



USER GUIDE

DANGEROUS GOODS

LogTrade Connect for Microsoft Dynamics 365 Business Central





1 GENERAL

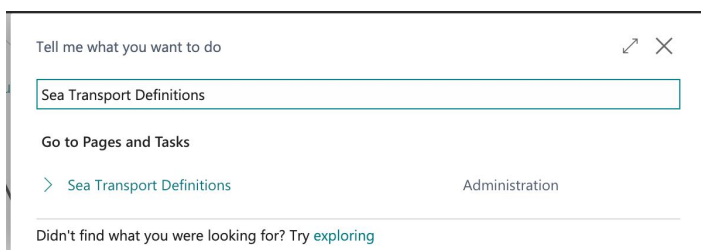
This document describes how to setup dangerous goods (hazardous goods), both in general and for each item. Dangerous goods are always handled as additional services for each carrier. The selection of the additional service is done automatically in Logtrade Connect based on settings for each item.

2 SETUP

Settings is done in both as general and for each item. Below is explanation of the settings.

2.1 SEA TRANSPORT DEFINITIONS

If a transport will be performed on water, it is important to print the *Multimodal Dangerous Goods Document*. By setting up zip code intervals for shipping *From* and *To* you can specify when the transport will be performed on the water. Search for *Sea Transport Definitions* to open the list.



In the *Sea Transport Definitions*, you specify from and to zip code intervals when you want a *Multimodal Dangerous Goods Document*. This can be done for specific carriers and products or for all at once. The example below shows a setup based on that the island Gotland in Sweden needs transport on water. Since both the transport to Gotland and back will be on water I have registered zip code intervals for both directions.

Shipping Agent Code ↑	Shipping Agent Service Code ↑	Pickup Country Code ↑	From Pickup Post Code ↑	To Pickup Post Code ↑	Delivery Country Code ↑	From Delivery Post Code ↑	To Delivery Post Code ↑
		SE	10000	61999	SE	62100	62470
		SE	62100	62470	SE	10000	61999
		SE	62100	62470	SE	62471	99999
		SE	62471	99999	SE	62100	62470

2.2 DANGEROUS GOODS

The first setting is to register the generic Dangerous Goods register that in the item setting will be selected to each item that is classified as dangerous goods. Search for *Dangerous Goods* to open the list.





Tell me what you want to do ↗ ✕

Go to Pages and Tasks

- > Dangerous Goods Administration
- > Dangerous Goods Item Settings Administration

Didn't find what you were looking for? Try [exploring](#)

Dynamics 365 Business Central

Dangerous Goods ✓ Saved 📄 🔍 ? L

Search + New Edit List Delete Open in Excel

Code ↑	Description	Description 2	UN No.	Classification Code	Packing Group	Tunnel Restrictions	IMDG Flaming Point	IMDG Marine Pollut...
→ 1	ACETON	ACETON	1090	3	II - medium da...	(D/E)	< 23°C	<input checked="" type="checkbox"/>
10	METANOL	METHANOL	1230	3	II - medium da...	(D/E)	9°C	<input checked="" type="checkbox"/>
11	METYLISOBUTYLKETON	METHYL ISOBUTYL KETONE	1245	3	II - medium da...	(D/E)	< 23°C	<input checked="" type="checkbox"/>
12	N-PROPANOL	N-PROPANOL (PROPYL ALCOHOL, N...	1274	3	III - low danger	(D/E)	23 - 60°C	<input checked="" type="checkbox"/>
13	FRÅTANDE VÄTSKA, N.O.S.	CORROSIVE LIQUID, N.O.S.	1760	8	II - medium da...	(D/E)	62°C	<input checked="" type="checkbox"/>
14	AEROSOLER	AEROSOLS	1950	2		(D)		<input checked="" type="checkbox"/>
15	ALKOHOLER, N.O.S. (ETANOL , PROPAN-2-OL)	ALCOHOLS, N.O.S. (vapour pressure a...	1987	3	II - medium da...	(D/E)	< 23°C	<input checked="" type="checkbox"/>
16	ALKOHOLER, N.O.S. (ETANOL ; PROPAN-2-OL)	ALCOHOLS, N.O.S.	1987	3	III - low danger	(D/E)	23 - 60°C	<input checked="" type="checkbox"/>
17	ALKOHOLER N.O.S (ETANOL, ISOPROPYLALKO...	ALCOHOLS, N.O.S. (vapour pressure a...	1987	3	II - medium da...	(D/E)	< 23°C	<input checked="" type="checkbox"/>
18	BRANDFARLIG VÄTSKA, N.O.S. (ETANOL, BUTA...	FLAMMABLE LIQUID, N.O.S. (vapour p...	1993	3	II - medium da...	(D/E)	< 23°C	<input checked="" type="checkbox"/>
19	BRANDFARLIG VÄTSKA, N.O.S. (DIPENTENE, TE...	FLAMMABLE LIQUID, N.O.S. (having a...	1993	3	III - low danger	(D/E)	< 23°C	<input checked="" type="checkbox"/>
2	BUTANOLER	BUTANOLS	1120	3	III - low danger	(D/E)	23 - 60°C	<input checked="" type="checkbox"/>

The following fields are available in the Dangerous Goods setup:

Code – Internal code for the dangerous goods setting

Description – Description in local language

Description 2 – English description

UN No. – A four-digit number that identify dangerous goods, hazardous substances and articles (such as explosives, flammable liquids, toxic substances, etc.) in the framework of international transport.

Classification Code – Dangerous goods substances and articles are allocated to one of 9 classes. Some of these classes are subdivided into divisions, for example Explosives, Gases, Flammable liquids etc.

Packing Group – Dangerous goods are assigned into 3 packing groups (also known as **UN Packing Group**) in accordance with **the degree of danger** they present:

- Packing Group I: high danger
- Packing Group II: medium danger
- Packing Group III: low danger





Tunnel Restrictions – The tunnel restriction code defines which tunnels can be driven through by which hazardous goods transports. All tunnels in the European Union are allocated to a tunnel restriction category. There are five categories in total. Generally speaking, it can be said: the higher the tunnel category, the higher the restrictions.

- **A** No restriction for hazardous goods.
- **B** Prohibited for the transport of hazardous substances which could cause a very large explosion.
- **C** The same restriction as for B, plus hazardous goods which could cause a large explosion or the extensive release of toxic substances.
- **D** The same restrictions as for C plus hazardous goods which could cause a large fire.
- **E** Prohibited for the transport of all hazardous substances. There are some exceptions for certain radioactive substances, clinical waste and samples.

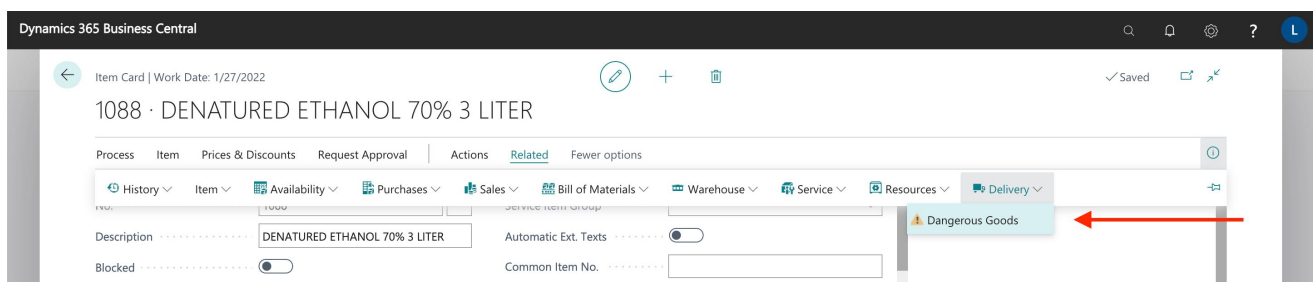
IMDG Flaming Points – Flashpoint means the lowest temperature of a liquid at which its vapour forms an ignitable mixture with air. Flashpoint gives a measure of the risk of formation of explosive or ignitable mixtures when the liquid escapes from its packing.

IMDG Marine Pollutant - IMDG Code identifies a substance, material or article as MARINE POLLUTANT with the criteria based on those developed by the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), as amended.

2.3 DANGEROUS GOODS ITEM SETUP

All items that are classified as dangerous goods needs to be setup, so the correct values are printed on the documents and also sent electronically to the carrier if applicable.

The setting can be reach from the Item Card by clicking *Related / Delivery / Dangerous Goods*, see screenshot below. This will open the dangerous goods settings for this particular item.



Below you see the dangerous goods settings for item 1088, Denatured Ethanol. This item is sold both in 3-liter boxes and on a pallet that has 100 boxes. This means that dangerous goods quantities differs and also classification can be different. See screenshot below as example of settings for this item.



Dynamics 365 Business Central

1088 | Work Date: 1/27/2022

✓ Saved

Dangerous Goods Item Settings | Search | + New | Edit List | Delete | Open in Excel

Unit of Measure Code	Sea Transport †	Dangerous Goods Code †	Packages per Unit	Package Type Code	Quantity Limitation	Gross Weight	Net Weight	Volume
PCS		16	1	BOX	Limited	8.64	7.98	0.009
→ PALLET	:	16	100	BOX		864	798	0.9

The following fields are available in the Dangerous Goods Item Setup:

Unit of Measure Code – The setting on this line is for this Unit of Measure Code since dangerous goods can be different for different units.

Sea Transport – Defines if this setting line is only for Sea Transport, Not for Sea Transport or for Both. For example, when shipping on road the Quantity Limitation setting below could be *Limited* (blank) but for water transport it could be regular dangerous goods.

Dangerous Goods Code – Refers to the general settings described in the chapter above about classification.

Packages per Unit – Number of dangerous goods packages when sold in specified Unit of Measure.

Package Type Code – What type of package the dangerous goods are packed in, can be different than the selling unit.

Quantity Limitation – Defines if any limitation should apply. The options are:

- Blank (regular)
- Limited - According to the regulations for shipping dangerous goods, for the majority of UN numbers, it is possible to use a mode of transport defined "Limited Quantity". This kind of transport simplify some aspects related to the shipping, but it is important that some parameters are met.
- Excepted - Certain dangerous goods, when shipped in very small quantities, and when packaged in user-tested packaging configurations, are subject to less stringent regulations.

Gross Weight – Weight including package materials for the item in the unit it is sold.

Net Weight – Weight for the material itself without packaging materials.

Volume – Net volume for the goods that is being shipped.





3 PROCESS

The example below shows an order shipped with DB Schenker System domestic in Sweden. The delivery does not require transportation on water. On the order I have added two items. Both require dangerous goods, one of them is only Limited Quantity but the whole consignment will be classified as regular dangerous goods since they are shipped together.

See order in screenshot below.

The screenshot shows the Dynamics 365 Business Central interface for a Sales Order. The order number is 1007, customer is Marsholm Karmstol, and the status is Open. The order contains two items: DENATURED ETHANOL 70% 3 LI... (quantity 4) and AG Alkylate Petrol 2T 5L (SE/NO/... (quantity 6). The interface includes a navigation menu, a top bar with 'Sales Order' and '1007 · Marsholm Karmstol', and a main content area with 'General' and 'Lines' sections. A 'Sell-to Customer Sales History' panel is visible on the right, showing various sales metrics for customer 46251425.

Type	No.	Description	Location Code	Quantity	Qty. to Assemble to Order	Reserved Quantity	Unit of Measure Code	Unit P.
Item	1088	DENATURED ETHANOL 70% 3 LI...	BLUE	4			PCS	
→ Item	128095	AG Alkylate Petrol 2T 5L (SE/NO/...	BLUE	6			PCS	*

Sell-to Customer Sales History		
Customer No. 46251425		
Ongoing Sales Quotes	Ongoing Sales Blanket Orders	Ongoing Sales Orders
0	0	3
Ongoing Sales Invoices	Ongoing Sales Return Orders	Ongoing Sales Credit Memos
0	0	0
Posted Sales Shipments	Posted Sales Invoices	Posted Sales Return Receipts
0	0	0
Posted Sales Credit Memos		
0		





In the screenshot below you can see the created consignment. It will be one pallet for both items. In the fact box to the right, you see that the consignments consist of two item lines.

Dynamics 365 Business Central

Consignment
BC17W1031700006 · Marsholm Karmstol

Select Packages Create Package Prepare & Print Add Service Reopen Book Actions Related Fewer options

General Show more

Warehouse Shipment No.		Delivery City	Halmstad
Warehouse Pick No.		Delivery Contact Person	Richard Holmkvist
Inventory Pick No.		Shipment Date	5/23/2021
Source Document Type	Sales Order	Location Code	BLUE
Source Document No.	1007	Shipping Agent Code	SCHENKER
Source Type	Customer	Shipping Agent Service Code	SYSTEM
Source No.	46251425	Shipment Method Code	DDP
Delivery Name	Marsholm Karmstol	Payer	Sender
Delivery Address	Tylö Fackhandel	Paying Customer No.	9019506
Delivery Post Code	SE-302 50		

Packages Lines Manage

No. of Packages	Package Type Code	Package Description	Goods Type Code	Weight	Volume	Load Meters
1	PALLET	Pallet	GOODS	61.634	0.045	

Totals

Packages	0	Weight	0	Volume	0
Load Meters	0	Pallet Places	0	Item Lines	2
Services	0	Linked Source Documents	0	Consolidated Consignments	0
Error Messages	0				

Statistics

Tracking
Status
Booking Status
Tracking No.
Consolidated With No.





When clicking *Prepare & Print* the additional service *Dangerous Goods* will automatically be inserted before sent to Logtrade. As you see in the screenshot below there is now added 1 additional service. You can also see in the following screenshots that it is the service *Dangerous Goods* and that it is not any *Sea Transport* selected.

General

Warehouse Shipment No.		Delivery City	Halmstad
Warehouse Pick No.		Delivery Contact Person	Richard Holmkvist
Inventory Pick No.		Shipment Date	5/23/2021
Source Document Type	Sales Order	Location Code	BLUE
Source Document No.	1007	Shipping Agent Code	SCHENKER
Source Type	Customer	Shipping Agent Service Code	SYSTEM
Source No.	46251425	Shipment Method Code	DDP
Delivery Name	Marsholm Karmstol	Payer	Sender
Delivery Address	Tylo Fackhandel	Paying Customer No.	9019506
Delivery Post Code	SE-302 50		

Packages Lines

No. of Packages	Package Type Code	Package Description	Goods Type Code	Weight	Volume	Load Meters
1	PALLET	Pallet	GOODS	61.634	0.045	

Totals

Packages	1	61.63	0.05
Load Meters	0	0	2
Services	1	0	0
Error Messages	0		

Statistics

Tracking Status: Prepared
Booking Status: Tracking No. 6577931782
Consolidated With No. -

Consignment Services

Description	Properties	Missing Property Values
Dangerous goods	1	-

View - Consignment Service Property Values

Property Description	Property Value
Sea transport	false





By clicking on *Manage / Dangerous Goods* you will see exactly which dangerous goods classifications, weights etc. that has been inserted to the consignment for that goods line. In this example we only had one goods line, so all the dangerous goods are related to that line.



Dynamics 365 Business Central

BC17W1031700006 - Marsholm Karmstol

Consignment Line Dangerous Goods

No. of Packages	Package Type Code	Package Description	Dangerous Goods Code	Dangerous Goods Description	Quantity Limitation	Gross Weight	Volume	Net Weight	Source Document No.	Source Document Line No.	Item No.
4	BOX	Box	16	ALKOHOLER, N.O.S. (ETANOL ...	Limited	34,56	0,036	31,92	1007	10000	1088
6	BOX	Box	8	BENSIN		6,804	0,009	6,210	1007	20000	128095

3.1 PRINTED DOCUMENT

3.1.1 REGULAR DANGEROUS GOODS DECLARATION

This shows the document that is printed when *Sea Transport* is false, that means when the transportation will not be done on water.

**Dangerous goods declaration
Godsdeklaration farligt goods**

Gäller Fraktsedels nr/Regarding Shipment no:
6577931782

Avsändare/Consignor:
Blue Warehouse
Propellergatan 2

SE 21115 MALMÖ
Sweden
1007

Mottagare/Consignee:
Marsholm Karmstol
Tylö Fackhandel

SE 302 50 Halmstad
Sweden

UN-nummer UN-number	Godsets officiella transportbenämning Official name of the goods	Klass Class	Förpacknings- grupp Pack.grp	Tunnelrestriktioner Tunnel restrictions	Antal kollar Pieces	Kollislag Package type	Nettovikt, kg Net weight, kg	Bruttovikt, kg Total weight, kg	Nettovolym, l Net volume, l	
UN1987	ALKOHOLER, N.O.S. (ETANOL ; PROPAN-2-OL)	3	III	(D/E)	4	Box	31.92	34.56	0.036	Miljöfarligt
UN1203	BENSIN	3	II	(D/E)	6	Box	6210.00	6804.00	0.009	Miljöfarligt



2,6
8 1/2

3.1.2 MULTIMODAL DANGEROUS GOODS DECLARATION

This shows the document that is printed when *Sea Transport* is true, that means when the transportation will be done on water. Sometimes you could want this document even if the transportation will not be done on water. Then you can just change the parameter *Sea Transport* from *false* to *true*.

MULTIMODAL DANGEROUS GOODS FORM						
1 Shipper/Consignor/Sender Blue Warehouse Propellergatan 2 SE 21115 MALMÖ Sweden		2 Transport document number 6577931782		3 Page of pages 1 1		
6 Consignee Marsholm Karmstol Tylö Fackhandel SE 302 50 Halmstad Sweden		4 Shippers reference 1007				
7 Carrier (To be completed by the carrier)		5 Freight forwarders reference				
8 Consignee SE 302 50 Halmstad Sweden		SHIPPER'S DECLARATION I hereby declare that the contents of this consignment are fully and accurately described below by the proper Shipping Name, and are classified, packaged, marked and labelled/placarded and are in all respects in proper condition for transport according to the applicable international and national government regulations.				
9 Additional handling information Transport enligt 1.1.4.2.1 Carriage in accordance with 1.1.4.2.1 (ADR)		10 Vessel/flight No. and date				
11 Port/place of loading		12 Port/place of discharge				
13 Destination		14 Shipping marks * Number and kind of packages, description of goods UN 1987 ALKOHOLER, N.O.S. (ETANOL ; PROPAN-2-OL) 3 III (23-60°C) MARINE POLLUTANT ((D/E)) 4 Box UN 1203 BENSIN 3 II (< 23°C) MARINE POLLUTANT ((D/E)) 6 Box			Gross mass (kg) 34.56 kg	Net mass (kg) 31.92 kg
15 Container identification No./ vehicle registration No.		16 Seal number(s)		17 Container vehicle size & type		
18 Tare mass (kg)		19 Total Gross mass (including tare) (kg)				
20 Name of company		21 RECEIVING ORGANIZATION RECEIPT Received the above number of packages/containers/trailers in apparent good order and condition, unless stated hereon: RECEIVING ORGANIZATION REMARKS: MUST BE COMPLETED AND SIGNED FOR ALL CONTAINER/VEHICLE LOADS BY PERSON RESPONSIBLE FOR PACKING/LOADING				
Name/Status of declarant		22 Name of company (OF SHIPPER PREPARING THIS NOTE) Blue Warehouse				
Place and date		Signature and date Malmö 20210523				
Signature of declarant		DRIVERS SIGNATURE				

* DANGEROUS GOODS. YOU MUST SPECIFY: PROPER SHIPPING NAME; HAZARD CLASS; UN NO.; PACKING GROUP (WHERE ASSIGNED); MARINE POLLUTANT AND OBSERVE THE MANDATORY REQUIREMENTS UNDER APPLICABLE NATIONAL AND INTERNATIONAL GOVERNMENTAL REGULATIONS. FOR THE PURPOSES OF THE IMDG CODE SEE 5.4.1.1.

** FOR THE PURPOSES OF THE IMDG CODE SEE 5.4.2

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