the updated attribute of the Hazmat product)
- Previous value (value prior update)
- New value (value after update)

A few important notes are:

- The default sorting of this page is by the field “Update On” descending (reverse chronological)
- User may Export the displayed information by using the export functionality. Refer to 4.2.2.1
- User may Sort the presented list
- User may be lead back to the “View Hazmat product details” page by clicking the respective link

- User may Use the Pagination controls in order to view more changes done to the specific Hazmat product. Refer to 4.2.2.2
- The default expand/collapse state of the table is:
  - The changes from last on-line version are by default "expanded"
  - All other changes are "collapsed"

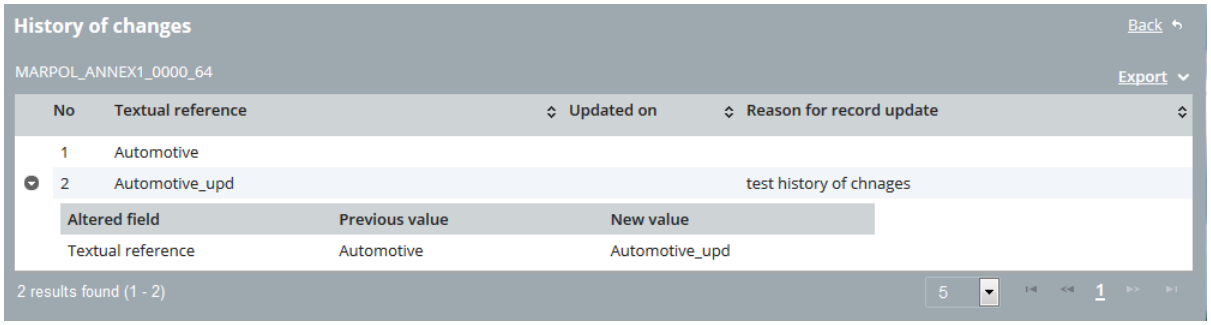

Figure 21: History of changes via Hazmat Product details

4.2.2.1 Export History of changes

The user may export the displayed changes in Excel (XLSX) format by clicking on the Export button.

Note: The application exports the changes displayed in the screen at that time. Therefore, the maximum number of changes is 200.

4.2.2.2 Pagination of History of changes

The user may increase the number of items displayed by using the pagination functionality (drop list located bellow the table of results). The following options exist:

- 5 items per page (default number of items)
- 10 items per page
- 20 items per page
- 50 items per page
- 100 items per page
- 200 items per page

4.2.2.3 Sort History of changes

The user can sort information in the columns by clicking the arrows on the right of the title text. Each click switches from ascending/descending order, on that particular column and sorts the entire data table accordingly.

European Maritime Safety Agency
Praça Europa 4
1249-206 Lisbon, Portugal
Tel +351 21 1209 200
Fax +351 21 1209 210
emsa.europa.eu