CATSAC
An update on the process and evaluation for similarity determinations in OPP

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CATSAC,
formerly known as the Similarity Clinic

- Chemistry and Acute Toxicology Science Advisory Council was formalized in 2016
- Formal membership now includes chemists/toxicologists/regulatory scientists
- Representatives from AD/BPPD/HED/RD
- 2 Executive Secretaries
- Created a database to archive and store CATSAC determinations and rationales
- Meeting minutes drafted for each review

CATSAC,
A new process

- Standard Operating Procedure (SOP)
  - finalized in 2017
- All Divisions following SOP
- All Divisions with potential denials/rejections of similarity or acute studies in OPP now reviewed by CATSAC

CATSAC SEP

Currently drafting the Standard Evaluation Procedure (SEP)

- guidance for registrants on what components to consider for both product chemistry and acute toxicity
- common definitions and terminology such as 100% repack, identical products, substantially similar products, and potential for bridging data
- Provide examples for substantially similar and bridging acute toxicity labels and data

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Similarity Considerations

Standard Evaluation Procedure (SEP) will provide internal guidance:

-On evaluating identical or substantially similarity of product chemistry products

-On evaluating identical, substantially similar or bridging of acute toxicology data

-SEP will be used by CATSAC, AD, BPPD and RD for making similarity determinations

-SEP will support consistency in evaluations across the Divisions

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Acute Toxicology Substantially Similar

Active Ingredient (a.i.) considerations for substantially similar toxicity:

- % a.i. proposed product ≤ %a.i. cited product
- Use dilution is similar for proposed and cited product
- Proposed product has no additional active ingredients compared to cited

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Inert considerations for substantially similar toxicity:

- Inerts don't need to be identical, but toxicity should not be significantly different as to change the toxicity, physical or chemical properties of the proposed product when compared to the cited product
- Toxicity profile of individual inerts will be considered
- Example: inert(s) that are corrosive vs non-corrosive, miscible vs non-miscible, water based vs oil based, etc
- Differences in concentration and identity of inert ingredients that may change the toxicity profile on a case by case basis using a weight of scientific evidence

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Registrant Packages

- Registrants should clearly identify if proposed product is identical, substantially similar, or bridged to cited product
- Registrants should include a logically outlined rationale for all or as many components in the formulation as possible

Acute Toxicology Substantially Similar

Example A: Toxicological Substantially similar products			
Criteria		**Product A (Cited)**	**Product B (Proposed)**
Physical/Chemical Property	**pH**	6	3
	Flammability	>100ºC	>100ºC
	Formulation	Liquid	Liquid
	Solubility	Miscible in water	Miscible in water
Ingredients	**Active Ingredient**	a.i. #1 (10%)	a.i. #1 (11%)
		a.i. #2 (5%)	
	Total Conc. of AI	15%	11%
	Solvent	75% Water	80%
	Solvent	10% Glycol ether	-
	Surfactant	4%	2%
	Surfactant		2%
	Chelating agents	2%	-
	Stabilizer	1%	-
	pH adjuster	None	5%

Acute Toxicology Non-Substantially Similar

Example B: Toxicological Non-Substantially similar products			
Criteria		**Product A (Cited)**	**Product C (Proposed)**
Physical/Chemical Property	**pH**	6	N/A
	Flammability	>100ºC	>100ºC
	Formulation	Liquid	Liquid
	Solubility	Miscible in water	Immiscible in water
Ingredients	**Active Ingredient**	a.i. #3	a.i. # 3
	Total Conc. of AI	10%	11%
	Solvent	30% Water	10% Organic
	Pigment	9.5	35%
	Resin	4%	32%
	Surfactant	0.50	-
	Plasticizer	-	2%
	Stabilizer	1%	-
	Inert filler	45%	10%

FY ‘17 CATSAC Summary

	Acute Oral	Acute Dermal	Acute Inhalation	Eye Irritation	Skin Irritation	Skin Sensitization
All 6 pack waived	1	1	1	1	1	1
Bridged	4	4	3	2	2	2
Waived/Assigned Tox Category	2	2	2	3	3	2
Waiver Rationales			3			
Tox Category Assigned Based on Pub. Lit. (OECD SIDS/IUCLID)	1	1	1	1	1	1
Studies Saved	8	8	10	7	7	6
Test Dollars Saved ($)	40,000	48,000	290,000	21,000	21,000	54,000
Paperwork Burden Cost Saved ($)	11,312	16,560	100,040	5,698	5,698	17,340
Paperwork Burden Hours Saved	160	240	1430	84	84	246

FY ‘18 CATSAC Summary

- **9 submissions in total:**
- **6 Substantial similarity submissions** for new products
- -Bridging/citing protective label accepted 2 times(1 of 2 was a rebuttal) = 12 studies
- -Bridging/not protective label rejected 4 times
- 1 Product chemistry submission, CATSAC accepted data
- 1 questionable skin sensitization study, CATSAC accepted data
- 1 product manager initiated action (not a new product) CATSAC determined not similar products