

Creating and using the UFI

Using the UFI for your products and mixtures

26 April 2018, updated July 2019

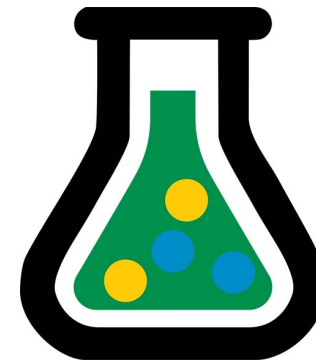
Daniel Sompolski



Principle 1

- A UFI is assigned to 1 (and only 1) mixture composition

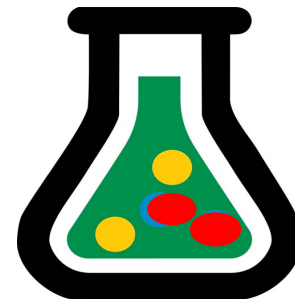
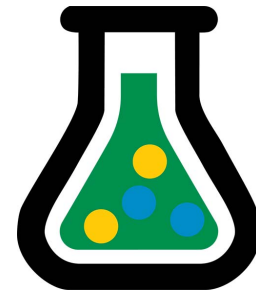
UFI: VDU1-414F-1003-1862



Principle 2

- Same UFI \neq mixtures of different composition

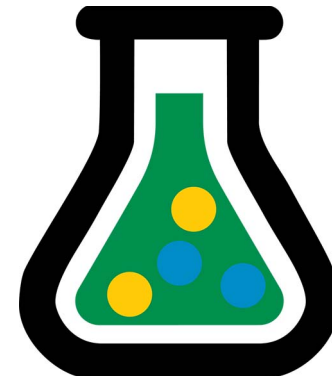
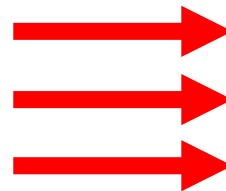
UFI: VDU1-414F-1003-1862



UFI flexibility

- 1 mixture composition may have multiple UFIs assigned to it

UFI: VDU1-414F-1003-1862
UFI: X800-UORP-S009-1KM3
UFI: 8XD3-W0EC-T00G-ATYX



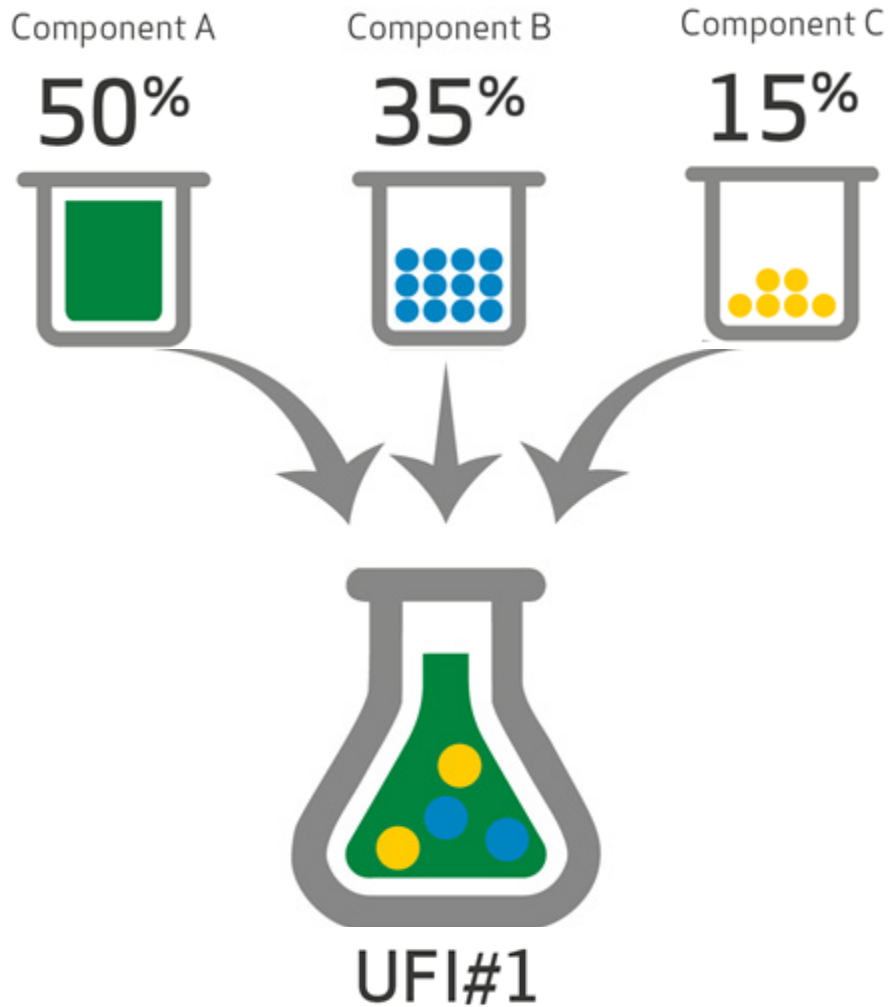
How is the UFI link made?

- Remember, the UFI does not possess information about mixture composition nor can you decode the composition from the UFI that is on the label
- **Step 1** - You link UFI to your mixture composition
 - Only you know the link
- **Step 2** - You submit information for poison centres about UFI on the label with the composition of the mixture that you assigned it to
 - Only you and poison centres know the link

Mixture composition and UFI (i) When you know all components

- Declare all components
- Identify them by chemical name and numerical identifier
- Provide exact concentration or concentration ranges for each component
- They should sum up to 100%
- Composition identified by UFI

When you know all components cont...



Mixture composition and UFI (ii)

When you have mixtures in mixture (MiM)

- MiM - if suppliers provide composition indirectly – via UFI
- Declare each MiM as a component
- Identify MiMs by UFI
- Provide exact concentration or concentration ranges for each MiM
- They should sum up to 100%
- Give your own UFI for final mixture

Mixtures in mixture (MiM) cont...

SUPPLIER 1



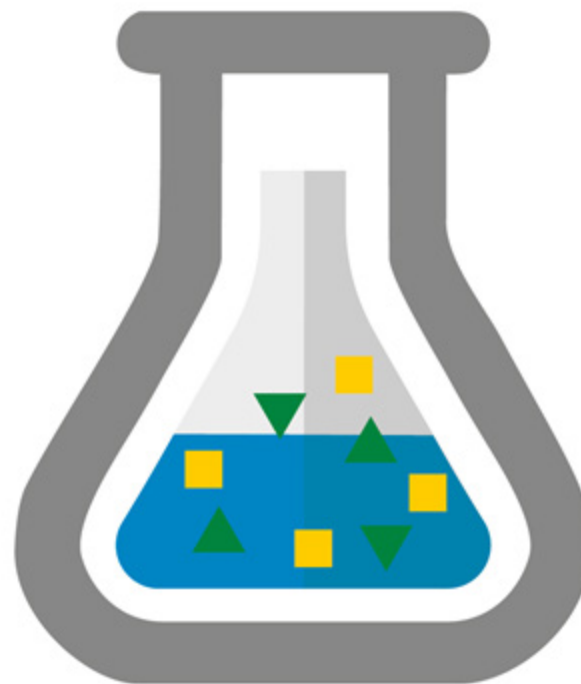
SUPPLIER 2



SUPPLIER 3



WATER



UFI#4

Exact concentration vs. ranges – hazardous components of major concern

Table 1

Concentration ranges applicable to hazardous components of major concern for emergency health response (substances or MIM)

Concentration range of the hazardous component contained in the mixture (%)	Maximum width of the concentration range to be used in the submission
≥ 25 - < 100	5 % units
≥ 10 - < 25	3 % units
≥ 1 - < 10	1 % units
≥ 0,1 - < 1	0,3 % units
> 0 - < 0,1	0,1 % units

Hazardous component of major concern:

- Acute toxicity
- Skin corrosion
- Serious eye damage

✓ Methanol 30-35%

✗ Methanol 30-40%

Exact concentration vs. ranges – other hazardous components or non-hazardous

Table 2

Concentration ranges applicable to other hazardous components and components not classified as hazardous (substances or MIM)

Concentration range of the component contained in the mixture (%)	Maximum width of the concentration range to be used in the submission
≥ 25 - < 100	20 % units
≥ 10 - < 25	10 % units
≥ 1 - < 10	3 % units
> 0 - < 1	1 % units

✓ Water 30-50%

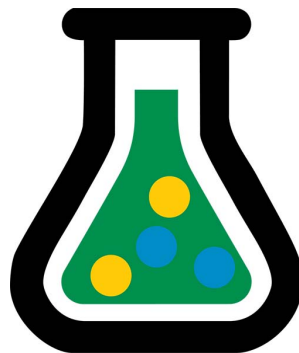
✗ Water 30-60%

Mixture vs. product

Mixture

Mixture or solution containing chemical components having associated properties:

- Composition
- Tox. properties
- Colour
- pH



Product

Mixture in the form in which it is supplied to the user and defining the other aspects:

- Trade name
- Packaging
- Labelling
- Product category



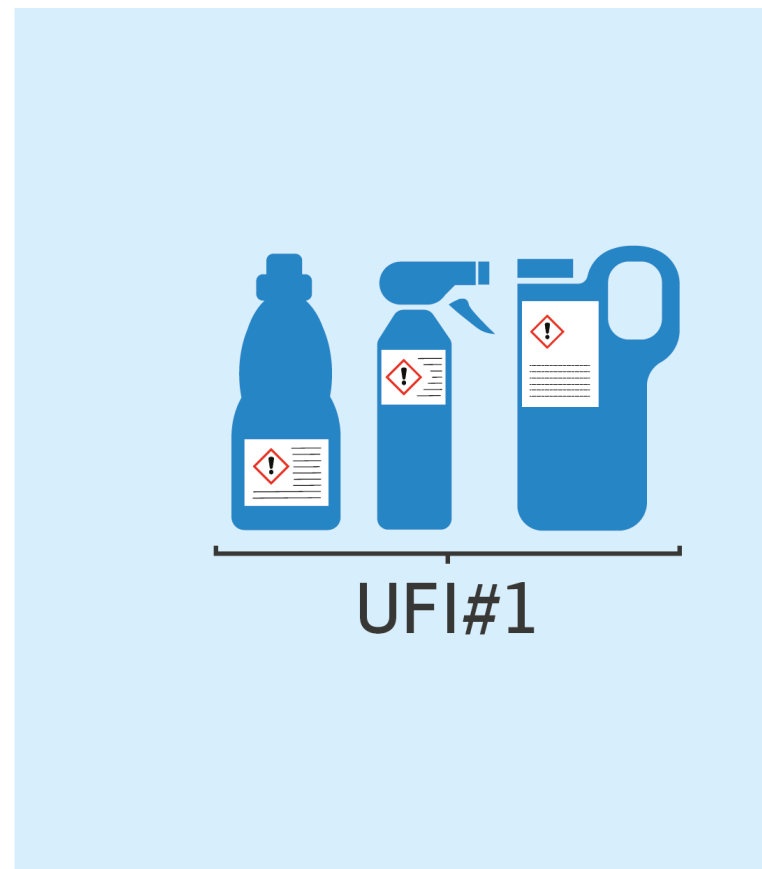
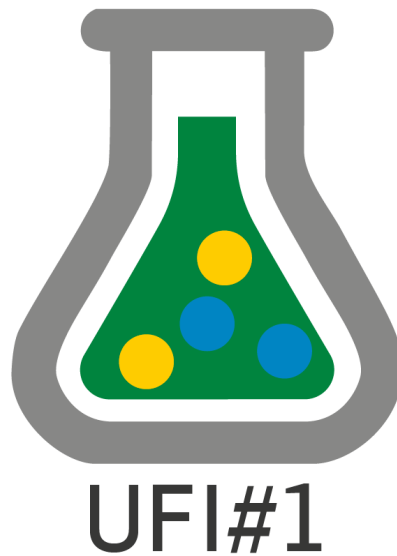


Assigning UFI

- Mixture-centric approach
- Product-centric approach
- Market-oriented approach
- Language/label-oriented approach
- Other approaches possible as long as principles 1 & 2 respected

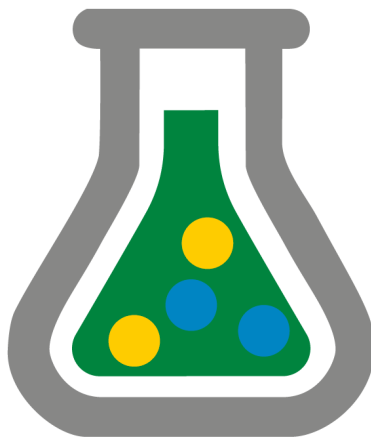
Mixture-centric approach

- UFI always per mixture composition, not per product
- All products containing that mixture have the same UFI

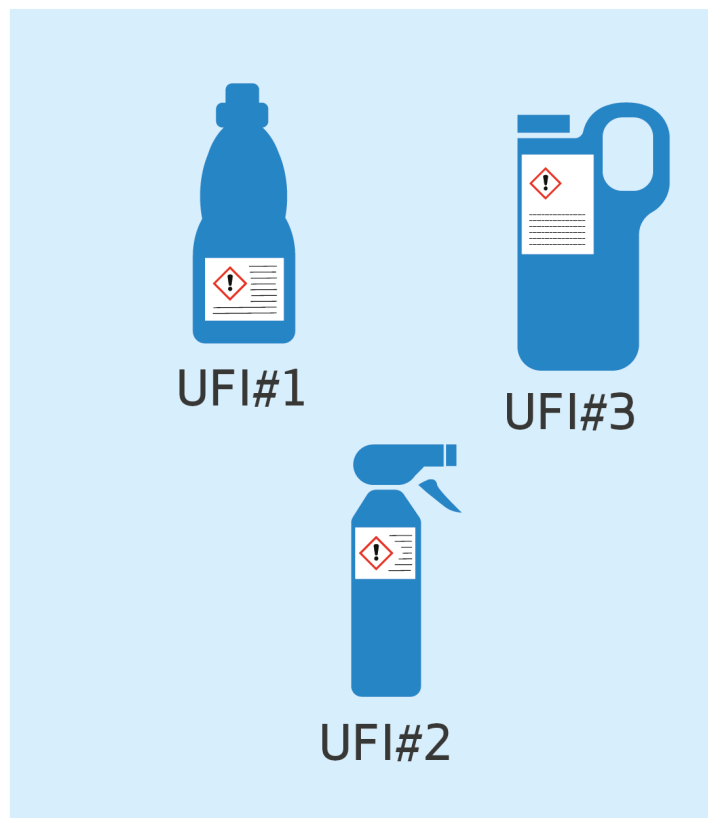


Product-centric approach

- UFI always per product, even if other products have mixture of the same composition
- All products having the same mixture have different UFIs

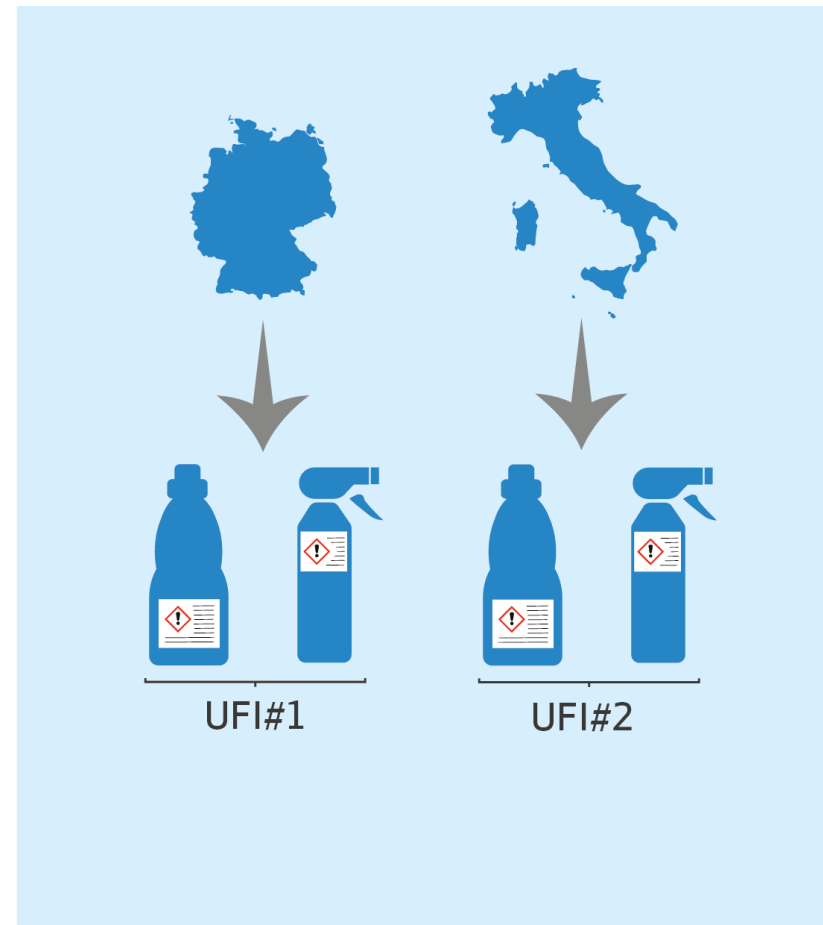


UFI#1
UFI#2
UFI#3



Market-oriented approach

- UFI always per country where product/mixture is placed on the market

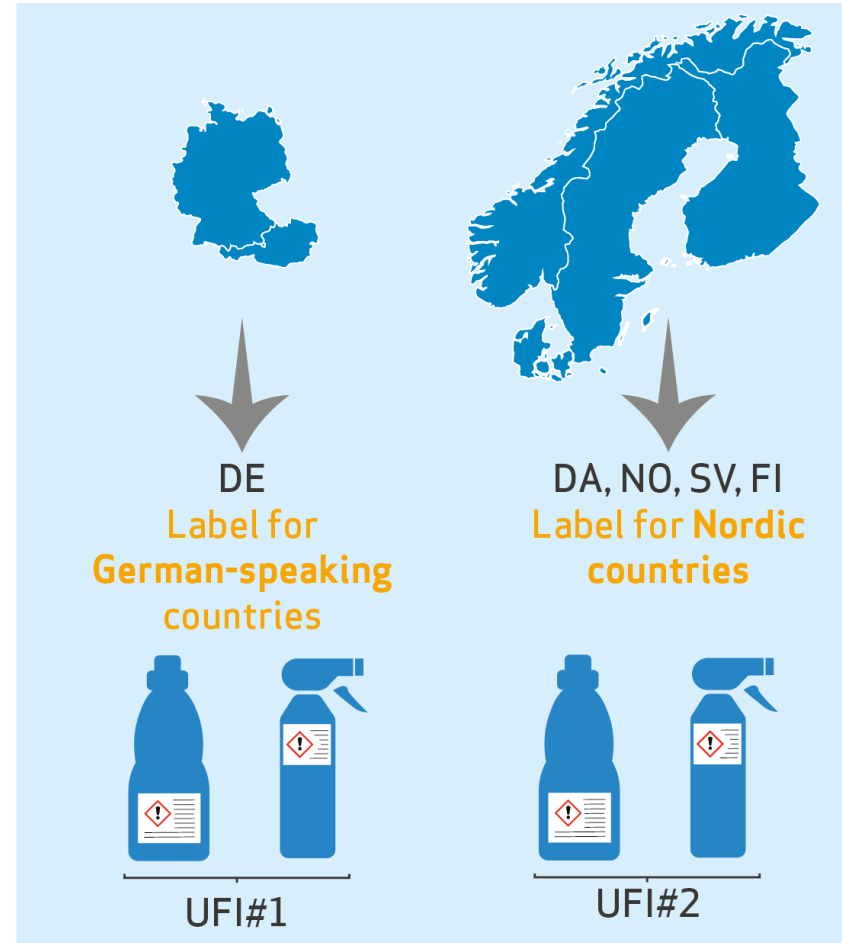


Language/label-oriented approach

- UFI always per language used on label



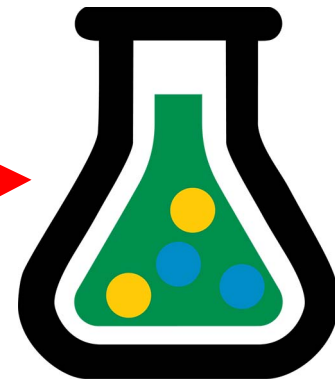
UFI#1
UFI#2



Recap: Assigning UFIs

- Non-exhaustive possibilities to use UFI
- Again, main rules:
 - One UFI = one mixture composition
 - Same UFI \neq mixtures of different composition

UFI: VDU1-414F-1003-1862



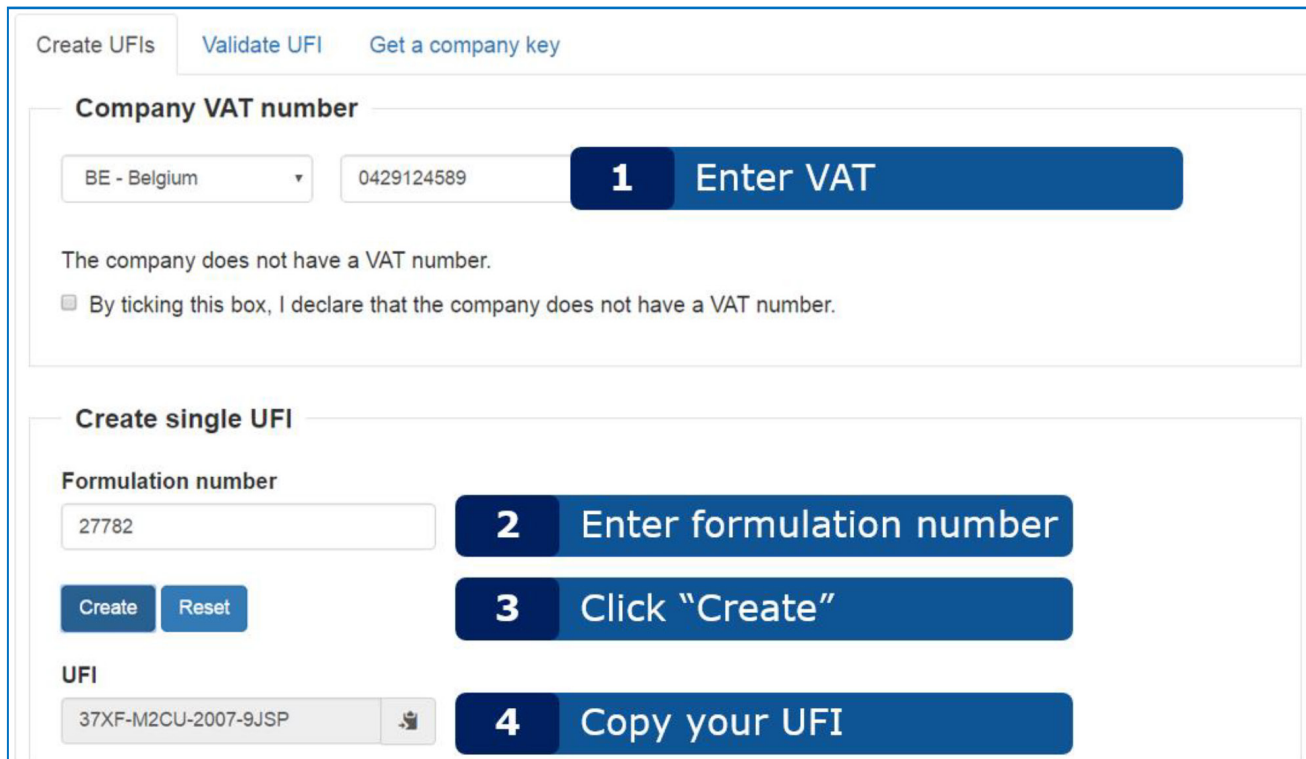


What you need to generate UFI?

- VAT number of your company
 - If you don't have VAT, there is an alternative method
- Formulation number
 - A number between 0 and 268 435 455

Single UFI creation

- Launch <https://ufi.echa.europa.eu/#/create>
- Select the language



The screenshot shows the 'Create UFI' page with the following elements and steps:

- Navigation:** 'Create UFIs' (active), 'Validate UFI', 'Get a company key'.
- Company VAT number section:**
 - Country dropdown: 'BE - Belgium'
 - VAT number input: '0429124589'
 - 1 Enter VAT** (blue button)
 - Text: 'The company does not have a VAT number.'
 - Checkbox: 'By ticking this box, I declare that the company does not have a VAT number.'
- Create single UFI section:**
 - Formulation number input: '27782'
 - 2 Enter formulation number** (blue button)
 - 'Create' and 'Reset' buttons
 - 3 Click "Create"** (blue button)
 - UFI output: '37XF-M2CU-2007-9JSP' with a copy icon
 - 4 Copy your UFI** (blue button)

Bulk UFI creation from sequential formulation codes

Create UFIs Validate UFI Get a company key

Company VAT number

BE - Belgium 0429124589 **1** Enter VAT

The company does not have a VAT number.

By ticking this box, I declare that the company does not have a VAT number.

Create multiple UFIs

From sequential formulation numbers **2** Select bulk mechanism

First formulation number **3.a** Enter formulation info
457890 *The first formulation number*

Count of formulation numbers **3.b** Enter formulation info
124 *How many UFIs will be created*

From a CSV file (of up to 10 000 formulation numbers)

4 Click "Create"

5 Save your file

Create Reset

Bulk UFI creation from non-sequential formulation codes

Create UFIs Validate UFI Get a company key

Company VAT number

BE - Belgium 0429124589 **1 Enter VAT**

The company does not have a VAT number.

By ticking this box, I declare that the company does not have a VAT number.

Create multiple UFIs

From sequential formulation numbers

First formulation number
 A number between 0 and 268 435 455

Count of formulation numbers
 A number between 1 and 10 000

From a CSV file (of up to 10 000 formulation numbers)

UFI bulk - 10000 codes.csv **2 Select bulk mechanism**

3 Open your input file
One formulation number per line

4 Click "Create"

5 Save your result file

Create Reset

If you do not have VAT number...

Create UFIs Validate UFI Get a company key

Company VAT number

The company does not have a VAT number.

By ticking this box, I declare that the company does not have a VAT number.

1 No VAT declaration

Create single UFI

Formulation number

2 Enter formulation number

3 Click "Create"

UFI

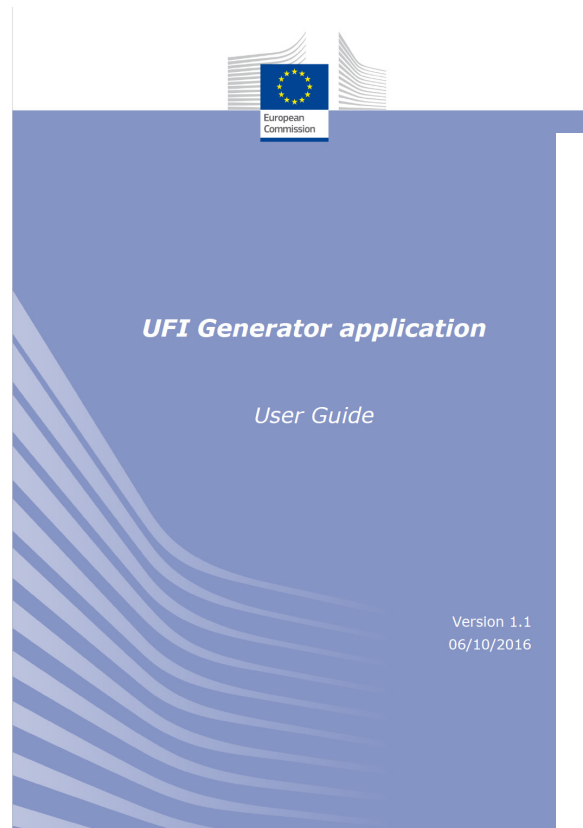
4 Copy your UFI

UFI User Guide

Available in all EU languages

Browser requirements

Cookie usage



UFI Generator application - User Guide

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Version 1.1 - 06/10/2016 - 2/19

UFI algorithm

- Even more efficient bulk creation
- Develop your own generator in your company's IT systems
- Consult UFI Developers Manual

UFI Developers Manual



European Commission

Study on analysis, development and testing of the Unique Formula Identifier (UFI) for information to be submitted to Poison Centres, according to Article 45 (4) of EC Regulation No 1272/2008 (CLP Regulation)

UFI Developers Manual

UFI Developers Manual

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Validating UFIs

Unique Formula Identifier Generator

[Create UFIs](#)

[Validate UFI](#)

[Get a company key](#)

UFI

JQQ2-V0XA-5008-XH0F

Validate

Reset

The UFI is valid.

It does not say if the submission has been made

Validating UFIs

Unique Formula Identifier Generator

[Create UFIs](#) [Validate UFI](#) [Get a company key](#)

UFI

JQQ2-V0XA-5008-XH0F

Validate

Reset

The UFI is valid.

Unique Formula Identifier Generator

[Create UFIs](#) [Validate UFI](#) [Get a company key](#)

UFI

JQQ2-V0XA-5008-XH0D

Validate

Reset

This UFI is not valid: It contains at least one invalid character.

Unique Formula Identifier Generator

[Create UFIs](#) [Validate UFI](#) [Get a company key](#)

UFI

JQQ2-V0XA-5008-XH0K

Validate

Reset

This UFI is not valid: You may have inverted characters

Unique Formula Identifier Generator

[Create UFIs](#) [Validate UFI](#) [Get a company key](#)

UFI

JQQ2-V0XA-5008-XH0

Validate

Reset

This UFI is not valid: It does not contain 16 characters.

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