



# Impact of REACH on Defense Procurement: Avoiding Supply Chain Disruptions

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## REACH's Substances of Very High Concern

- An SVHC goes through a 5 phase process, appearing on a series of lists and ultimately banned from the EU
- Wave One
  - Registry of intent – [www.echa.eu](http://www.echa.eu) website June 2008
  - Annex 15 list – 16 substances, June 30, 2008
  - Candidate List – 15 substances October 28, 2008
  - Priority list – 7 potential substances identified, 1<sup>st</sup> wave at the latest June 2009
  - Annex XIV – BANNED, date TBD
- Wave Two
  - Registry of intent - [www.echa.eu](http://www.echa.eu) website October 2008
  - Next phases: sometime in 2009

## Communication of Candidate List substances in Articles

- For a substance in an article:

if the article is imported or produced in the EU,

- and the substance is on the **Candidate List** and the substance is present in a wt/wt concentration in the article at greater than 0.1%

then the substance must be communicated to **immediately** to all recipients and **within 45 days** to any consumer who asks

*Ref: Article 33.1-2 of the REACH Regulation*

## Communication of Candidate List substances in Articles

















**Table 4** Information types for communicating on SVHC in article - Example

Item	Example
Substance name	Diarsenic trioxide
CAS Number	1327-53-3
Registration number (if provided by supplier)	01-1234567-49-00
Classification and SVHC properties	Carc. Cat. 1; R45; May cause cancer T+; R28; Very toxic if swallowed C; R34; Causes burns N; R50/53; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Concentration in the article <sup>31</sup>	1% w/w
Information on safe handling including safe disposal if relevant	Prevent from heating above 60 °C Keep article out of reach of children This article should be disposed of as hazardous waste. Do not dispose of via normal household waste

## Communication of Candidate List substances in Articles

- Format for communications
  - Website
  - Explicit labeling (not on inside of package)
  - Label has URL - retailer downloads from web
- Further considerations
  - Need to update continuously
  - How to manage data?
  - Proprietary concerns
  - Obsolescence planning

# The Candidate List as of Today (May 6th)

Substance identification			Authority	Reason for proposing	Date of publication	Deadline for commenting	Link to the Annex XV report	Link to commenting form
Substance name	CAS number	EC number						
Anthracene	120-12-7	204-371-1	Germany	PBT	30/06/08	14/08/08		Anthracene
4,4'-Diaminodiphenylmethane	101-77-9	202-974-4	Germany	CMR	30/06/08	14/08/08		4,4'-Diaminodiphenylmethane
Dibutyl phthalate	84-74-2	201-557-4	Austria	CMR	30/06/08	14/08/08		Dibutyl phthalate
<del>Cyclododecane</del>	<del>204-63-2</del>	<del>206-33-9</del>	<del>France</del>	<del>PBT</del>	<del>30/06/08</del>	<del>14/08/08</del>	<del></del>	<del>Cyclododecane</del>
Cobalt dichloride	7646-79-9	231-589-4	France	CMR	30/06/08	14/08/08		Cobalt dichloride
Diarsenic pentaoxide	1303-28-2	215-116-9	France	CMR	30/06/08	14/08/08		Diarsenic pentaoxide
Diarsenic trioxide	1327-53-3	215-481-4	France	CMR	30/06/08	14/08/08		Diarsenic trioxide
Sodium dichromate, dihydrate	7789-12-0		France	CMR	30/06/08	14/08/08		Sodium dichromate, dihydrate
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	Netherlands	vPvB	30/06/08	14/08/08		5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)
Bis (2-ethyl(hexyl) phthalate) (DEHP)	117-81-7	204-211-0	Sweden	CMR	30/06/08	14/08/08		Bis (2-ethyl(hexyl) phthalate) (DEHP)
Hexabromocyclododecane (HBCDD)	25637-99-4	247-148-4	Sweden	PBT	30/06/08	14/08/08		Hexabromocyclododecane (HBCDD)
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	287-476-5	United Kingdom	PBT	30/06/08	14/08/08		Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)
Bis(tributyltin)oxide	56-35-9	200-268-0	Norway	PBT	30/06/08	14/08/08		Bis(tributyltin)oxide
Lead hydrogen arsenate	7784-40-9	232-064-2	Norway	CMR	30/06/08	14/08/08		Lead hydrogen arsenate
Triethyl arsenate	15606-95-8	427-700-2	Norway	CMR	30/06/08	14/08/08		Triethyl arsenate
Benzyl butyl phthalate	85-68-7	201-622-7	Austria	CMR	30/06/08	14/08/08		Benzyl butyl phthalate

## REACH's Substances of Very High Concern – Practical Consequences

- **An SVHC will have little or no market in EU**
  - Will still be able to legally import articles with banned substances
  - ***Must*** know about and communicate all Candidate List substances (if  $>.1\%$  concentration in article)
  - **Reality** is that market pressures will ensure that these substances have a very dim future in EU commerce (cf. Lead-free solder)

# Impacts

- Most affected materials:
  - Plasticizers
  - Semiconductor materials
  - Fire retardants
  - Chromium pigments and dyes
  - Metal surface treatments
  - Adhesive additives

## Risks

- Delivery delays
- Decreased availability of parts and materials
- Increased costs
- Alternatives meet military specs?
- ITAR – what should not be disclosed to foreign entities?

## What can be done?

- Best practices/guidance documents (for DoD and suppliers)
  - Identify processes for ensuring compliance
  - Identify processes for safeguarding the supply chain from disruptions
  - Incorporate requirements into contract Terms and Conditions and educate suppliers and procurement staff on obligations
- Supplier education/trainings
- Database for parts information

## Conclusion

- Disclosure of SVHCs effectively is required for all foreign military sales and for all parts on military installations
  - This is an MSDS requirement for articles and will be required globally (either by law or by contractual terms)
- Suppliers unwilling or unable to meet new requirements may drop off market
- Education and data management tools/processes can mitigate this risk

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