



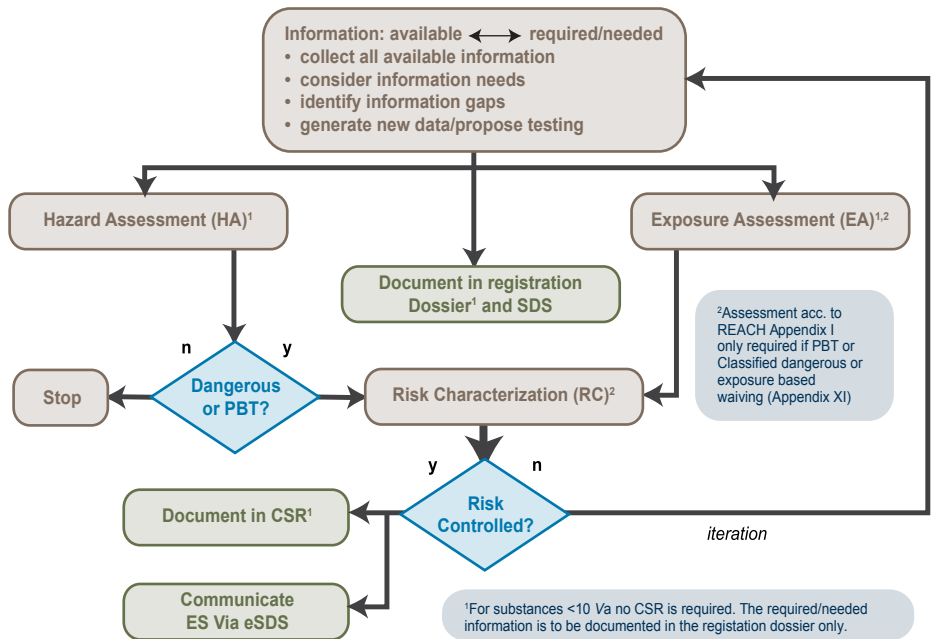
**Product Safety & Compliance**

# REACH Compliance

REACH is the common name for the EU regulations entitled Registration, Evaluation, Authorization and Restriction of Chemicals. REACH makes industry responsible for assessing and managing the risks posed by chemicals and providing appropriate safety information to their downstream users. As such, all manufacturers and importers of chemicals must identify and manage risks linked to the substances they manufacture and market. For substances manufactured or imported in quantities of 1 tonne or more per year per company, manufacturers and importers need to demonstrate that they have appropriately done so by means of a registration dossier, which must be submitted to the European Chemicals Agency (ECHA).

REACH is an extremely complex set of regulations requiring many integrated steps to complete registrations including working jointly with others producing the same substances to achieve data sharing, harmonized decisions on hazard classifications and ultimately “one registration” for each chemical substance.

REACH requirements apply to EU producers and any company exporting products to the EU. The diagram to the right illustrates the many activities needed to accomplish a registration.





## REACH Service Areas

### Hazard Assessment

Determination of hazard classification; establishment of Derived No Effect Levels (DNELs) for human exposure and environmental Predicted No Effect Concentrations (PNECs); PBT and vPvB assessment for persistence, bioaccumulation & toxic properties.

### Exposure Assessment

Exposure evaluation for substances classified as dangerous or having PBT/vPvB concerns; generation of environmental, occupational and consumer exposure scenarios (ESs).

### Final Exposure Scenario

Specify conditions of use where risks are adequately controlled; summarize final exposure scenario – attach to extended Safety Data Sheet (eSDS) for supply chain communication.

### Chemical Safety Report (CSR)

Development and/or review of CSRs required for registration dossiers for all substances manufactured or imported into EU at quantities of 10 tonnes or more per year.

### Technical Dossier Preparation & Submission

Compilation of IUCLID 5 dossiers required for registrations necessary information regarding manufacturer/importer; substance identity, use, classification, and labeling; robust study summaries; proposals for further testing; IUCLID 5 dossier format; submission of documentation to the European Chemicals Agency (ECHA).

### Classification, Labeling, & Packaging Evaluations

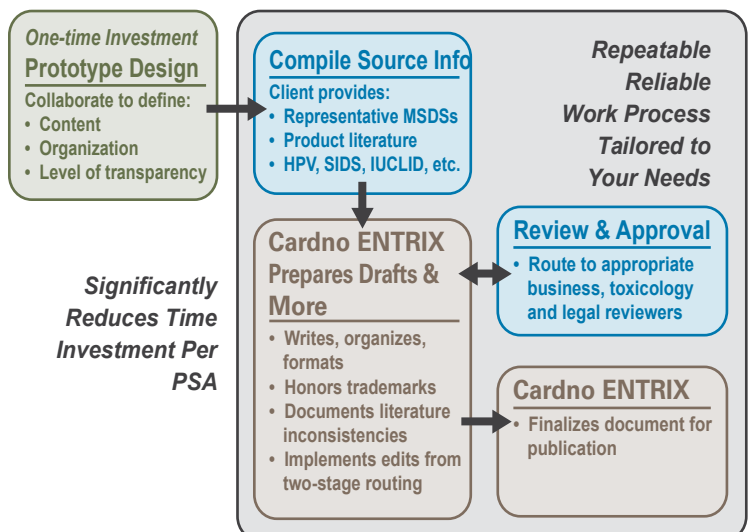
Development of hazard determinations in accordance with the Classification, Labelling, and Packaging (CLP) regulations; development of CLP inventory submittals in format required by ECHA.

## Product Stewardship

Product Stewardship is the practice of making health, safety and environmental protection an integral part of the life cycle of chemical products. It includes an evaluation of product hazards and potential exposure scenarios to develop appropriate actions to protect human health and the environment. Product Stewardship is also a key element in Responsible Care® and similar industry initiatives. It is achieved by:

- Creating a base-set of information for products
- Defining safe conditions of product use
- Developing programs to control product use within safe conditions
- Using this information to meet global regulatory requirements
- Making product safety information available to consumers

## Product Safety Assessment Process



# Product Stewardship Service Areas

## US Toxic Substance Control Act

Cardno ENTRIX continues to remain informed about the evolving changes to TSCA and can define anticipated changes in TSCA under new administration. For our clients Cardno ENTRIX can define requirements and provide training, file pre-manufacturing notifications, prepare our clients for EPA inspection, prepare our clients for inventory use reporting.

## USEPA directive on endocrine disruption

Cardno ENTRIX can facilitate fast and inexpensive testing for endocrine disruptors in the environment.

## Product Safety Summaries

Draft product safety summaries that can be used to communicate product hazards and attributes to the public.

## Green Chemistry Initiatives

Help companies develop and manage a green chemistry program in addition to green marketing of products.

## Globally Harmonized System of hazard communication and labeling

Preparation of Material Safety Data Sheets, product labels and product brochures.

## Product testing

Product characterization, physical properties, human health hazard assessment, environmental toxicology, biodegradation, transport and fate testing.



Cardno ENTRIX is committed to conserving and restoring our natural resources and the environment. We practice stewardship through the conduct of our business, the development of our staff, and the services we provide our clients.