



REACHLAW
COMPLIANCE. SUSTAINABILITY.

ESA REACH Tool Webinar

Oliver Reiff-Musgrove (Senior Product Manager at REACHLaw)
& Premysl Janik (ESA REACH Officer)

26th February 2025 | ESA SME Office | Webex



Disclaimer

**Do NOT Register for the ESA REACH Tool
until the END of this Webinar!**

You will not be approved until *after* this Webinar

For any REACH Questions, please refer to the Previous **REACH Awareness Webinar** (Held 29/01/25)

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We hope this material will be of good benefit for your activities!

- **Contractor to ESA since 2011**
- **Established in Helsinki, Finland 2006**
- **Subsidiaries in 7 Countries**
- **Multidisciplinary team - Business, Legal & Technical: *Eco-/Toxicologists, Chemists, Lawyers, Socio-econ. analysts and Environmental specialists***
- **Support in 10+ different languages**
- **Major industries served: *Oil, Chemicals, Specialty Chemicals, Metals, Aerospace and Defence sector, Electronics, Pulp & Paper and Other Downstream User (DU) industries, etc.***
- **More info at: www.reachlaw.fi**

Regulations Supported:

- **EU REACH / CLP, WFD / SCIP, ESPR / Other European Green Deal initiatives**
- **UK REACH / GB / CLP**
- **Turkey KKKDIK / SEA / GBF**
- **India “REACH”* / BIS**
- **Korea REACH**
- **UKRAINE REACH**
- **Swiss ChemO**

...and more
* Upon Entry Into Force



We Specialize in Chemical Regulatory Compliance, Advocacy and Sustainability

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
CLP = Classification, Labelling and Packaging of substances and mixtures
KKDIK = Kimyasalların Kaydı, Değerlendirilmesi, İzni ve Kısıtlanması

ESA REACH Tool Webinar

Agenda

1. Recap of REACH
2. Introduction to the ESA REACH Tool
3. How it works
4. Main updates
5. Why use the ESA REACH Tool (INVENT)
6. How to get started (Demo)
7. Outlook
8. Q&A



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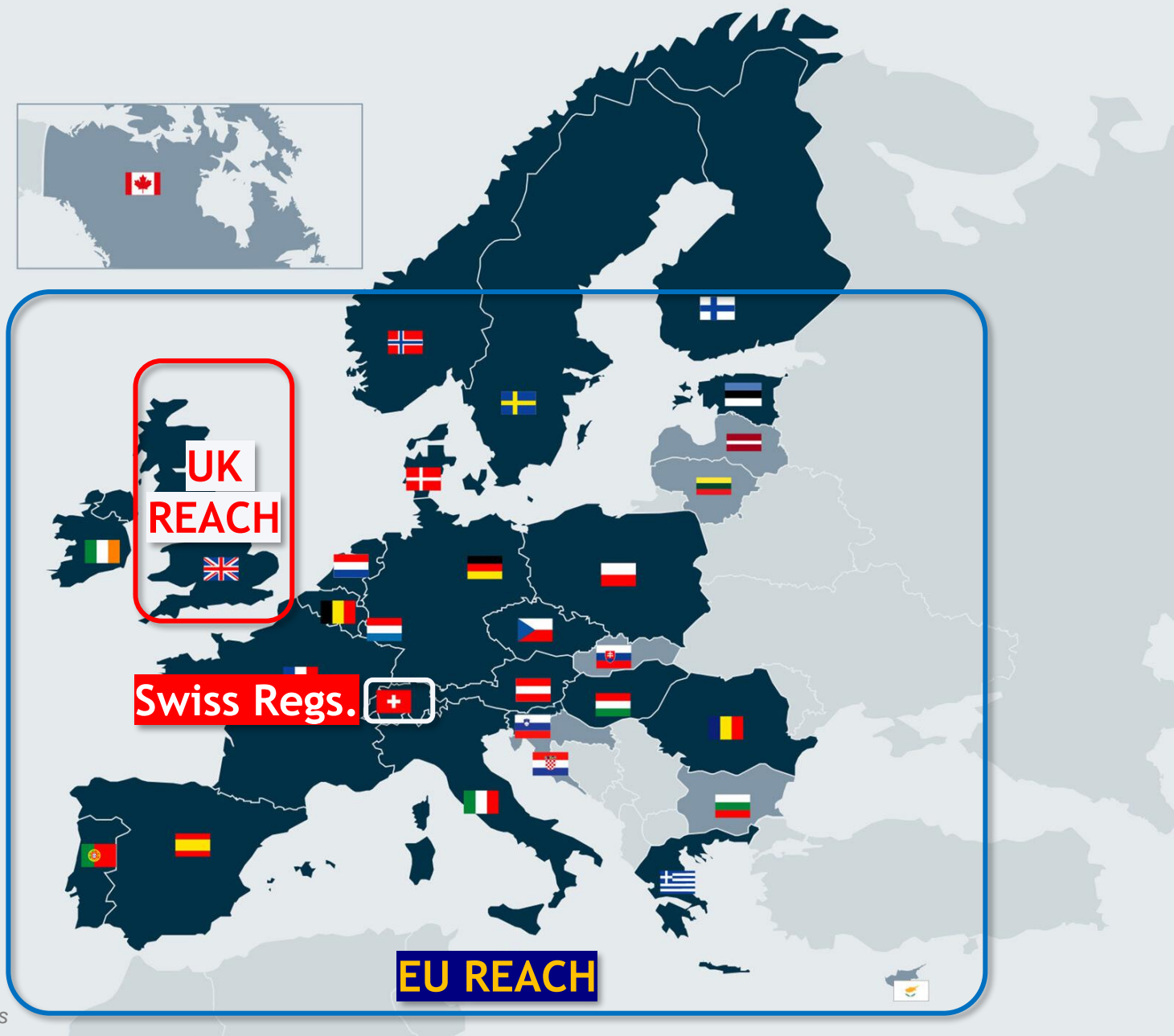
Recap of REACH

European Space Agency

REACH = Chemical Regulations
Registration
Evaluation
Authorisation
and Restriction
of Chemicals

ESA Regulatory Jurisdictions

- EU REACH
- UK REACH
- Swiss ChemO/ORRChem



Source: https://www.esa.int/About_Us/Corporate_news/Member_States_Cooperating_States

Recap of REACH EU REACH Substance Lists

Space-relevant EU REACH Substance Lists

Also known as

Compliance Obligations

Obsolescence Risk

Update Frequency

Entries (Δ Since Mar. 2024)

Candidate List
(SVHC)

Reporting
duties

Medium

2x/year

247 (+7)

Restrictions
(Annex XVII)

Restriction on
certain uses

High* (for ban)

No schedule

74 (+1)

Authorisation
(Annex XIV)

Ban without
authorisation

Very High

No schedule

59

*Restriction entry text specific

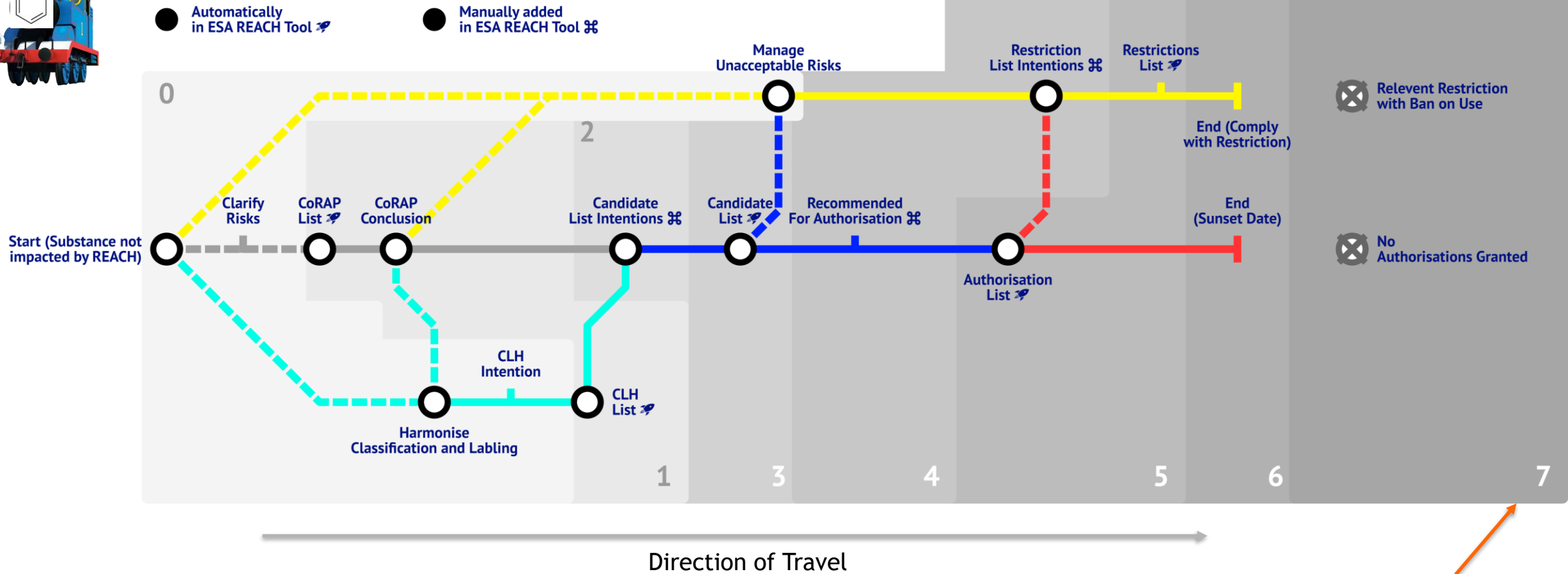
Multiple regulatory updates each year from EU REACH alone!

SVHC = Substance of Very High Concern

Recap of REACH EU REACH High Level Substance Pathway



Recap of REACH EU REACH High Level Substance Pathway



Please note: This is a simplified representation. Passing from one stop to the next is never guaranteed!

Source: MPTB List of Lists

ESA REACH Tool Webinar

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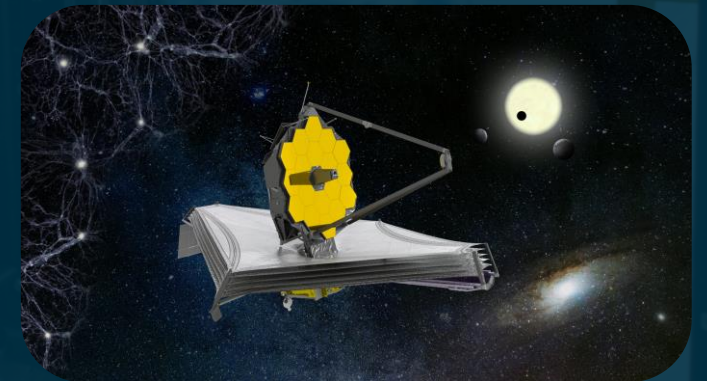
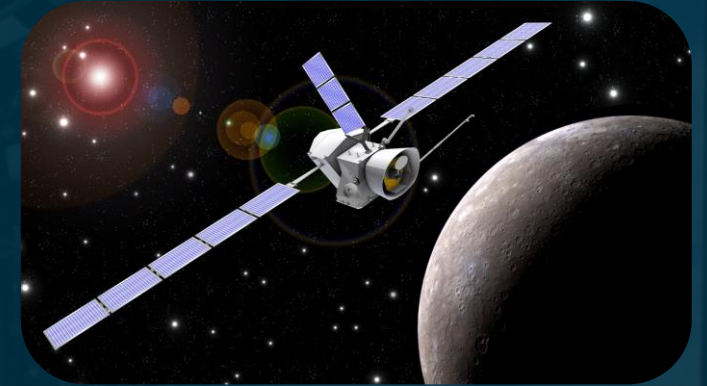
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Introduction

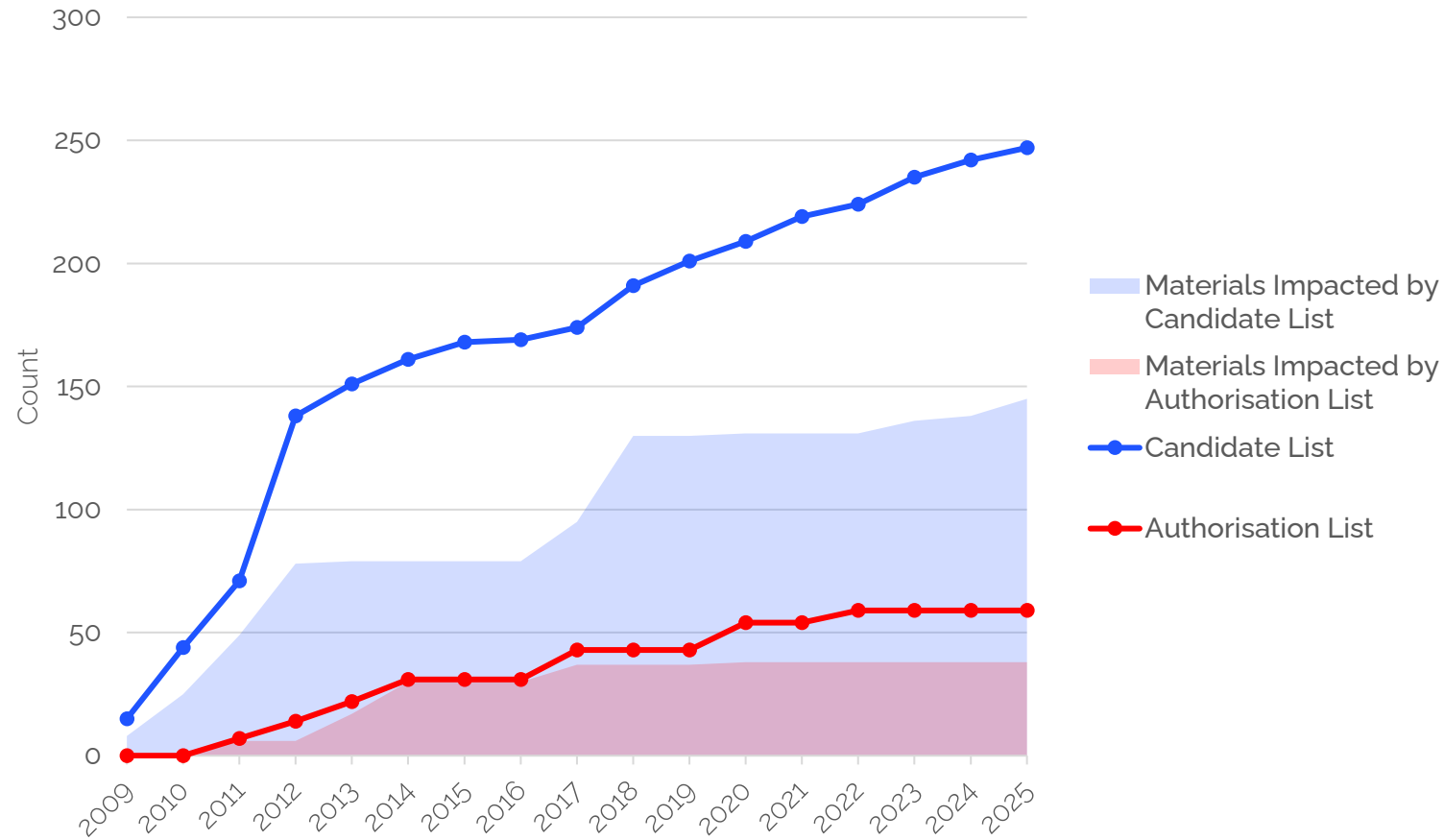
REACH @ European Space Agency

- ESA does not build anything, but is rather the end user
 - Industry builds spacecraft through a complex supply chain
- ESA projects can take >15 years
 - At odds with REACH timelines
- REACH-driven obsolescence can be very costly, so ESA helps industry mitigate these risks through the **MPTB**
 - **Materials and Processes Technology Board** of the European Space Components Coordination (ESCC)



Source: <https://www.esa.int>

Introduction **Space Materials Statistics**



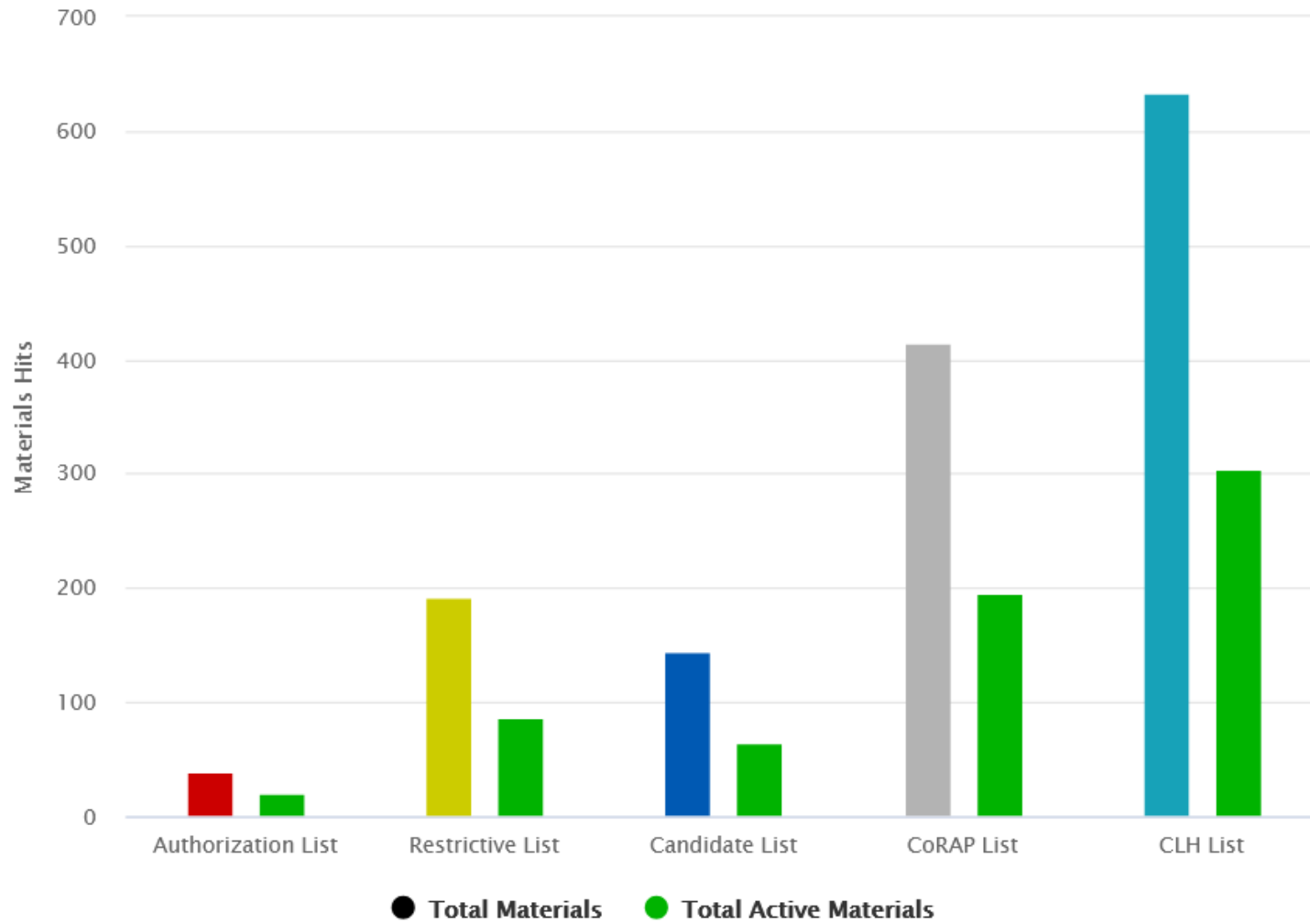
ESA REACH Tool

 **18170 (+196)**
Tracked Substances

 **1055 (+86)**
Tracked Materials

Source: ESA REACH Tool

Introduction **Space Materials Statistics**



ESA REACH Tool



18170 (+196)
Tracked
Substances



1055 (+86)
Tracked
Materials

Source: ESA REACH Tool

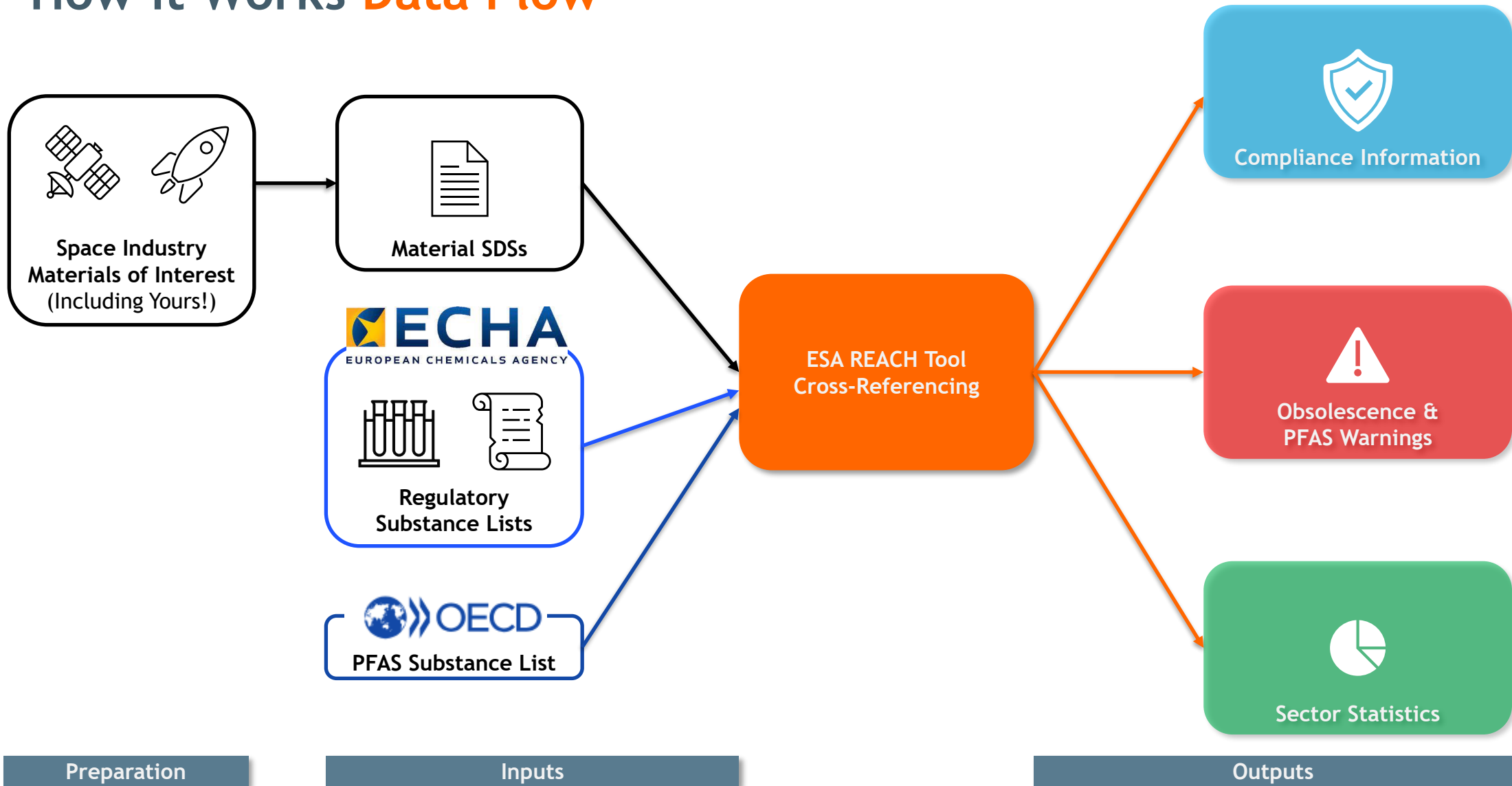
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How it Works **Data Flow**



How it Works Application

Trade Name	Class	Region	Entry Date	Last Modified	Manufacturer	SDS Date	CAS Numbers	Active
HV 998	Min.	▼	Max. (YYYY)	Max. (YYYY)		Max. (YYYY)	AIM	▼
★ HARDENER HV 998 v2	10	EU	01/06/2020	24/01/2023	Huntsman	15/06/2020	80-05-7 80-05-7 111-40-0 10563-29-8	✔ !

Contains...

Substance Name	CAS Numbers	Reasons	Regulatory Status
4,4'-isopropylidenediphenol	80-05-7	<ul style="list-style-type: none"> Potential endocrine disruptor High (aggregated) tonnage Wide dispersive use Consumer use Toxic for reproduction (Article 57c) Endocrine disrupting properties (Article 57(f) - environment) Endocrine disrupting properties (Article 57(f) - human health) 	CLH Aquatic Acute 1, Aquatic Chronic 1, Eye Damage 1, Skin Sens. 1, STOT Single Exp. 3, Repr. 1B CoRAP Concluded Candidate List Inclusion Date: 12/1/2017 Recommended for Authorisation Restrictions List Indirectly Space Relevant Restriction
2,2'-iminodiethylamine	111-40-0		CLH Skin Sens. 1, Acute Tox. 4, Skin Corr. 1B

Showing 1 to 2 of 2 entries

Previous **1** Next

What does this mean?

Production of HARDENER HV 998 may now be **obsolete**

Regulatory Compliance

Restriction List

Based on the known composition, indexed from the SDS with the above revision date, the REACH Tool has identified that HARDENER HV 998 contains a restricted substance

HARDENER HV 998 contains a substance found in the Restrictions List (REACH Annex XVII), therefore **action may be required**. Restrictions may be any condition for or prohibition of the manufacture, use or placing on the EEA market. Please consult the ECHA website for further details on the specific entry that covers the substance(s) in question, the latest EU REACH Safety Data Sheet provided by the substance/mixture supplier and – if in doubt – regulatory experts. Please use the restriction space relevancy note (indirectly space relevant vs directly space relevant) purely as a guide, and make sure to make your own assessment before taking any decisions based on this information.

Candidate List

Based on the known composition, indexed from the SDS with the above revision date, the REACH Tool has identified that HARDENER HV 998 contains a SVHC included in the REACH Candidate List.

HARDENER HV 998 contains a substance found in the Candidate List of Substances of Very High Concern for Authorisation*, therefore **action may be required**. If the material (qualifying as article as such or assembly of articles) containing this substance above 0.1 % weight by weight in the article is supplied to another entity in the EEA after the substance's inclusion in the Candidate List, the EEA supplier is required to provide a REACH Article 33 Declaration. Furthermore, as from 5 January 2021 EEA suppliers of such articles/assemblies (including EEA importers) are required to submit a SCIP notification based on Article 9(1)(i) & (2) of the EU Waste Framework Directive 2008/98/EC in association with the applicable national law.

*Note: In a worst-case scenario, the substance may subsequently also enter the Authorization List (REACH Annex XIV) within about 2 years from the Candidate List inclusion date, banning its use within the EEA without authorisation after the specified sunset date.

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Main Updates

PFAS (Per- and Polyfluoroalkyl Substances) Badge

- Materials with PFAS have a unique and **evolving obsolescence risk**
- Filter available to all users in the warnings column

3M to Exit PFAS Manufacturing by the End of 2025

ST. PAUL, Minn., Dec. 20, 2022 /PRNewswire/ -- (NYSE: MMM) today announced it will exit per-polyfluoroalkyl substance (PFAS) manufacturing

Showing 1 to 49 of 49 entries (filtered from 978 total entries)

Trade Name	Class	Region	Entry Date	Last Modified	Manufacturer	SDS Date	CAS Numbers	Active	Warnings
<input type="text"/>	<input type="text" value="Min."/>	<input type="text" value="v"/>	<input type="text" value="Max. (YYYY)"/>	<input type="text" value="Max. (YYYY)"/>	<input type="text"/>	<input type="text" value="Max. (YYYY)"/>	<input type="text" value="All"/>	<input type="text" value="v"/>	<input type="text" value="PFAS"/>
★ 3M Novec HFE-7500	20	EU	16/06/2023	23/08/2024	3M	14/03/2019	297730-93-9	✓	PFAS
★ Tetradecafluorohexane	20	EU	02/06/2023	02/06/2023	Sigma-Aldrich	05/12/2012	355-42-0	-	PFAS
★ Galden DET	20	EU	02/06/2023	02/06/2023	Solvay	21/03/2023	69991-67-9	-	PFAS
★ Galden D02	20	EU	02/06/2023	02/06/2023	Solvay	17/07/2022	69991-67-9	-	PFAS
★ PROMOSOLV DR3	20	EU	02/06/2023	02/06/2023	INVENTEC PERFORMANCE CHEMICALS SAS	12/05/2021	163702-08-7	-	PFAS
★ 3M™ Fluorinert™ FC-72 Electronic Liquid	20	EU	02/06/2023	23/08/2024	3M	07/09/2022	86508-42-1	✓	PFAS

Main Updates

Regulatory Risk Thermometer

- Simplified regulatory risk levels
- Not to scale, nor can it be added to a numerical value
- Try to avoid using substances/materials with a high risk value

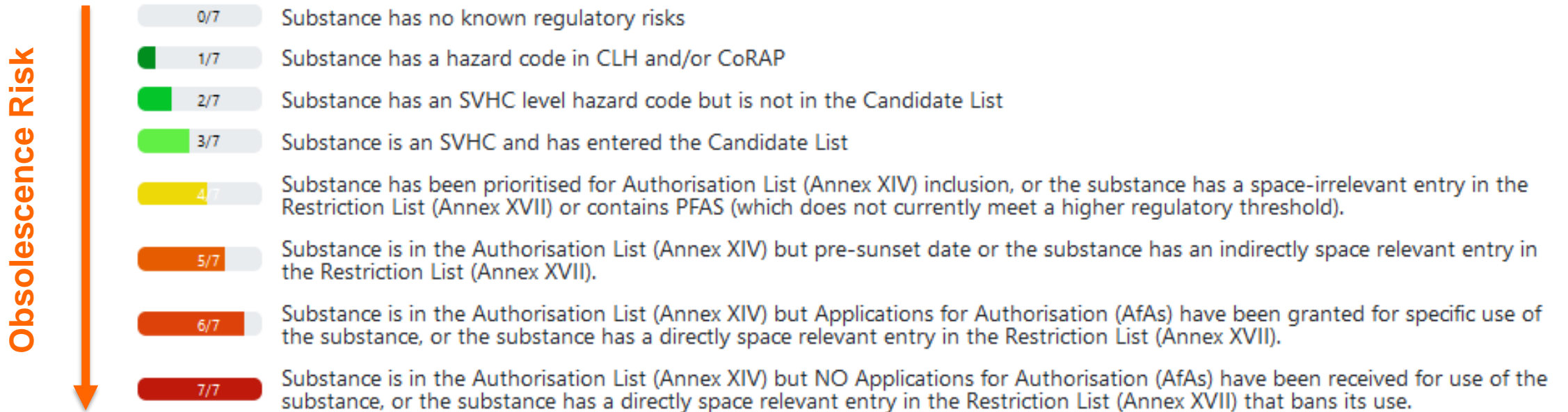
WACKER® PRIMER G 790

Last Modified: 14/11/2024

Trade Name WACKER® PRIMER G 790 !

Regulatory Risk 6/7

Use With WACKER® RTV-S 691 A/B



Main Updates Risk Thermometer

Substance Name	Risk	EC Numbers	CAS Numbers	Reasons	CLH	CoRAP	CL	Restr	Auth
form									
				<ul style="list-style-type: none"> • CMR • Exposure of workers 					
formaldehyde ...%	<div style="width: 28%;">2/7</div>	200-001-8	50-00-0		<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
formaldehyde and formaldehyde releasers <i>formaldehyde and formaldehyde releasers</i>	<div style="width: 57%;">4/7</div>	200-001-8	50-00-0		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Formaldehyde, oligomeric reaction products with aniline	<div style="width: 86%;">6/7</div>	500-036-1	25214-70-4	<ul style="list-style-type: none"> • Carcinogenic (Article 57a) 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
N,N-dimethylformamide	<div style="width: 71%;">5/7</div>	200-679-5	68-12-2	<ul style="list-style-type: none"> • Toxic for reproduction (Article 57c) 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
N,N-dimethylformamide <i>dimethyl formamide</i>	<div style="width: 28%;">2/7</div>	200-679-5	68-12-2		<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chloroform <i>trichloromethane</i>	<div style="width: 86%;">6/7</div>	200-663-8	67-66-3		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	<div style="width: 71%;">5/7</div>	300-298-5	93925-00-9 1471311-26-8	<ul style="list-style-type: none"> • Endocrine disrupting properties (Article 57(f) - environment) 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Formamide	<div style="width: 43%;">3/7</div>	200-842-0	75-12-7	<ul style="list-style-type: none"> • Toxic for reproduction (Article 57c) 	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C,C'-azodi(formamide)	<div style="width: 57%;">4/7</div>	204-650-8	123-77-3	<ul style="list-style-type: none"> • Respiratory sensitising properties (Article 57(f) - human health) 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Octene, hydroformylation products, low-boiling	<div style="width: 14%;">1/7</div>	273-110-1	68938-03-4	<ul style="list-style-type: none"> • High (aggregated) tonnage • Suspected PBT/vPvB • Consumer use 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Main Updates

Material Alternatives

- Up to 3 material alternatives can be marked per material
- These have been selected by ESA or Industry Obsolescence Experts
- The card links to the REACH Tool entry for the material
- New feature so not much data yet, but more alternatives will be added soon

Note: Currently the alternatives can only be other materials in the REACH Tool!

WACKER® PRIMER G 790

Last Modified: 14/11/2024

Trade Name	WACKER® PRIMER G 790 !
Regulatory Risk	6/7
Use With	WACKER® RTV-S 691 A/B
Manufacturer Name	Wacker
Class	10
Region	EU
Entry Date	09/06/2014
Product Type	Primer
Chemical Nature	Silicone primer
SDS Revision Date	25/05/2020
OSG Monitoring Status	OSG: Open
Comment	obsolescence announcement by 2024
CAS Numbers	108-88-3 5593-70-4 78-10-4 90622-56-3
DMPL Name	×
Matrex Name	Wacker Primer G 790
MODESA Name	×
Active	✓

Material Alternatives

Alternative 1

WACKER® PRIMER G 790
TOLUENE FREE
Class: 10
Manufacturer: Wacker
Revision Date: 10/05/2023

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Short Break and then...

Why Use the ESA REACH Tool?

Michal Gabco / INVENT

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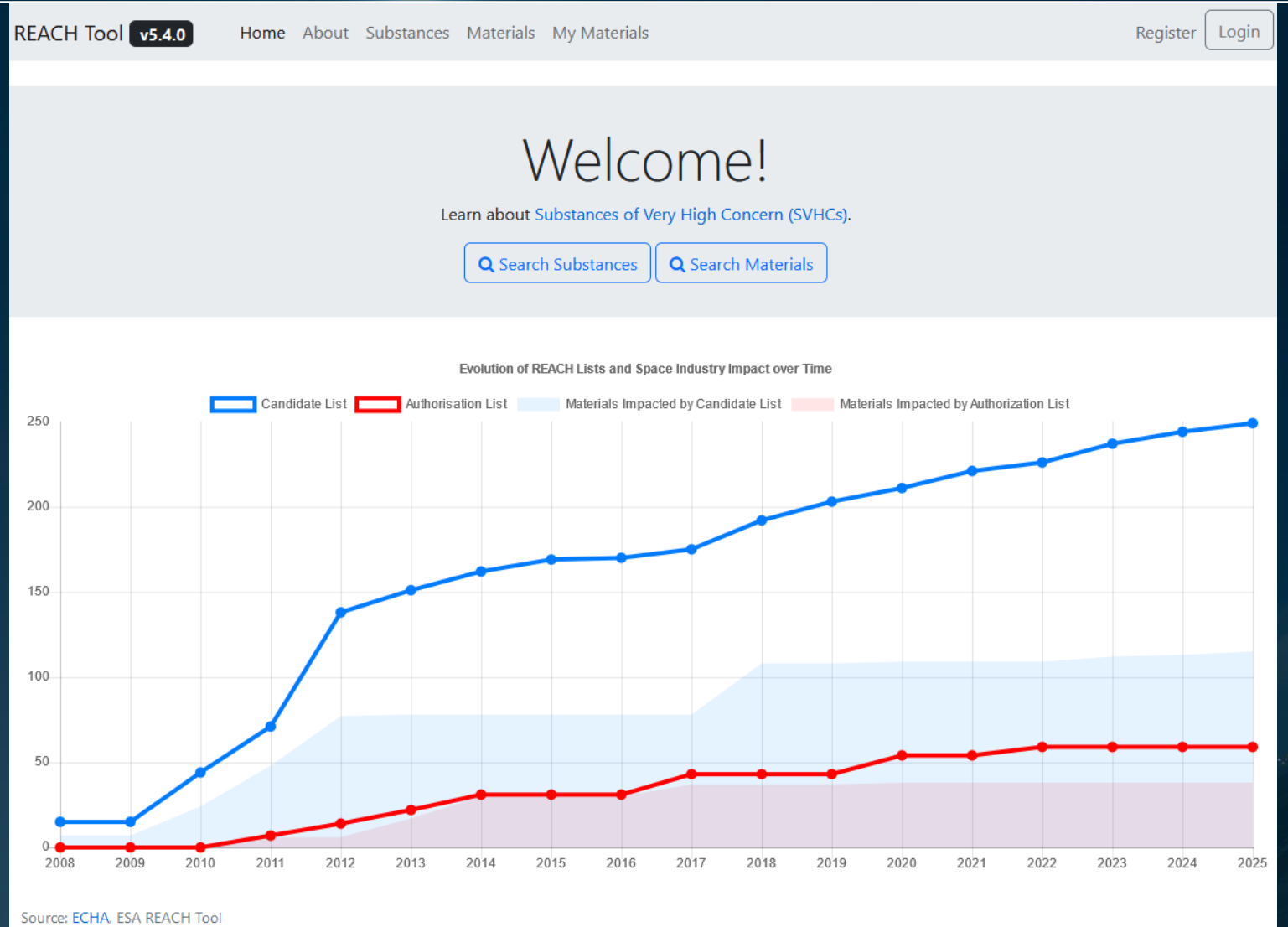
ESA REACH Tool User Guide (v5.4) – for READERS

Oliver Reiff-Musgrove & Premysl Janik

26/02/2025

1. Registration
2. Substances
 - a. Search
 - b. Evaluate
3. Materials
 - a. Search
 - b. Evaluate
 - c. Favourite
 - d. Versioning
 - e. Request

<https://reachtool.esa.int/>



SME Registration

1. Go to: <https://reachtool.esa.int/>
2. Fill out registration form
 - i. First + Last Name
 - ii. Work Email Address
 - iii. Company (eg. ESA)
 - iv. Select ESA Member State
 - v. Select Organisation Type
 - i. Select SME
 - ii. Enter your ESA Entity Code
 - vi. State why you would like to access the ESA REACH Tool
3. Confirm your email address
4. Wait for your account to be approved. **Please be patient!**
5. You will receive an email to let you know that your account has been approved
6. You're ready to use the REACH Tool!

Company *

Please select the ESA Member State: *

-- Select the ESA Member State --

Organization Type *

SME (<250 employees & <50M€)

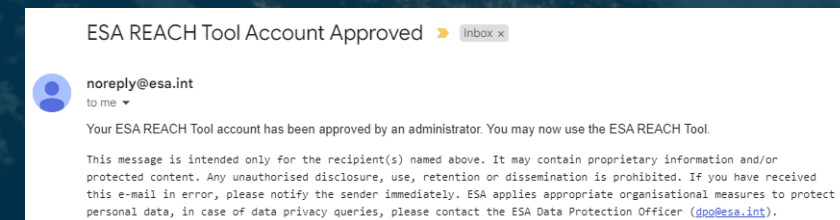
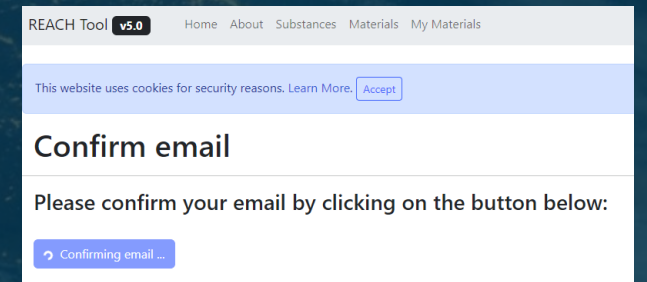
ESA Entity Code *

Additional Options

MPTB

OSG

Why would you like access to the ESA REACH Tool *



Substances Search

Material Hits

Represents the number of Materials in the REACH Tool that contain this Substance. A larger hit number represents a greater impact on the European Space Industry for that particular substance.



Column visibility Show UK status Show Switzerland status Reset Filters

Show 50 entries

Showing 1 to 50 of 5,344 entries

Previous 1 2 3 4 5 ... 107 Next

Substance Name	Risk	EC Numbers	CAS Numbers	Reasons	CLH	CoRAP	CL	Restr	Auth	Hits
Toluene	5/7	203-625-9	108-88-3	<ul style="list-style-type: none"> High (aggregated) tonnage Wide dispersive use Other hazard based concern Consumer use CMR 	✓	✓	×	✓	×	53
PFAS	4/7		9002-84-0 25067-11-2 69991-67-9 69991-61-3 811-97-2 60164-51-4 24937-79-9 86508-42-1 138495-42-8 9011-17-0		×	×	×	!	×	53
Silver	1/7	231-131-3	7440-22-4	<ul style="list-style-type: none"> High (aggregated) tonnage 	×	✓	×	×	×	48

Text Filters

Ascending/Descending Sorting




Dropdown Filters

See further details and impacted materials









Minimum Hits Number Filter






Entries have been CAS matched against ECHA  substances to indicate regulatory obsolence risk

	CLH	List of harmonised classification and labelling of hazardous substances
	CLH	List of harmonised classification and labelling of hazardous substances fulfilling the criteria for Candidate List inclusion
	CLH	List of harmonised classification and labelling of hazardous substances fulfilling the criteria of Substances of Concern in ESPR*

*According to Article 2(27), point (b) of the Ecodesign for Sustainable Products Regulation (Regulation (EU) 2024/1781)

	Community Rolling Action Plan (CoRAP)	Substance is being assessed by ECHA member states
	Community Rolling Action Plan (CoRAP)	Substance assessment has been concluded or withdrawn by ECHA member states
	Candidate List (CL) recommended for Authorisation	Substance is on the ECHA Candidate List and has been recommended for Authorisation List inclusion
	Candidate List (CL)	Substance is on the ECHA Candidate List for Authorisation
	Candidate List (CL) intention	Substance has a registered intention to enter the ECHA Candidate List for Authorisation
	Restriction List (Annex XVII) - Relevant*	Substance has space-relevant restrictions on its placement on the EU market
	Restriction List (Annex XVII) - Irrelevant*	Substance has restrictions on its placement on the EU market
	Restriction List (Annex XVII) intention	Substance is on the registry of restriction intentions until outcome

*Based on a restriction text analysis conducted by REACHLaw and ESA

	Authorisation List (Annex XIV) - Passed Sunset Date	Substance cannot be used in the EU market and has no Applications for Authorisation
	Authorisation List (Annex XIV) - Passed Sunset Date	Substance cannot be used in the EU market without authorisation
	Authorisation List (Annex XIV) - Sunset Date upcoming	Substance can shortly not be used in the EU market without authorisation

Substances Search – Dropdown Filters

Substance Name	Risk	EC Numbers	CAS Numbers	Reasons	CLH	CoRAP	CL	Restr	Auth	Hits
Toluene	5/7	203-625-9	108-88-3	<ul style="list-style-type: none"> High (aggregated) tonnage Wide dispersive 	✓	✓	✗	✓	✗	53

CLH List

CoRAP List

Candidate List (SVHC)

Restriction List (Annex XVII)

Authorisation List (Annex XIV)

CLH

Select All CLH ✓ (All)

Not ESPR impacted ✓

Prioritised for SVHC ✓!

ESPR impacted ✓

Not in CLH ✗

CoRAP

Select All CoRAP ✓ (All)

CoRAP concluded ✓

CoRAP ongoing ✓

Not in CoRAP ✗

CL

Select All CL ✓ (All)

Not Auth. prioritised ✓

Auth. recommended ✓

CL intention !

Not in CL ✗

Restr

Select All restrictions ✓ (All)

Relevant restrictions ✓

Irrelevant restrictions ✓

Restriction intention !

Not in Restriction ✗

Auth

Select All auths ✓ (All)

Post-sunset date ✓

Pre-sunset date ✓

Not in Auth. ✗

Most Useful

Substances Evaluate

CLH Hazard Classes for this Substance

CoRAP status

Restriction relevancy, entry list number and brief summary of restriction text. Restriction replicated in UK REACH and Swiss Chemical Regulations

Materials containing selected Substance (eg Toluene)

View details about the Material

Material might already be obsolete or with high obsolescence risk

Total Materials containing this Substance

Toluene

Substance Name Toluene
EC Numbers 203-625-9
CAS Numbers 108-88-3

Concern

- High (aggregated) tonnage
- Wide dispersive use
- Other hazard based concern
- Consumer use
- CMR

CLH List

Class and Category Codes:



- Asp. Tox. 1
- Skin Irrit. 2
- STOT Single Exp. 3
- STOT Rep. Exp. 2
- Repr. 2
- Flam. Liquid 2

Community Rolling Action Plan

Concluded

Restrictions List

Indirectly Space Relevant Restriction
Restr. List Entry Number: 48
Restriction Text: Restriction on use in adhesives and spray paints

Contained in

Show entries

Search:

APS Name	Manufacturer	Product Type	Entry Date	SDS Date	Origin	Active	
Arathane 5750 A	Huntsman		01/06/2020	09/08/2017	DMPL	<input checked="" type="checkbox"/>	-
Arathane 5750 B (LV)	Huntsman		01/06/2020	23/06/2017	DMPL	<input checked="" type="checkbox"/>	-
Chemosil 211 <small>v2</small>	Lord Corporation	Primer	10/02/2016	19/09/2019	MTB	<input checked="" type="checkbox"/>	-
Hardener CK124/7E1149	Alzobeta Montarais, F		15/11/2010	31/05/2017	MTB	<input checked="" type="checkbox"/>	-
MAP Phosmap 11 Primer Base	Map Space Coatings	Paint	20/05/2014	15/10/2018	MATREX MTB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
MAP Phosmap 11 Primer Thinner	Map Space Coatings	Paint	20/05/2014	22/01/2014	MATREX MTB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
MAP Phosmap 11 Thinner	Map Space Coatings	Paint	01/06/2020	12/07/2010	MATREX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
MAP PNC Base	Map Space Coatings	Paint	20/05/2014	10/05/2016	MATREX MTB	<input checked="" type="checkbox"/>	-
MAP PU1 Base	Map Space Coatings	Paint	03/12/2018	17/10/2018	DMPL MATREX MTB	<input checked="" type="checkbox"/>	-
MAP PUK Base	Map Space Coatings	Paint	03/12/2018	17/10/2018	MATREX MTB	<input checked="" type="checkbox"/>	-

Showing 1 to 10 of 46 entries

Previous [1](#) [2](#) [3](#) [4](#) [5](#) Next



Substances Evaluate PFAS

- PFAS is treated differently within the REACH Tool
- ESA/REACHLaw have **pre-screened** all 9000+ CAS numbers, and identified **13 CAS numbers that impact Space**
- These 13 CAS numbers are cross-referenced throughout the tool, but the other 9000 are analysed **only** in this page

Material Hits

They may be **differences** between the Material Hits and Total Materials on this page

Nominal [Impacting] CAS Numbers
(Cross-referenced throughout the Tool)

Imported CAS Numbers
(Only cross-referenced on this page)

Total Materials containing PFAS

The screenshot displays the REACH tool interface for PFAS evaluation. At the top, a grid lists 'Substance Name' and 'CAS Numbers' for various PFAS. Below this, a 'Restriction Intention' section shows a warning icon and the text 'Status: Submitted'. The main part of the interface is a table titled 'Contained in' with a search bar and a 'Show 10 entries' dropdown. The table has columns for 'Material Name', 'Manufacturer', and 'Product Type'. The first few entries are:

Material Name	Manufacturer	Product Type
3M Novec 7100 Engineered Fluid	3M	fluorinated hydrocarbon or cooling fluid
3M Novec HFE-7500	3M	non-flammable fluid
3M™ Fluorinert™ Electronic Liquid FC-40 (EU SDS) OSG: Open	3M	thermally stable, fully-fluorinated liquid for heat transfer applications in the manufacturing industry
3M™ Novec™ 1700 Electronic Grade Coating (EU)	3M	Protective barrier coating
3M™ Novec™ 1700 Electronic Grade Coating (US) v2	3M	Protective Barrier Coating
3M™ Novec™ 2708 Electronic Grade Coating v2	3M	Protective Barrier Coating
3M™ Novec™ 7200 Engineered Fluid	3M	
3M™ Novec™ 7200DL Engineered Fluid	3M	heat transfer fluid, clean deposition
Braycote 601 EF	Castrol	Grease
Braycote Micronic 601EF	Castrol	Grease

At the bottom of the table, it says 'Showing 1 to 10 of 48 entries' and has navigation buttons for 'Previous', '1', '2', '3', '4', '5', and 'Next'.

Materials

Search by Name, Manufacturer or CAS Number Search

XXXX-XX-X CLH List

XXXX-XX-X Community Rolling Action Plan (CoRAP)

XXXX-XX-X Candidate List (CL)

XXXX-XX-X Restricted List (Annex XVII)

XXXX-XX-X Authorisation List (Annex XIV)

Column visibility Back to full list

Show 50 entries

Showing 1 to 50 of 950 entries

Trade Name	Class	Region	Entry Date	Last Modified	Manufacturer	SDS Date	CAS Numbers	Active
★ Loctite Eccobond FP4401 (EU) New	10	EU	03/03/2023	03/03/2023	Henkel	07/08/2018	25068-38-6 9003-35-4 9003-36-5 14808-60-7 2286-87-0 25550-51-0 34090-76-1	✓
★ CAF 730 MF New	10	EU	03/03/2023	03/03/2023	Elkem	21/03/2022	541-02-6 541-02-6 540-97-6 623-40-5 58190-62-8	-

CAS Numbers
 The colours of the CAS numbers displayed on this page act as a quick guide to any REACH impact, using the legend above

Toggle columns shown or hidden

Select number of entries to show

Text Filters

See further details and contained Substances

New symbol and **bold** name

New = Material added in the last month
Bold = Material has been modified in the last month

Filter for maximum SDS age to display

Material is in active use by OSG members

Show/hide manufacturer count chart
 Show/hide legend

Materials Favourite Material

Click on star to favourite Material

Material has been favoured

★ ARADUR HY 905 New	10	EU	07/10/2022	07/10/2022	Huntsman	24/05/2018	85-44-9 85-42-7 85-43-8 2210-79-9	✓	-	i p
★ CV-2500 Part A New	10	EU	07/10/2022	07/10/2022	Nusil	07/01/2020		✓	-	i p
★ CV-2500 Part B New	10	EU	07/10/2022	07/10/2022	Nusil	07/01/2020		✓	-	i p
★ PSB New	10	EU	07/10/2022	07/10/2022	Map Space Coatings	26/11/2012	1314-13-2 1312-76-1 111-90-0 90622-57-4 90622-58-5	✓	-	i p
★ MAP SG121FD Thinner New	10	EU	07/10/2022	07/10/2022	Map Space Coatings	27/08/2021	1330-20-7 100-41-4 108-88-3 108-88-3 108-65-6	✓	-	i p

Click to view favourite Materials

My Materials view, showing all your favoured Materials

NOTE: This is anonymous and confidential!

REACH Tool **v5.4.0** Home About Substances **Materials** My Materials

Materials

Search by Name, Manufacturer or CAS Number

Showing 1 to 3 of 3 entries

Trade Name	Class	Region	Entry Date	Last Modified	Manufacturer	SDS Date	CAS Numbers	Active
★ CV-2500 Part B New	10	EU	07/10/2022	07/10/2022	Nusil	07/01/2020		✓
★ MAP SG121FD Thinner New	10	EU	07/10/2022	07/10/2022	Map Space Coatings	27/08/2021	1330-20-7 100-41-4 108-88-3 108-88-3 108-65-6	✓
★ MAP SG121FD Base New	10	EU	07/10/2022	07/10/2022	Map Space Coatings	27/08/2021	1330-20-7 108-65-6 108-88-3 108-88-3 1314-13-2 100-41-4	✓

Materials Evaluate

Marked as Potentially Obsolete

Link to Part A

REACH regulatory information, based on the Substances identified to be in the Material (based on the CAS numbers input)

Substances contained in selected Material (e.g., PR 420 Part B)

PR 420 Part B

Last Modified: 07/11/2024

Trade Name	PR 420 Part B !
Regulatory Risk	6/7
Use With	PR 420 Part A
Manufacturer Name	PPG
Class	14
Region	Other
Entry Date	11/01/2010
Product Type	Sealant
Chemical Nature	
SDS Revision Date	24/07/2019
CAS Numbers	7439-92-1 108-94-1 14807-96-6 79-01-6 11113-70-5
DMPL Name	x
Matrex Name	PRC-DeSoto PR 420
MODESA Name	x
Active	-

Contains

Show EMWG

Show entries

Search:

Substance Name	CAS Numbers	Reasons	Regulatory Status
Trichloroethylene	79-01-6	<ul style="list-style-type: none">Carcinogenic (Article 57a)	CLH Carc. 1B, Skin Irrit. 2, STOT Single Exp. 3, Aquatic Chronic 3, Eye Irrit. ! Candidate List Inclusion Date: 18/6/2010 Recommended for Authorisation Authorisation List Sunset Date: 21/4/2016
Lead and its compounds	7439-92-1 11113-70-5		Restrictions List Space Irrelevant Restriction
Lead	7439-92-1	<ul style="list-style-type: none">Toxic for reproduction (Article 57c)	Candidate List Inclusion Date: 27/6/2018 Recommended for Authorisation
Cyclohexanone	108-94-1	<ul style="list-style-type: none">High (aggregated) tonnageWide dispersive useSuspected CarcinogenicExposure of workersSuspected MutagenicSuspected Reprotoxic	CLH Acute Tox. 4, Flam. Liquid 3 CoRAP Concluded



Marked as Potentially Obsolete

What does this mean?

Production of PR 420 Part B may now be **obsolete**

Candidate List Information

Regulatory Compliance

Candidate List

Based on the known composition, indexed from the SDS with the above revision date, the REACH Tool has identified that PR 420 Part B contains a SVHC included in the REACH Candidate List.

PR 420 Part B contains a substance found in the Candidate List of Substances of Very High Concern for Authorisation*, therefore **action may be required**. If the material (qualifying as article as such or assembly of articles) containing this substance above 0.1 % weight by weight in the article is supplied to another entity in the EEA after the substance's inclusion in the Candidate List, the EEA supplier is required to provide a REACH Article 33 Declaration. Furthermore, as from 5 January 2021 EEA suppliers of such articles/assemblies (including EEA importers) are required to submit a SCIP notification based on Article 9(1)(i) & (2) of the EU Waste Framework Directive 2008/98/EC in association with the applicable national law.

*Note: In a worst-case scenario, the substance may subsequently also enter the Authorization List (REACH Annex XIV) within about 2 years from the Candidate List inclusion date, banning its use within the EEA without authorisation after the specified sunset date.

Restriction List Information

Restriction List

Based on the known composition, indexed from the SDS with the above revision date, the REACH Tool has identified that PR 420 Part B contains a restricted substance

PR 420 Part B contains a substance found in the Restrictions List (REACH Annex XVII), therefore **action may be required**. Restrictions may be any condition for or prohibition of the manufacture, use or placing on the EEA market. Please consult the ECHA website for further details on the specific entry that covers the substance(s) in question, the latest EU REACH Safety Data Sheet provided by the substance/mixture supplier and – if in doubt – regulatory experts. Please use the restriction space relevancy note (indirectly space relevant vs directly space relevant) purely as a guide, and make sure to make your own assessment before taking any decisions based on this information.

Authorisation List Information

Authorisation List

Based on the known composition, indexed from the SDS with the above revision date, the REACH Tool has identified that PR 420 Part B contains a SVHC.

PR 420 Part B contains a substance found in the Authorisation List (REACH Annex XIV), therefore **action is required**. This material (if qualifying as a substance/mixture) cannot be used within the EEA market without authorisation after the sunset date stated above*, unless a REACH exemption clause applies (e.g. based on Scientific R&D). Users relying on an authorisation granted to an upstream supplier have to notify the European Chemicals Agency (ECHA) within 3 months of the first supply of the substance/mixture (REACH Article 66).

*Note: Some chromates (respectively mixtures containing them) are currently still allowed for continued use under the REACH authorisation process, despite their elapsed sunset dates. For details on authorised suppliers, uses, authorisation number, timelines and conditions, as well as pending applications for authorisation, the user should consult the latest EU REACH Safety Data Sheet and CLP label provided by the supplier, the applicable authorisation decision, the chemicals supplier, any customer communications provided and – if in doubt – reach out to regulatory experts.

Material where the CAS numbers have changed with SDS date show as versions. V2 is the second version, so an updated SDS has been used to update the Material entry.

Trade Name

v2

- ★ SS4155 v2
- ★ STYCAST 1090 BULK v2
- ★ DOW CORNING(R) PR-1200 RTV PRIME COAT RED v2
- ★ Pattex FT101 All Colours v2
- ★ ARALDITE® AV 138 M-1 v2
- ★ CHO-THERM® 1642 Part B v2
- ★ EP29LPSP Part B v2
- ★ LOCTITE 603 v2

STYCAST 1090 BULK

Version: 2
Last Modified: 11/03/2022

Trade Name	STYCAST 1090 BULK v2
Use With	
Manufacturer Name	Henkel
Class	10
Region	EU
Entry Date	11/11/2021
Product Type	Epoxy adhesive
Chemical Nature	Epoxy
SDS Revision Date	07/12/2021
Comment	
CAS Numbers	25068-38-6 9003-36-5
DMPL Name	x
Matrex Name	x
MODESA Name	x
SOFOS Name	x
Active	<input checked="" type="checkbox"/>
CAS Numbers History changes	07/12/2021 9003-36-5 → ← 28064-14-4 ← 26447-14-3

When SDS date is updated while editing a Material, the CAS number changes are tracked. The updated SDS date is shown with the changes.

CAS numbers with a **green** arrow have been added in new.

CAS numbers with a **red** arrow have been removed

NOTE: Only if Revision Date changes

Materials Request

If you cannot find a material you are looking for, please make a [Material Request](#)

1. Navigate to Materials
2. Click on “+ Request Material” (see right)
 - a. Opens New Tab
3. Fill in:
 - a. Trade Name
 - b. ECSS Material Class (optional)
 - c. Product Type (optional)
 - d. Manufacturer
 - e. Leave a comment (optional, please don't include confidential info)
4. Click on [Request](#)
5. Your request has been sent to REACH Tool admins!

Note: This process is [anonymous](#) by default

+ Request Material

Request Material

* Required fields

Trade Name *

Class

Product Type

Manufacturer

-- Select Manufacturer --

▼ Manufacturer not found in list?

Public Comment

Request

ESA REACH Tool Webinar

Agenda

1. Recap of REACH
2. Introduction to the ESA REACH Tool
3. How it works
4. Main updates
5. Why use the ESA REACH Tool (INVENT)
6. How to get started (Demo)
7. Outlook
8. Q&A



Outlook **Actions**



Sign up to the ESA REACH Tool



Favourite the materials your entity uses



Suggest feedback and create material requests if missing data

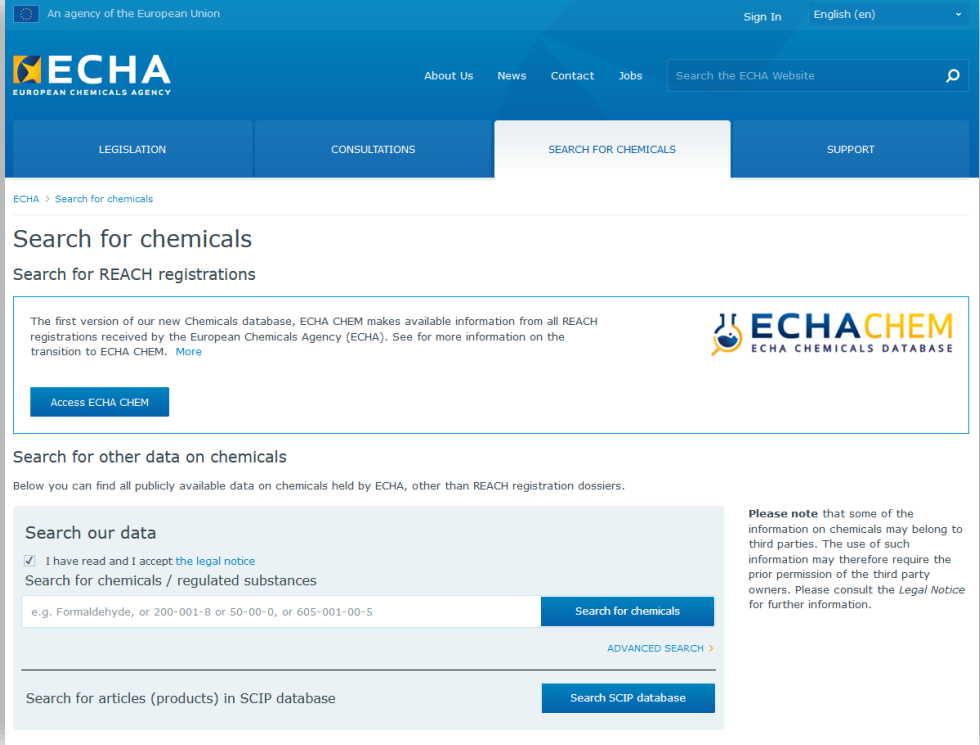
Outlook

Limitations

- We cannot guarantee that all regulatory lists will be up to date
 - Always check the ECHA information on chemicals page (for EU REACH) *see right*

<https://echa.europa.eu/information-on-chemicals>

- We cannot guarantee the accuracy of the materials data, it should **only be used for guidance**



The screenshot shows the ECHA website's search interface. At the top, there is a navigation bar with the ECHA logo, the text 'An agency of the European Union', and links for 'Sign In' and 'English (en)'. Below this is a secondary navigation bar with 'About Us', 'News', 'Contact', 'Jobs', and a search bar labeled 'Search the ECHA Website'. The main content area is titled 'Search for chemicals' and includes a section for 'Search for REACH registrations'. This section features a text box with the following text: 'The first version of our new Chemicals database, ECHA CHEM makes available information from all REACH registrations received by the European Chemicals Agency (ECHA). See for more information on the transition to ECHA CHEM. [More](#)'. To the right of this text is the 'ECHA CHEM' logo. Below the text is a blue button labeled 'Access ECHA CHEM'. Further down, there is a section for 'Search for other data on chemicals' with a sub-section 'Search our data'. This section includes a checkbox for 'I have read and I accept the legal notice', a search input field with the example text 'e.g. Formaldehyde, or 200-001-8 or 50-00-0, or 605-001-00-5', and a blue button labeled 'Search for chemicals'. There is also an 'ADVANCED SEARCH' link. At the bottom of the search area, there is a section for 'Search for articles (products) in SCIP database' with a blue button labeled 'Search SCIP database'. On the right side of the page, there is a 'Please note' section with text regarding third-party information and legal notices.

Outlook

Upcoming Features

- EU POPs List Integration
 - Annex I(A), I(B), II, III & IV
 - Likely as a new column on the Substances Page
- EC Number Cross-Referencing
 - Increase the number of PFAS substances checked
- Article, Preparation or Substance indicator
- Formulator View

[ECHA](#) > [Search for chemicals](#) > [List of substances subject to POPs Regulation](#)

List of substances subject to POPs Regulation

Here you can find all substances currently listed in the relevant annexes to the POPs Regulation.

Substances listed in:

- Annex I to the regulation are subject to prohibition (with specific exemptions) on manufacturing, placing on the market and use;
- Annex II to the regulation are subject to restriction on manufacturing, placing on the market and use;
- Annex III to the regulation are subject to release reduction provisions; and
- Annex IV to the regulation are subject to waste management provisions.

Note that for some substances listed in Annex I, specific exemptions on the prohibition of their use, manufacturing and placing on the market may apply.

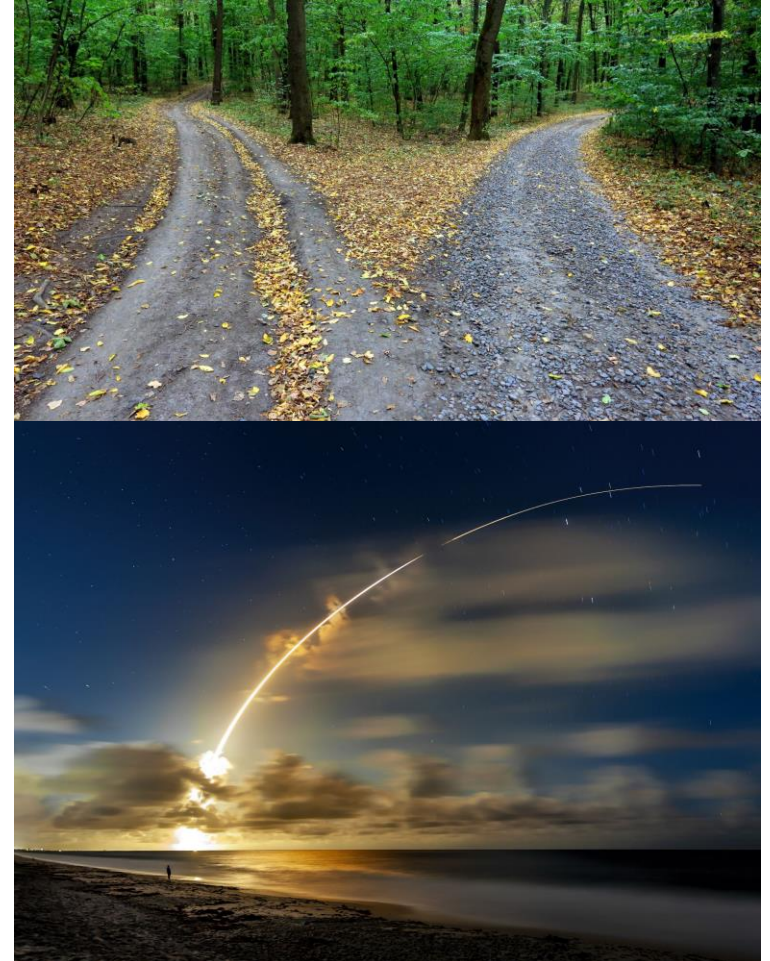
Last updated 31 October 2024. Database contains 32 unique substances/entries.

Source: <https://echa.europa.eu/list-of-substances-subject-to-pops-regulation>
<https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:02019R1021-20241017&from=EN>

Outlook

Outlook

- Focus shifting to broad **group restrictions** like PFAS
- Increasing EU (and Swiss) vs UK regulatory **divergence**
- Further **sustainability** related requirements
 - Substances of Concern reporting obligations
 - Ecodesign/Life Cycle Assessment
- **Awareness raising**
 - 6th ESA REACH Workshop (ESA ESTEC [Noordwijk, NL], 17th June 2025 [TBC])



Outlook Acknowledgements & Further Reading

We would like to thank the following for their continued support on the ESA REACH Tool project:

- ESA TEC-Q IT Support (Terma)
 - Joao Martins Pedro
 - Rahul Rathore
 - Gosse Mol
 - Tim Becker (REACHLaw)
 - Leo Fournier (ESA)
- For more information on automated materials obsolescence management systems, please read my article in Chemical Watch & ISMSE Poster

How can automated systems help mitigate the risks of obsolescence caused by REACH?

INSIGHT | EXPERT FOCUS | 12 September 2022

Oliver Reiff-Musgrove, regulatory consultant, REACHLaw UK, looks at how to stay ahead of the challenges the regulation presents

Europe | PFAS | EU REACH



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CORPORATE SUSTAINABILITY

The Design, Development and Application of the ESA REACH Tool – A Digital Materials Obsolescence Management Tool

Oliver Reiff-Musgrove¹, Laura Feasey², Jorge Sánchez Seojo³, Premysl Janik⁴

¹ REACHLaw Ltd, Vlnkikujala, 3 JK 21, 02600 Espoo, Finland. oliver.reiff-musgrove@reachlaw.fi

² ESA, ESTEC, Keplerlaan 1, PO Box 299, 2200 AG, Noordwijk, The Netherlands.

ABSTRACT

The article introduces the successful software development undertaken by ESA, to create a novel digital tool to evaluate and mitigate against potentially costly materials obsolescence risks to space projects that arise from the EU chemical regulation REACH. It highlights the advantages of creating an automated system for tracking substances of very high concern (SVHC) against a material list of space-relevant materials, a collaboration with collaborators. The results of the tool using the European Chemical Agency (ECHA) Registration File, the ECHA SVHC list, the ECHA REACH compliance and the management, are also discussed. The paper demonstrates the benefits of an automated tool compared with prior manual obsolescence management methods, by highlighting the functionality developed in the project. Examples of how the tool extracts available data from the ECHA REACH Tool can provide powerful insights and automation of REACH-related activities. Finally, the application and broader use of the ECHA REACH Tool for wider obsolescence risk analysis and mitigation are discussed, including the operational cooperation needed for the space sector to overcome the current challenges in an ever-changing chemical regulatory landscape.

INTRODUCTION

Registration, Evaluation and Authorisation of Chemicals (REACH) is an essential EU chemical regulation that aims to protect human health and the environment. In the EU, REACH has the power to list or restrict substances of concern in the space sector. After an 8-year pilot space project finishes after exceeding 3 years, customer selected for a spaceflight can become candidates for non-compliant and project, requiring a search for alternatives and potentially costly replacement campaigns.

EU REACH Substances Lists

Compliance Obligations	None	Check and List	Restrictions on certain uses	Not authorized
Classification Risk	Low	Medium <td>High</td> <td>Very High</td>	High	Very High

Note: Not all of the substances in the Authorisation List, which are listed.

DESIGN

The tool accesses regulatory substance list data and cross-references them against a list of space-relevant materials. Substances of concern are provided for the identification of SVHC in the customer's material list. The tool identifies materials with potential high SVHC content and material lists, and chemically related using Safety Data Sheet (SDS) Dynamic cross-referencing. Regulatory compliance checks are performed using a dynamic identification of specific substances. Material synthesis and performance records were added to help users trace the data consistently across the system, reducing the need for testing.

APPLICATION

The ESA REACH Tool has been in active use by ESA since January 2020, and by external members of the European Space Agency (ESA) since January 2021. The tool is part of the European Space Agency's Compliance Strategy (ESA).

CONCLUSIONS

- Successful development of an automated REACH-obsolescence tool.
- Automated integration of EU REACH list substance data directly from ECHA, in addition to the scope of chemical regulatory data from the ECHA website.
- Application of the tool has significantly reduced the burden of REACH list exposure analysis on internal materials obsolescence teams.
- Further development of the ESA REACH Tool will help other ESA tools gain access to ECHA-obsolescence data.

ACKNOWLEDGMENTS


The authors would like to thank all their colleagues for their work on the project. In particular, they express their gratitude to a sponsor (ESA) for the tool with the departments of the ESA REACH Tool and T. Becker (REACHLaw) for the continued support on REACH matters. Additionally, they would like to thank T. Becker (REACHLaw) for the valuable help with the data used in the project. The presented poster and development of the tool was supported by ESA/ESTEC, contract 01040000000000000000.

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3. Reiff-Oliver, M., Feasey-Laura, S., Seojo-Jorge, P., Janik-Premysl, J., 2022. How can automated systems help mitigate the risks of obsolescence caused by REACH? ISMSE Poster, 2022, 1(1), 1-10.

REACHLAW
www.reachlaw.fi

To request access to the ECHA REACH Tool, please contact reachlaw@reachlaw.fi or scan the QR code.



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3. How it works
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6. How to get started (Demo)
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8. Q&A



Thank you for listening!

Any Questions?

REACHLaw

Aleksanterinkatu 19
FI-00100 Helsinki
Finland

www.reachlaw.fi
info@reachlaw.fi
sales@reachlaw.fi

Oliver REIFF-MUSGROVE

Senior Product Manager
oliver.reiff-musgrove@reachlaw.fi

Tim BECKER

Senior Legal Advisor
tim.becker@reachlaw.fi

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