

National Code of Practice for Chemicals of Security Concern



Understanding the risks in chemical security

This fact sheet has been written to help you better understand the context in which the risks around chemical security were assessed.

Terrorism poses a real and enduring threat to Australia. There is a risk that terrorists will use chemicals to make homemade bombs or to poison people. The government is committed to keeping Australia safe from this threat through a range of programs that operate at home and overseas. This includes:

- ▶ encouraging the community to help police and security agencies by reporting suspicious activities to the National Security Hotline on 1800 123 400.
- ▶ letting industry and the private sector know that they have an important role in protecting Australia by being security aware and reporting suspicious activities to the National Security Hotline.
- ▶ strengthening cooperation between industry, the community and existing police and security agencies to enhance counter-terrorism efforts.

The government has assessed the national security risks associated with 96 chemicals that could be used to poison people or make bombs. These risk assessments were used to help develop the voluntary National Code of Practice for Chemicals of Security Concern.

This factsheet explains the risk assessment process and the overall security risk ratings for the 15 high risk chemicals. It provides high-level context and is not intended to replace the risk assessment process suggested in the National Code of Practice for Chemicals of Security Concern.

Find out more on what the government is doing about national security at www.nationalsecurity.gov.au.



Risk assessment process

Our risk assessment process is based on the International Standard for Risk Management AS/NZS ISO 31000. It assesses the likelihood and consequence of terrorists diverting a chemical from the legitimate supply chain.

As part of the risk assessment, we assign each chemical an overall risk rating. This is based on an analysis of four areas (see Diagram 1 below):

- ▶ **impact**—the potential impact of the chemical if it was used as a toxic or explosive weapon.

- ▶ **employability**—how easy it is to use the chemical as a weapon.
- ▶ **level of security concern**—how interested terrorists are in the chemical and how easily they could acquire and use the chemical.
- ▶ **vulnerability**—how easily the chemical could be diverted from the legitimate supply chain.

To assess risk in these four areas, we obtained information from law enforcement, intelligence and security agencies as well as industries that handle the chemicals in question.

Diagram 1:



11 precursors to homemade explosives and 4 toxic chemicals

Of the 96 chemicals of security concern, we identified 11 as priority chemicals because of their potential to be used to make homemade explosives (HMEs). There are also four toxic chemicals identified as high risk. These 15 high risk chemicals are listed in the table at the end of this fact sheet. The National Code of Practice for Chemicals of Security Concern applies to these 15 chemicals.

In 2010–2011 (for HMEs precursors) and 2011–2013 (for 84 toxic chemicals), the government consulted with over 500 businesses who deal with these chemicals to find out what they are doing to manage the security risks associated with these chemicals. Each business answered questions to determine the vulnerability aspect of the risk assessment methodology, that is, how easily could the chemical be diverted from the legitimate supply chain.

The questions related to a number of security areas:

Employee checking—Robust processes for assessing employee suitability to access chemical precursors can reduce the likelihood of chemicals being stolen or diverted by a trusted insider.

Risk assessment and planning—Formal security risk assessment and planning processes can help businesses identify possible points of vulnerability to theft/diversion as well as the appropriate mitigation measures.

Physical and personnel access controls—Effective physical and personnel access controls can reduce the likelihood of unauthorised access, which reduces the likelihood of chemicals being stolen or diverted for terrorist purposes.

Point of sale procedures—Effective procedures for processing orders and validating customers can reduce the likelihood of chemical precursors being sold to terrorists.

Transport and delivery procedures—Robust verification procedures can reduce the likelihood of chemical precursors being diverted during delivery. Having good security measures in place to transport chemicals can reduce the likelihood of those chemicals being diverted or stolen in transit.

Security awareness—Dedicated security training can help make staff more aware of security vulnerabilities and possible measures to mitigate them.

Inventory control—Effective inventory control measures can reduce the likelihood of chemicals being stolen or diverted.

Consignment control—Consignment control measures that enable effective monitoring and accounting of chemical consignments will increase control of chemical precursors and reduce the likelihood of undetected theft or diversion.

Overall security risk ratings

The following table set outs the overall security risk ratings for 15 high risk chemicals of security concern. Use this as a guide only. Do not rely on it as an assessment of the security risks faced by your business. To determine the security risks of your business, conduct a risk assessment as recommended in the National Code of Practice.

It considers the following points in the supply chain:

Introducer—the first point in the supply chain. Introducers either import the chemical or manufacture the chemical at a facility in Australia.

Transport/logistics—multiple points in the supply chain, including people who transport and store chemicals.

Processor—people who reformulate or repackage the chemical. The chemical and/or reformulated product will then be on-sold to wholesalers, retailers and/or end users.

Wholesaler—people who sell primarily to businesses and institutions and do not repackage or reformulate the chemical.

Retailer—people who sell primarily to individuals and do not repackage or reformulate the chemical.

End User (business)—people who consume the chemical in their business/industrial/institutional processes. They do not on-sell the chemical or any products that contain the chemical. (Does not apply to domestic/home use).

Table: Overall security risk ratings for 15 high risk chemicals of security concern

	Introducer	Transport/ Logistics	Processor	Wholesaler	Retailer	End User
11 Precursors to homemade explosives						
Ammonium perchlorate	Medium	Medium	Medium	Medium	n/a	Medium
Hydrogen peroxide	High 3	Very High	High 3	Very High	Very High	High 3
Nitric acid	Very High	Very High	Very High	Very High	High 3	Very High
Nitromethane	High 2	High 3	High 3	High 3	Very High	High 3
Potassium chlorate	High 3	High 3	High 3	High 3	n/a	High 3
Potassium nitrate	High 3	High 3	High 2	High 3	High 2	High 3
Potassium perchlorate	Medium	Medium	Medium	Medium	n/a	Medium
Sodium azide	Medium	High 1	High 1	High 1	n/a	High 1
Sodium chlorate	High 2	High 3	High 2	High 3	n/a	High 3
Sodium nitrate	High 3	High 3	High 2	High 3	n/a	High 3
Sodium perchlorate	Medium	Medium	Medium	Medium	n/a	Medium
Four toxic chemicals						
Aluminium sulphide	High 1	High 2	High 1	High 1	High 2	High 2
Chlorine gas	High 2	High 3	n/a	High 2	n/a	High 3
Potassium cyanide	High 2	High 2	High 2	High 2	n/a	High 3
Sodium cyanide	High 3	High 3	High 3	Very High	n/a	Very High
Key	Medium	High 1	High 2	High 3	Very High	