ADR2005

ADR2005 is a program for the Palm or Pocket PC handheld computers. It shows you the UN number the 'hazard identification code' (HIN), the needed labels, a description of the substance and the instructions how to handle in case of incidents (EIRC-card).
Also the exemptions according ADR section 3.4.2 and 1.1.3.6 (LQ) are available.

Because the entry of the data can be done with use of large buttons, there is no need to use the stylus.

Due to differences between PalmOs and Windows Mobile (PocketPC), small variations in the screens as displayed in the manual are possible. The displayed information and the behaviour of the program in for both version equal.

Installation

For PalmOs: select the needed language (NL-Dutch, EN-English, DU-German) and install both files to your palm (ADR2005xx.prc and ADR2005xx.pdb). Unfortunately it is not possible to install the program or the database on an external memory card (SD/MMC, compactflash, memorystick etc.).

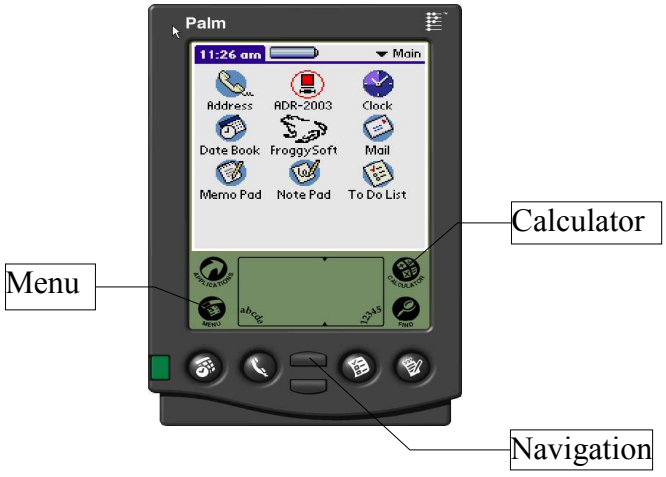
For PocketPC: select the needed language and execute the setup program: Setup.EXE

The handheld computer

Some of the keys on the handheld computer are being used by this program. Depending on the modal, some functions can be accesed directly in stead of via a menu.

Classic Palm

The classical palm devices have four keys for direct access to internal programs and two navigation keys. These last two are used for scrolling of text or selection of a different packaging group.
Also the 'Menu' and 'Calculator' are used.



Palm with 5-Way Navigator

These are the newer generation Palm handheld computers like the Tungsten and Zire. On the picture you can see this 5-Way Navigator. The keys of this navigator are being used for scrolling text are selecting buttons. The center pushbutton is used to confirm the selection.

Sony with Jogdial

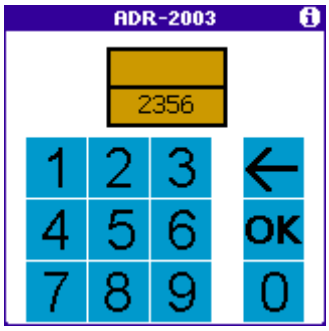
Most Sony handhelds have a scroll button on the side called Jogdial. The function is comparable with the up/down navigation of the classical palm. A push on the jogdial confirms the selection. A push on the 'back' button returns you to a previous screen.

Pocket PC

As mentioned in the introduction, most screens of the program and the behaviour and contents of the program are equal between PalmOs and PocketPC.
The navigation keys on the PocketPC are only used for selecting buttons, the center key is used for confirmation of the selection.

The program

After you start the program, the first screen will enable you to enter the UN-number of the substance:



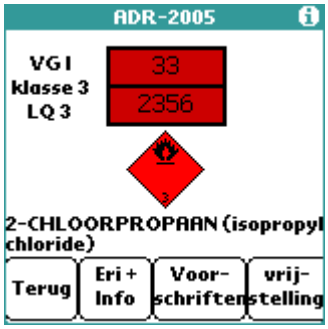
Enter the digits of the UN-number and press the 'OK'button. The arrow key can be used to make corrections.

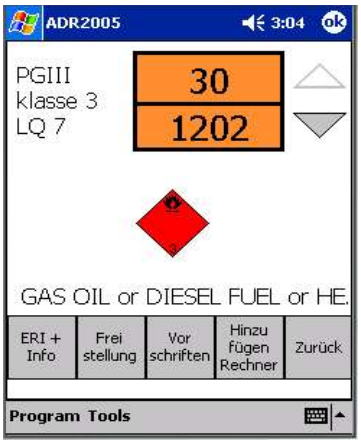
With the navigatie keys (or the 5-Way Navigator or Jogdial) you can also select the next or previous UN-number in the list.

As on many screens, de 'i' on the top righthand corner of the screen will show you help information. On the PocketPC this helpscreen can be accessed via the menu 'Program' item 'Help'.

Product screen

After you have entered a valid UN-number, the screen with information will be shown:





On this screen you see some general information about the UN-number:
the name, HIN, packaging group, class, LQ-code and the labels.
When more packaginggroups are allowed for this UN-number, these can be selected using the arrows on the top righthand side of the screen or using the up/down navigation keys

The 'Info' button will bring you to another screen where characterisctics and instructions are shown

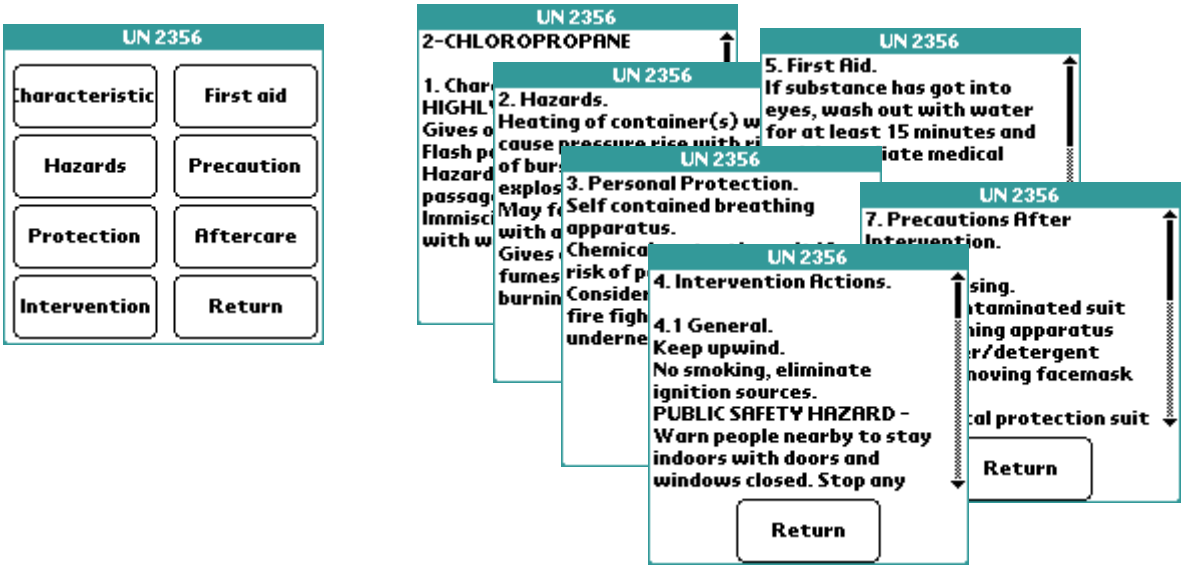
The 'Exemptions' button starts a screen where the exemptions according ADR section 3.4.2 (LQ) and 1.1.3.6.are shown.

From this screen you can also start the calculator by pressing the calculator button or via the menu selecting 'calculator'. You can also add this substance to the calculator list.

Pushing on the 'Return' button will return you to the previous screen (entering the UN number)

Characterisctics and instructions

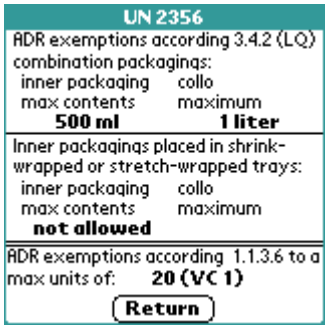
Pushing on one of the buttons on this screen will show you either the characterictics of the substance or the instructions how to handle in case of emergency.



The text can be scolled using the scrollbar on the rightside of the screen or by using the navigation keys, 5-Way Navigator or JogDial.

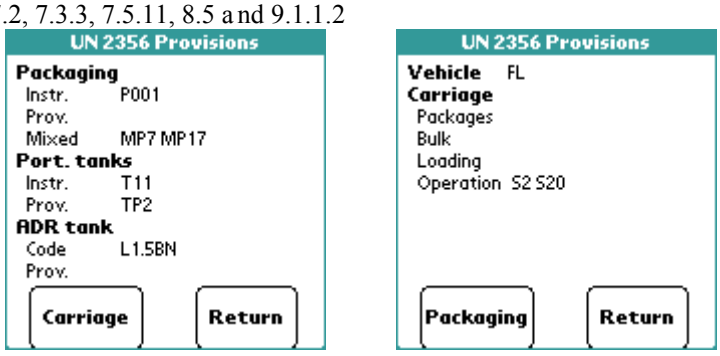
Exemptions

The key 'Exemptions' on the product screen will show you the exemptions according ADR section 3.4.2 (LQ) and section 1.1.3.6.



Provisions

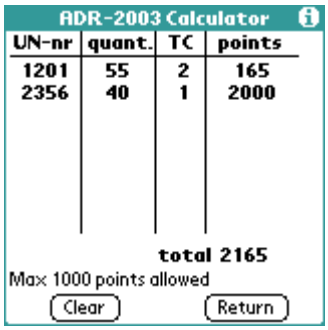
The key 'Provisions' on the product screen will show you the provisions and tank codes according ADR sections 3.3, 4.1, 4.2, 4.3, 6.8.4, 7.2, 7.3.3, 7.5.11, 8.5 and 9.1.1.2



Calculator

Certain dangerous goods packed in limited quantities may be subject to exemptions. Where the dangerous goods carried in the transport unit belong to the same category, the maximum total quantity per transport unit is limited to the indicated value at the bottom of the calculator screen. Where dangerous goods of different transport categories are carried in the same transport unit, the sum of the points shall not exceed 1000.

The calculator can be used to check if the number of points of the total transport does not exceed this limit.



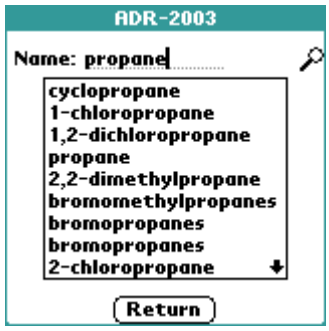
To add a substance, select it in the main screen and use to menu item 'add to calc' to add it to the list.
A substance can be removed from this list by selecting the UN-number and then tap on the 'Clear' button. The total number of points will then be recalculated

It is not possible to alter the UN-number or transport category in this screen. You have to remove the incorrect item and add a new one.

Searching

You can also search for a substance based on the name or part of the name as given in the official list of ADR.
Enter the name and tap on the lookingglass icon.

A list of all substances will be shown which correspondes with the given search criterion. Tap on the name and the product screen will appear.



Information about ERICards

This guidance provides definitions as further useful information related to each section of an ERICard.

Characteristics/Hazards

Ambient temperature: The temperature of the environment in which any chemical event occurs. Normally accepted as 20°C.

BLEVE: Boiling Liquid Expanding Vapour Explosion, likely to occur when an external fire impinges on a tank/barrel above any liquid level causing weakening of the metal and consequential rupture from increasing internal pressure.

Reactive: The property of a substance to react quickly either on its own or by an external source, producing a chemical change with the release of energy by polymerisation or decomposition, which can be caused by heat, water, oxygen (air), physical shock etc.

VCE: Vapour Cloud Explosion, caused by the ignition of a cloud of flammable gas/vapour mixed with air in an unconfined environment e.g. in the open air.

Personal Protection

It is emphasised that no chemical protective clothing will afford protection against all chemicals.

Depending upon the respective hazards of substances, levels of protection advised in individual ERICards are divided into five categories.

- Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves.
- SCBA with a chemical protection suit only where personal (close) contact is likely.
- SCBA with a chemical protection suit.
- SCBA with a chemical protection suit but gas-tight suit when close proximity to the substance or its vapours is likely.
- Gas-tight suit

The gas-tight suit represents the highest level of chemical protective clothing. Such suits may be manufactured from neoprene, vinyl rubber or other materials and are used with SCBA. Protection will be afforded from many chemicals but not all. If in any doubt, specialist advice should be sought.

For incidents involving deeply refrigerated and many other liquefied gases where contact will cause frostbite and severe damage to eyes, thermally insulated undergarments including thick textile or leather gloves, should be worn. Similarly, for incidents involving significant heat radiation, it is recommended that heat reflective suits be used.

Fire fighter's clothing conforming to EN469 provides a basic level of protection for chemical incidents and includes helmets, protective boots and gloves. Clothing not conforming to EN469 may not be suitable in any chemical incident.

PVC protective clothing is not suitable for many chemicals being transported.

Spillage

To prevent escalation of a spillage, it is expected that any leakage should be stopped as soon as possible, if this can be done safely. Depending upon the nature of the substance and the volume spilled additional actions will be required. These may be either containment or drenching with water. Specific recommendations are given in individual ERICards.

To keep a contaminated area as small as possible it is important to contain any spillage where appropriate. Remember that containment is not the same as absorption. Responders should also be aware of the physical dangers of any area that has been contaminated, e.g. a surface may become slippery, powders may cause dust clouds etc. Caution should therefore be exercised when it is necessary to walk through spilled product.

Some products, due to specific hazards, are better drenched away with water without delay in order to dilute the spillage rapidly. Special care must be taken in such circumstances to minimise environmental damage.

For all products with a flash point below 61°C, it is important to continuously monitor for the possible presence of an explosive mixture with air. Intrinsically safe equipment is necessary to prevent ignition by the emergency teams. Needless to say smoking or naked lights must not be allowed at the site of such an incident.

As a precaution against untoward poisoning of emergency responders, it is to be assumed that all personnel involved will avoid consumption of food in any incident especially for toxic substances.

After containment of a liquid spill, it may be necessary to absorb the product, especially if recovery is not possible. Various means of achieving this, are covered in individual ERICards dependent upon the nature of the substance(s) involved.

If products are likely to create effects beyond the immediate area of spillage, guidance is given to minimise their impact e.g. 'Knock down or disperse gas cloud with water spray. Do not allow water spray to come into contact with the liquid product'.

Fire

Extinguishing media - avoidance of unnecessary pollution.

Most extinguishing media can cause pollution of watercourses. Jets or water spray, used for fire fighting, drenching spills or knocking-down/absorbing gas or vapour clouds, are notable causes of water pollution at hazardous chemical incidents. Chemical powders, some gaseous extinguishing agents and foams, or other water-based media are also recognised pollutants.

As a consequence, it is emphasised that all extinguishing media be used judiciously.

Fire fighting action

The fire fighting methods described and the means specified are those that are compatible with the chemical substance directly involved in the fire, whether or not it is flammable. Fires involving adjacent buildings, vehicles or other property should be dealt with by following established procedures.

Removal of containers from heat radiation.

This is considered a normal course of action in fire fighting operations if it can be accomplished without risk to emergency responders. Advice to this effect therefore does not normally feature in individual ERICard texts. An exception is made for ERICards relating to materials presenting a risk from violent reaction with water. In such cases, advice to cool containers with water does not appear. Conversely, removal of containers is not recommended on cards covering very reactive substances or substances in pressurised containers. In such cases, advice is given to work from protective positions and the use of unmanned monitors or lances is recommended.

First Aid

ERICards are designed for use by trained responders. It is therefore presumed that the responder is capable of performing life saving actions, such as artificial respiration, cardiac-pulmonary resuscitation or resuscitation with oxygen (not in flammable atmospheres!) or air driven apparatus.

Basic action, such as the removal of tight fitting clothes in appropriate circumstances, is to be assumed.

First Aid information given in ERICards is only for the first, life saving, actions. An ERICard is not to be used for (para)-medical treatment of victims.

If an unprotected person becomes contaminated then it is important to treat him/her in an appropriate way depending on the type of chemical. Such measures are given in ERIC's wherever necessary.

Essential Precautions for Product Recovery

Fire Brigades in some European countries have responsibility for product recovery. In many other countries recovery is effected by specialist agencies. As a consequence, this section is intended to provide guidance to those brigades with specialised equipment and knowledge, and to those, not likely to become directly involved, with basic awareness of actions expected of competent recovery agencies.

Such information relates to the selection of suitable product transfer pumps, the need for proper earthing of equipment and recovery of spilled product. Of particular importance is the need to select safe pumps for flammable liquids and gases e.g. EEX de II A T3 - CENELEC-characterisation (EN 50014) where:

EEX = explosion protected unit,

de = type of ignition protection (d = pressure resistant enclosure; e = raised safely).

II A = explosion Group

T3 = temperature classification (e.g. T3: the temperature of any external surface of an electrical appliance may not exceed 200°C and the ignition point of the flammable liquid is greater than 200° C).

Precautions after Intervention

Fire Brigade personnel should be decontaminated as soon as possible after any contact with a spilled substance has occurred. Contaminated protective clothing should be removed after use following recommended procedures and stored in a secure area until effectively decontaminated before re-use. If on-site decontamination is not possible, specialist advice should be sought before transporting from the incident location.

It is expected that Fire Brigade personnel will undertake normal hygiene actions (e.g. shower and change of clothing) after returning to headquarters.

More information about transport of hazardous material can be found at:

UNECE: http://www.unece.org/trans/danger/danger.html CEFIC: http://www.cefic.org en http://www.ericards.net

Contact

www.FroggySoft.com

info@FroggySoft.com

The contents of the program is a summary of the legislation of transporting dangerous goods. Although great care has been taken with the composition of the data, we do not accept any responsibility for the correctness of the data and the program.