



Association Internationale de la Savonnerie, de la Détergence et des Produits d'Entretien  
International Association for Soaps, Detergents and Maintenance Products

# SCEDs

## Specific Consumer Exposure Determinants

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# SCEDs – General overview

- Created because Tier 1 consumer estimates in ECETOC TRA are very conservative which limits its usefulness.
- They are sets of **habits and practices data** (e.g. in REACH terminology Conditions of Use for consumers)
- Provide determinants for **more realistic exposure estimates** (compared with default estimates from the ECETOC TRA).
- SCEDs are intended to be **used directly in ECETOC TRA v3 and CHESAR** for refined exposure estimation (similar to SPERCs).

# SCEDs- Expected benefits/improvements



- Better consumer exposure scenarios for downstream users
  - Benefits both registrants and DUs by **avoiding any unnecessary communication of RMM or OC** within affected supply chains.
- Easiness of Chemical Safety Assessment
  - Refined exposure estimates without having to use more complex, higher tier models.
- Harmonised source consumer exposure information for communication.

# A.I.S.E. SCEDs – How were they developed?

- A.I.S.E./FEA used several data sources including:
  - HERA tables of Habits & Practices data
    - Voluntary risk assessment programme 1999-2005
    - Peer-reviewed methodology, available on:  
<http://www.heraproject.com/>
    - Data collected via an in-depth survey on consumer habits, re-confirmed as valid in 2009
  - Published literature
  - Data from higher tier models (ConsExpo 4.1)

# The A.I.S.E. SCEDs – An Overview



AISE Category	SCEDs
LAUNDRY PRODUCTS	Laundry products (regular & compact)
	Fabric conditioners (regular & compact)
	Laundry additives, e.g. Bleach (specific)
	Water softener (specific)
	Laundry aids, e.g. Ironing aids (specific)
CLEANERS	All-purpose cleaners (non spray)
	All-purpose cleaners (spray)
	Hand dishwash
	Autodishwash
AIR FRESHENERS	Air fresheners
POLISHES & WAXES	Polishes and waxes

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<b>POLISHES &amp; WAXES</b>	<b>Polishes and waxes</b>

## Scope of the SCEDs

- SCEDs do not change the underlying **algorithms** in the TRA v3.
- The SCEDs **determinants** (exposure parameters) can be used to refine consumer exposure estimation.
- The SCEDs determinants can be inserted into the **“Add subcategory” tab** in the TRA v3.
- Refined exposure estimates can help RCRs <1

## Example: Use of SCEDs for shoe spray

- **Product:** Shoe polish spray containing 0.1% fragrance ingredient (PC31).
- **Issue:** Dermal & Inhalation RCRs fail using the defaults at Product Subcategory level in TRA v3.
- **SCED selected:** “Polishes and Wax blends” used to refine TRA exposure estimates.
- **SCED determinants used:** ‘Skin Contact Area (cm<sup>2</sup>)’ & ‘Amount of Product (g)’. Other TRA defaults are unchanged.



# Justification for dermal determinant



## Consumer use of Polishes and wax blends (Furniture, Floor & Leather Care Maintenance Products)

Exposure Descriptor or Determinant	Value	Justification
Use description	Consumer use of Polishes and wax blends (Furniture, Floor & Leather Care Maintenance Products)	
Product/Article Use Category	PC31- Polishes & wax blends	<b>AISE use mapping table:</b> C20: FURNITURE FLOOR & LEATHER CARE (spray, liquid) for consumer use
PC/AC Subcategory	2 Subcategories	Polishes, wax / cream (floor, furniture, shoes)  Polishes, spray (furniture, shoes)
<b>Dermal Specific Parameters</b>		
<b>Skin Contact Area</b>	Wax / cream: 430cm <sup>2</sup>  Spray: 430cm <sup>2</sup>	This is the RIVM ConsExpo value for floor, furniture and shoe care products, both spray & non-spray (RIVM Cleaning Products Fact Sheet).  n.b. In the TRA, this can be selected as:  2: inside hands / one hand / palm of hands. (TRA value of 857.5 represents the front and back of both hands. However, the RIVM value of 430 represents the front and back of one hand or 2 palms, which is more realistic.)

# Justification for inhalation determinant



## Consumer use of Polishes and wax blends (Furniture, Floor & Leather Care Maintenance Products)

Exposure Descriptor or Determinant	Value	Justification
Use description	Consumer use of Polishes and wax blends (Furniture, Floor & Leather Care Maintenance Products)	
Product/Article Use Category	PC31- Polishes & wax blends	AISE use mapping table: C20: FURNITURE FLOOR & LEATHER CARE (spray, liquid) for consumer use
PC/AC Subcategory	2 Subcategories	Polishes, wax / cream (floor, furniture, shoes)  Polishes, spray (furniture, shoes)
<b>Inhalation Specific Parameters</b>		
Amount of Product used per application (g)	Wax / cream: 550 g/event  Spray: 135 g/event	Unchanged from TRA default value. (n.b. Except for shoe cream, the RIVM Cleaning Products Fact Sheet cites 10g/event).  Unchanged from TRA default value. (n.b. Except for shoe spray, the RIVM Cleaning Products Fact Sheet cites 36g/event).

# Results- with & without SCEDs



Descriptor	Product Subcategory	Dermal Exposure Estimate (mg/kg/day)	Inhalation Exposure Estimate (mg/kg/day)	Inhalation Exposure Estimate (mg/m <sup>3</sup> )
PC31:Polishes and wax blends	Polishes, wax / cream (floor, furniture, shoes)			
	Polishes, spray (furniture, shoes)	1.43E-01	1.81E-01	1.99E+00
<b>NEW SUBCATEGORIES</b>				
PC31:Polishes and wax blends	shoe spray	7.15E-02	4.84E-02	5.29E-01

*Using SCED determinants:*

Dermal exposure is 2-fold lower than default TRA

Inhalation exposure is 3.7-fold lower than default TRA

# Comparison of Exposure Estimates across Consumer tools.



Product: Shoe Polish Spray	Dermal exposure (mg/kg/day)	Inhalation exposure (mg/kg/day)
TRA v3 (with Defaults)	0.143	0.18
TRA v3 (with SCEDs)	0.072	0.048
ConsExpo 4.1	0.002	0.0005

# Next Steps for A.I.S.E.

- Further clarification/justification of SCED parameters and decisions is ongoing (following dialogue with ECHA).
- A guidance document to support the concept is being developed at DUCC level.
- DUCC commits to host the available SCEDs in a publically accessible library
- We are working to ensure consistency across sectors in format/content.



**Thank you for your attention.**