

## 1. Hazcheck Risk Zone (RZ) Data Introduction

---

Exis Technologies and our parent company National Cargo Bureau (NCB) have been working with major container line customers, industry bodies and CINS to develop [CINS Risk Based Stowage Guidelines](#).

Exis input has been focused around our detailed knowledge of the IMDG Code Dangerous Goods List and stowage requirements, and on input from industry experts to categorize specific UN Numbers into the appropriate Risk Zones (RZ) based on risks presented by the IMDG Code, including the corresponding Emergency Schedules.

This detailed knowledge has been combined with the in-depth practical knowledge from customers and industry bodies with regard to dangerous goods and the handling, thereof, during shipment by sea.

Hazcheck Risk Zone (RZ) Data is supplied by Exis Technologies as a free resource to enhance existing ship safety stowage and segregation requirements by assigning a Dangerous Goods Risk Zone to all declared dangerous goods. The free data supplied includes the UN Number, Packing Group if applicable, Risk Zone (RZ) and a Notes field in a CSV format and is subject to acceptance of the terms and conditions of use.

It contains information based on the Dangerous Goods List of the International Maritime Dangerous Goods Code (IMDG Code) currently Amendment 40-20.

Dangerous Goods, including those which are not subject to the provisions of IMDG through application of a Special Provision, have been allocated in this model to one of six Risk Zones (RZ). This is done on the basis of class, subsidiary hazards, packing groups and other properties such as the ability to evolve toxic vapours. Where IMDG requires on deck stowage only, the zone number has been adjusted accordingly. It should be noted that the model does not provide details of vertical or athwartships stowage and segregation of Dangerous Goods. It is intended that such elements will be developed and published.

Ship operators may develop suitable ship-specific Risk Zone configurations for the ships they are operating.

## 2. Hazcheck Risk Zone Data Examples

---

UN Number	Packing Group	Risk Zone	Notes
1827	II	RZ3	
1828	I	RZ3	
1829	I	RZ3	
1830	II	RZ1	In metal drums
1830	II	RZ3	Not in metal drums
1831	I	RZ4	
1832	II	RZ1	In metal drums
1832	II	RZ3	Not in metal drums
1833	II	RZ3	

### 3. Hazcheck Risk Zone Data Distribution

The information will be made available as a CSV file suitable for import into MS Access, MS Excel or any application or database able to import a CSV file.

The first record will have field names. The second and subsequent records will each represent a single variant.

Field Name	Format	Description
UNNo	4 digits	UN number
pg	3 alphanumeric characters	Packing Group
RZ	3 alphanumeric characters	<p>Risk Zone, one of 5 values, as per below list</p> <p>RZ1 - IMDG Code cargo which should be effectively extinguished with CO2. Taking consideration of the fire and spillage schedules.</p> <p>RZ2 - As RZ1, but Class 4.3 if IMDG Code permits under deck without mechanical ventilation. IMDG Code cargo which should be effectively extinguished with CO2. Taking consideration of the fire and spillage schedules.</p> <p>RZ3 - Slow reacting cargo. IMDG Code cargo which should be effectively extinguished with water. Taking consideration of the fire and spillage schedules for class 8 and class 9.</p> <p>RZ4 - Flammables, oxidizing, and toxic cargo</p> <p>RZ5 - Explosives</p>
Note	Free Text	Human readable description

The zones have been allocated according to Table 1 of the CINS DG Stowage Considerations document for this class and subsidiary hazards, including the footnotes of that table. In some cases, the UN Number and packing group are not sufficient enough to determine a single Zone number, so explanatory notes are given.

Examples are UN 2037 where class 2.2 goes in RZ3 whereas classes 2.1 and 2.3 require RZ4, or UN 2956 which goes in RZ4 unless a class 1 subsidiary hazard puts it into RZ5. IMDG stowage categories C and D require a cargo to be on deck only, and Zone numbers have been adjusted where necessary so as not to put these into RZ1 or RZ2.

Exis Technologies have extensive experience of managing and providing IMDG Code data and can provide a support service to help with the above.

Contact details for Exis Technologies are as follows:

Customer Service and Support: +44 (0) 1325 466672

Email: [support@existec.com](mailto:support@existec.com)

Website: [www.hazcheck.com](http://www.hazcheck.com)