

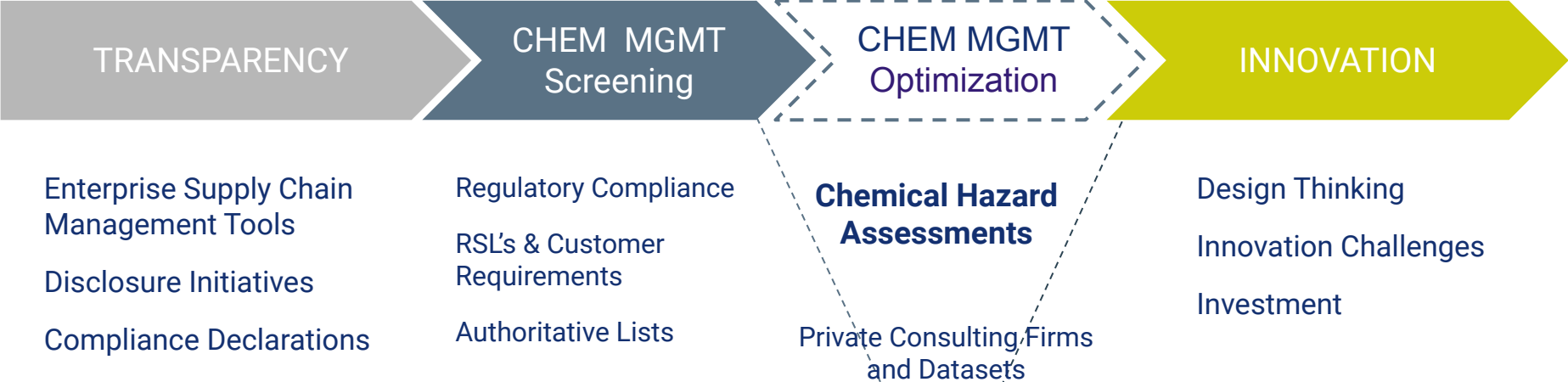
A person wearing a light-colored knit hat and a purple jacket is seen from behind, standing in a field of tall grass. They are pointing their right hand towards the horizon. The background shows a sunset or sunrise with a warm, golden glow and a cloudy sky.

TURNING CHEMICAL DATA INTO POSITIVE IMPACT

By creating broad access to chemical hazard data and illuminating safer alternatives, in partnership with industry, we are ending toxic chemical exposure and advancing human and environmental equity.

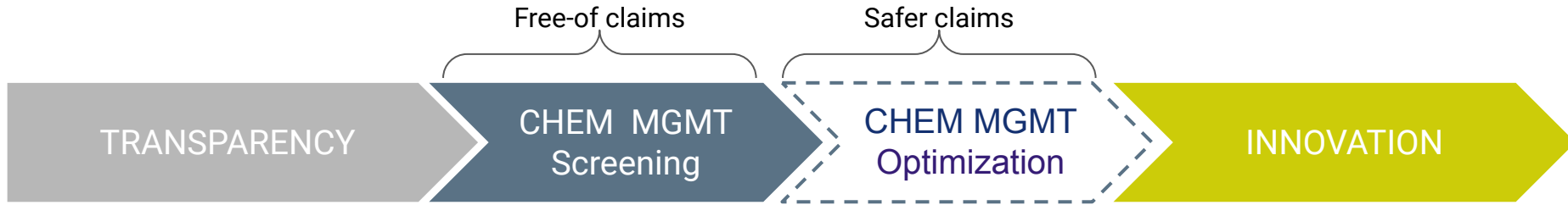
Bridging the chasm to safer chemistry

Lack of cost-effective, high-quality, chemical hazard data is a barrier for most companies



The current system perpetuates high cost, inconsistencies, and slows the transition to inherently safer chemistry

TOXIC IS EASY, SAFE IS HARD



“It takes a lot more information to prove that a chemical is inherently safe than it does to prove that it is toxic. Just knowing that a chemical is a known carcinogen or that it causes skin sensitization can be enough to rule it out as a good candidate for product applications. But to be sure that it is inherently benign for its intended use means that all human and environmental impacts must be classified. A lack of hazard data does not mean that a chemical is inherently benign,”

Lauren Heine, Ph.D., Co-Founder and Director of Science & Data Integrity

Who We Are

A **science-based, non-profit**, value chain **collaboration**

Our goal is to be the trusted source for cost-effective, verified information on chemical hazards and **safer alternatives**.

Co-design partners include:



SEPHORA



credo



method.

Steelcase

H&M



amazon

What we do

FIND SAFER ALTERNATIVES

Helping brands, retailers, and manufacturers transition to safer chemistry using the best science available

MARKET SAFER ALTERNATIVES

Helping suppliers communicate trusted, third-party verified, globally harmonized data to all of their stakeholders

MEASURE PROGRESS

Helping brands, retailers, and investors reduce risk and improve ROI while accelerating the transition to safer chemistry

Populating a first- of-its-kind, globally harmonized -repository of chemical hazard assessments for safer alternatives

ChemFORWARD SAFER

We help suppliers to verify and amplify their "ingredient" raw materials that meet ChemFORWARD's rigorous GHS-based criteria for safer alternatives



List and Amplify Your Safer Alternatives

Suppliers have their raw materials reviewed by a third party profiler who verifies the material disclosure, assesses substances subject to review and determines that the material presents only moderate to low hazard on human and environmental impacts according to the ChemFORWARD Safer Program Requirements

Assess your ingredient once.

Amplify your verified safer alternative.

Trusted, third-party data flows to your stakeholders through
ChemFORWARD and our data partners

CHEMFORWARD

Leading
Brands +
Retailers

Product
Designers +
Formulators

Customers +
Prospective
Customers

Investors +
Stakeholders

Data
Platforms

Product Certifications

Benefits

for suppliers

1

Stay ahead of regulations

2

Ensure human AND environmental safety

3

Build trust through third-party verified transparency







Building Trust in the Science of CHAs

ChemFORWARD's program is unique and features:

- Built on proven existing [hazard classification methodologies](#) (starting with GHS, C2CC). ChemFORWARD is NOT a new CHA method.
- [Qualified Assessors](#) own and **maintain the data** they create and participate in a community of practice
- **Peer review/**[verification](#) by independent toxicologists who assure assessments are comprehensive, consistent, and credible - thereby increasing user trust
- A technical [challenge process](#) that promotes **continuous improvement** and results in a definitive dataset that justifies having one CHA per chemical
- A policy for reviewing, incorporating, and protecting unpublished [private data](#) into CHAs
- **Governance** that promotes inclusion, transparency, and best practices

ChemFORWARD Chemical Hazard Bands


An actionable summary rating and a meaningful measure of progress

ChemFORWARD Hazard band	Implications
	Low hazard and low risk
	Some moderate hazards but low risk
	Moderate to high hazards and moderate risk; or uncertainty that could result in moderate risk
	High hazards and high risk in most scenarios
	CHA has been completed but with excessive data gaps, rating is not possible
	Seek additional information, request a CHA to inform a decision

Harmonized ratings = flexibility, portability, and ROI

	Program Equivalency		
ChemFORWARD Hazard Band	C2CC Chemical Rating	US EPA SCIL	GreenScreen Benchmark
A	a	--	4
B	b or c/b	green full circle	3 (3tp, 3dg)
C	C, x/c, x/c-CMR(Cat 2), grey/c, c/b-CRE	green half circle, yellow triangle	2 (2tp, 2dg)
F	x-PBT, x-CMR, x/c-CMR(Cat 1), x/c-E (also x*, x*-CMR and banned)	grey square	1 (1tp), LT-1
U		--	BM U
?	No CHA	No CHA	No GS, , LT-UNK, LT-P1

Designation

Designation	Icon	Rules
ChemFORWARD SAFER	 The logo for ChemFORWARD SAFER is contained within a dark blue rounded square border. It features the text 'CHEM' in blue, 'FORWARD' in yellow, and 'SAFER' in blue. Below this, there is a small icon of two squares (one grey, one yellow) followed by the website 'chemforward.org'. A 'TM' symbol is in the top right corner.	All chemicals (at or above the disclosure threshold) have been assessed, and all constituents have a C or higher hazard band rating*

*Hazard band ratings are assigned according to the [ChemFORWARD Program Description](#). Skin and respiratory sensitizers are subject to additional requirements.

Program Requirements

Disclosure Requirements

Disclosure to Third-Party Assessor under NDA (as needed)

1. All intentionally added ingredients
2. All impurities and residuals at or above 100 ppm
3. A current Safety Data Sheet on file

[LINK](#) to CF SAFER Ingredient Disclosure template

Substances Subject to Review

Assessment and Screening Requirements

- Full ChemFORWARD chemical hazard assessments (CHAs) are required for all constituents intentionally added and those present at or above 1000 ppm if they are not already in the ChemFORWARD application;
- List Translator screening is permitted in lieu of a full CHA for constituents present at or above 100 ppm and below 1000 ppm.
 - LT-1 chemicals would be F
 - LT-P1 and LT UNK would not affect the listed status

Program Process

1. Disclosure

- Manufacturer contacts Assessor to review trade name ingredients
- Enters into NDA with third-party assessor of your choice
- Provides ingredient disclosure to CF assessor based on program rules
 - All constituents intentionally added
 - All constituents at or above 100 ppm
 - Assessor requests appropriate documentation (attestation, test results)
- Assessor provides a cost estimate to verify disclosure and assess the product based on constituents disclosed.

2. Assessment

- Assessor searches for existing chemical ratings (hazard bands) for all chemicals present in the ingredient at or above disclosure and assessment thresholds
 - Assessor uses existing hazard ratings for chemicals already in ChemFORWARD
 - Assessor produces new CHAs and posts them in ChemFORWARD for chemicals without ChemFORWARD hazard bands
- Assessor determines if the ingredient qualifies for ChemFORWARD Safer (all chemicals have C or higher hazard bands)

3. Posting and Amplifying

- **Approval and Submission**

- Manufacturer reviews the final assessment and recommendation for ChemFORWARD SAFER with the assessor before it is released to ChemFORWARD
 - Manufacturer has right-of-refusal to stop the process
 - Assessor submits results to ChemFORWARD

- **Terms of use**

- Manufacturer signs license agreement for ChemFORWARD SAFER marks
- Manufacturer pays modest 2-year license fee to ChemFORWARD for use of marks

- **Outreach and Amplification**

- SAFER products will be posted and promoted on the ChemFORWARD platform and website
- SAFER products will be pushed to our data partners: Covalo, ChemSec Marketplace, and NOVI to begin

Sample Entry Summary

- Function

- Abrasive
- Absorbent
- Anticaking
- Anticorrosive
- Antidandruff
- Antifoaming
- Antifungal
- Antimicrobial
- Antioxidant
- Antiperspirant

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+ Applications

- Chemical Class

- 1,2-Aminoalcohols
- Acid
- Alcohols
- Aldehyde
- Aldehydes; Carboxylic Acids
- Aliphatic Diester
- Aliphatic Ether
- Aliphatic Gamma-Lactones
- Alkyl Ester
- Alkyl Glyceryl Ether

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+ Safer Alternatives

- Sustainability Claims

- On the SCIL List

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New Trade Name Product

Product Summary

Hazards

Product Details

SAMPLE PRODUCT is a versatile non-phthalate plasticizer for PVC and other polar polymers, specially intended for use in applications that involve intimate human contact. Therefore, it is the ideal solution when it comes to high safety and quality standards for use in many sensitive goods such as: toys, medical devices, food contact applications, sport leisure products, flooring, wallcovering. Thanks to its excellent toxicological profile and the low migration rate, the plasticizer is approved and certified by many authorities and institutions worldwide.

SAMPLE PRODUCT is a colorless, clear and practically anhydrous liquid with a hardly noticeable odor. It is soluble in the usual organic solvents and is miscible and compatible with all of the monomeric plasticizers commonly used in PVC. SAMPLE PRODUCT is almost insoluble in water.

100% of the fossil-based raw materials required for the manufacturing of this product were replaced by biomass certified as sustainable. The biomass is allocated according to the certified biomass balance approach.



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Assessed by

• GRADIENT

Assessment Date

• Jan 20 2021

Assessment Expires

• Jan 20 2024

Verification Status 0

• Verified

Sample Entry Hazards

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+ Applications

Chemical Class

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- Aldehydes; Carboxylic Acids
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- Aliphatic Gamma-Lactones
- Alkyl Ester
- Alkyl Glyceryl Ether

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+ Safer Alternatives

Sustainability Claims

- On the SCIL List

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New Trade Name Product



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Product Summary Hazards Product Details

Contents Full Hazard View

Chemical Name	CAS	Function	Hazard Band	Concentration	C2CC Roll-up	GHS Health	GHS Enviro
Strontium Oxide	1312-11-0	Base Polymer	B	33.5-35.7 %	c/b	H316, H320	None
Proprietary Ingredient	N/A	Monomer	C	19%	x/c-CMR(2)	H336, H351	H410
Waxes and Waxy substances, jojoba	61789-91-1	Impurity	B	37-38%	c/b	None	None

Sample Entry Product Detail

- Function

- Abrasive
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+ Safer Alternatives

- Sustainability Claims

- On the SCIL List

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New Trade Name Product



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Product Summary Hazards Product Details

Manufacturer: Company Name

Contact: Joe Smith

Contact Phone Number: 800-555-1212

Contact Email Address: joe.smith@companyname.com

Documents: [Safety Data Sheet](#)

[Technical Data Sheet](#)

External Links: [Product Page](#)

VOC Concentraion: 1 mg/L

Product PH: 1 mg/L

Functions: Flame Retardant , Plasticizer

Contact Us

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