

# Avery Dennison RBIS - Restricted Substances List (ADRSL V10)

RBIS Product Compliance Team  
June 2022

[Recording \(English\)](#)

[Recording \(Mandarin\)](#)



# Background



## ADRSL V10 - effective 1<sup>st</sup> July, 2022

What is Restricted Substance List “ RSL “ ?

- It is a list of hazardous chemicals / substances with test methods and limits
- It helps to ensure our products are free from banned chemicals / substances
- The first Avery Dennison RBIS Restricted Substances List (ADRSL) was implemented globally in 2008

Where can I download the latest ADRSL?

- <http://www.myrbis.averydennison.com/RSL/>

How was the ADRSL developed?



# What do AD Suppliers need to do?

- Review and understand the requirement under the latest ADRSL
- Have thorough knowledge of the chemicals used in the manufacturing process and maintain an updated chemical inventory list
- Ensuring the material or product supplied to AD does not contain substance listed in the ADRSL exceeding the allowable limit
- Notify AD immediately if the material or product supplied to AD cannot comply with ADRSL and/ or applicable legislation
- Signed the ADRSL agreement

# ADRSL Content

1. Letter to Suppliers
2. Legal Compliance
3. RBIS Restricted Substances List and Limits
4. Implementation Guide
5. Frequently Asked Questions
6. Change Log

# RBIS Restricted Substances List and Limits

Test Method

Category: Butylated Hydroxy Toluene (BHT)

<b>PRSL Test Method</b>	Solvent Extraction, GC-MSD Analysis		
Restricted Substance Name / Group	CAS #	PRSL Limit	MRSL Limit
Butylated Hydroxy Toluene (BHT)	128-17-0	Usage Ban in Packaging Material (1 mg/kg)	/

Substance Name

Unique numerical identifier assigned by the Chemical Abstracts Service (CAS)

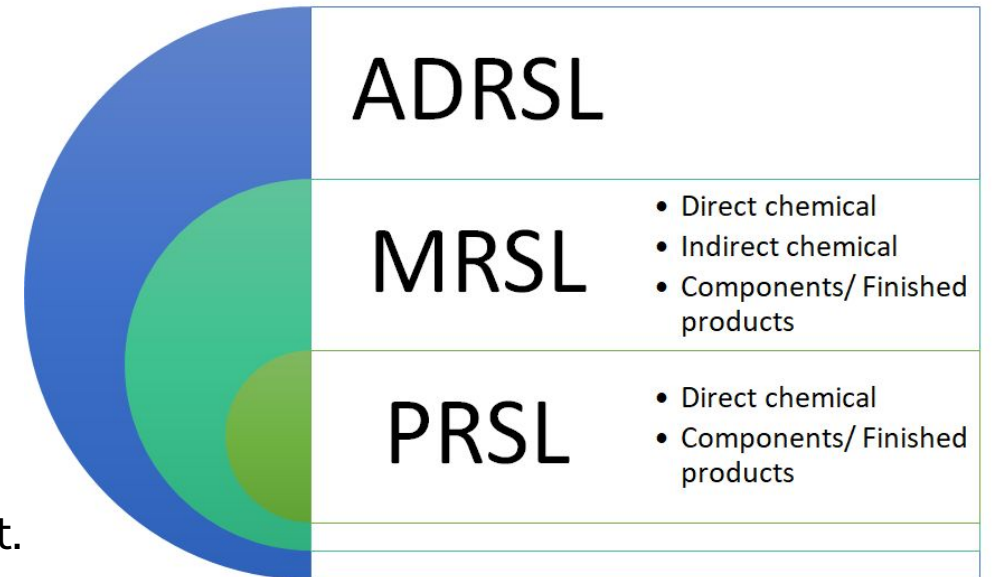
Limit of restricted substance

# PRSL vs MRSL

- **Product restricted substances list (PRSL)**
  - applies to direct chemicals, components, semi-finished/ finished products, and packaging. PRSL limits do not apply to indirect chemicals.
- **Manufacturing restricted substances list (MRSL)**
  - applies to all chemical substances used within manufacturing facilities, including both direct and indirect chemicals.

Difference between direct and indirect chemical:  
direct chemical will become part of the finished good, while indirect chemicals may be used during the manufacturing process, but is not intended to remain with the finished product.

- Example of direct chemicals: inks, adhesives, dyes, and colourants
- Examples of indirect chemicals: cleaners, detergents, chemicals used for instrument maintenance, wastewater treatment, sanitation and pest control.



# Key Changes

## Legal Compliance:

Section d: REACH – Registration, Evaluation, Authorisation and Restriction of Chemicals

- UK REACH added
- <https://www.hse.gov.uk/reach/index.htm>

## Chemical restrictions updates:

Total 12 changes are made to restricted substances and limits

- 3 restricted substances newly added
- 7 existing restricted substances have PRSL limits updated
- 2 existing restricted substances have MRSL limits updated

## Test Matrix:

- A few test items are added to test packages A & B (adhesives; ink, dyes, coatings)

# Newly Added Restricted Substances



<b>Chemical Group</b>	<b>Restricted Substance Name</b>	<b>CAS#</b>	<b>PRSL Limit</b>
APEO	4-Tert-butylphenol	98-54-4	5 mg/kg
BISPHENOLS	Bisphenol B (BPB)	77-40-7	Usage Ban (1 mg/kg)
FLAME RETARDANT	Antimony Trioxide	1309-64-4	Usage Ban (1000 mg/kg)



# Existing Restricted Substances with PRSL Limit Change



Restricted Substance Name / Group	CAS#	Changes made to PRSL Limit
Aniline	62-53-3	Usage Ban (10 mg/kg) → Usage Ban (20 mg/kg)
Bisphenol S (BPS)	80-09-1	Usage Ban (0.1 mg/kg) → Usage Ban (1 mg/kg)
Bisphenol F (BPF)	620-92-8	Usage Ban (0.1 mg/kg) → Usage Ban (1 mg/kg)
Bisphenol AF (BPAF)	1478-61-1	Monitoring → Usage Ban (1 mg/kg)
PCP, TriCP, TeCP	Various	Sum 0.05 mg/kg → Each 0.05 mg/kg
MCP, DCP	Various	MCP, DCP, TriCP: Sum 0.5 mg/kg → MCP, DCP: Sum 0.5 mg/kg
pH Value on Leather Material	/	3.5 - 7.0 → 3.5 - 4.5

# Existing Restricted Substances with MRSL Limit Change

Restricted Substance Name / Group	CAS#	Changes made to MRSL Limit
2-Methoxypropyl Acetate	70657-70-4	MRSL limit changed to 50 mg/kg; MRSL limit for leather (1000 mg/kg) removed
Short-chain Chlorinated Paraffins (SCCPs) (C10 to C13)	85535-84-8	MRSL limit changed to 50 mg/kg; MRSL limit for leather (250 mg/kg) removed

**V9:**

Restricted Substance Name / Group	CAS #	PRSL Limit	MRSL Limit
2-Methoxypropyl Acetate	70657-70-4	Each 50 mg/kg	<del>Textile: 50 mg/kg;</del> <del>Leather: 1000 mg/kg</del>
Short-chain Chlorinated Paraffins (SCCPs) (C10 to C13)	85535-84-8	Usage Ban (30 mg/kg)	<del>Textile: 50 mg/kg;</del> <del>Leather: 250 mg/kg</del>

**V10:**

Restricted Substance Name / Group	CAS #	PRSL Limit	MRSL Limit
2-Methoxypropyl Acetate	70657-70-4		50 mg/kg
Short-chain Chlorinated Paraffins (SCCPs) (C10 to C13)	85535-84-8	Usage Ban (30 mg/kg)	50 mg/kg

# Test Matrix Update

- Package A : Additional heavy metals, PFCs, and VOCs added
- Package B: Chlorinated Organic Carriers, additional heavy metals, PFCs, and VOCs added
- MCCPs added to SCCPs test

Restricted Substances	Non-packaging										Packaging
	A	B	C	D	E	F	G	H	I	J	K
	Adhesive, HTL release	Ink, dyes, coating, foil	Leather (natural)	Leather (synthetic)	Metal	Paper	Plastic, silicone, heat seal backing	Textile (natural)	Textile (synthetic)	Textile (blend) *1	All material
Azo Dyes ^		•	•			•		•	•	•	•
APs, APEOs	•	•	•	•		•	•	•	•	•	•
BHT											•
Chlorinated Organic Carriers		•									
Chlorinated Phenol	•	•	•	•		•		•	• *2	•	•
Dimethyl Formamide		• *3		•			• *3				
Disperse Dyes, Carcinogenic Dyes and Other Restricted Dyes ^		•	•	•					•	•	
Formaldehyde	•	•	•	•		•		•	•	•	•
Total Heavy Metals ^	•	•	•	•	•	•	•				
Additional Total Heavy Metals ^	•	•									
Chromium VI			•								
Nickel Release					• *4						
Extractable Heavy Metals ^	•	•	•	•		•	•	•	•	•	•
Organotins	•	•	•	•		•	•	•	•	•	•
PFCs	• *5	• *5									• *5
Pesticides			•			•		•		•	•
pH			•	•				•	•	•	
Phthalates	•	•		•			•				• *6
PAHs ^	•	•		•			•				
SCCPs & MCCPs	•	•	•	•			•				
VOCs	•	•									
Heavy Metals in Packaging and Packaging Component (94/62/EC, TPCH)											•

# Avery Dennison's Prefer Laboratories

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# ZDHC MRSL Conformance

## Letter to Suppliers

A paragraph was added to highlight RBIS's sourcing preference for ZDHC conformance chemicals.

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*Avery Dennison is committed to the elimination of hazardous substances as listed in the ZDHC MRSL from use and discharge from our facilities. We seek to work with chemical suppliers that are registered on the ZDHC Gateway chemical module, with sourcing preference for ZDHC MRSL Level 1 or above conformance chemicals. We continuously strive to substitute hazardous chemicals with safer alternatives and better environmental profiles wherever possible.*

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# ZDHC Signatory Brands

## Zero Discharge of Hazardous Chemicals

Roadmap to Zero Programme to help the fashion industry to eliminate harmful chemicals from its global supply chain.



# The Roadmap to Zero Programme

[ZDHC](#)



**ZDHC MRSL  
and Conformance  
Guidance**



**Data & Disclosure  
ZDHC Gateway –  
Chemical Module**



**Audit Protocol  
Chemical Management**



**Training  
ZDHC Academy**



**ZDHC Wastewater  
Guidelines**



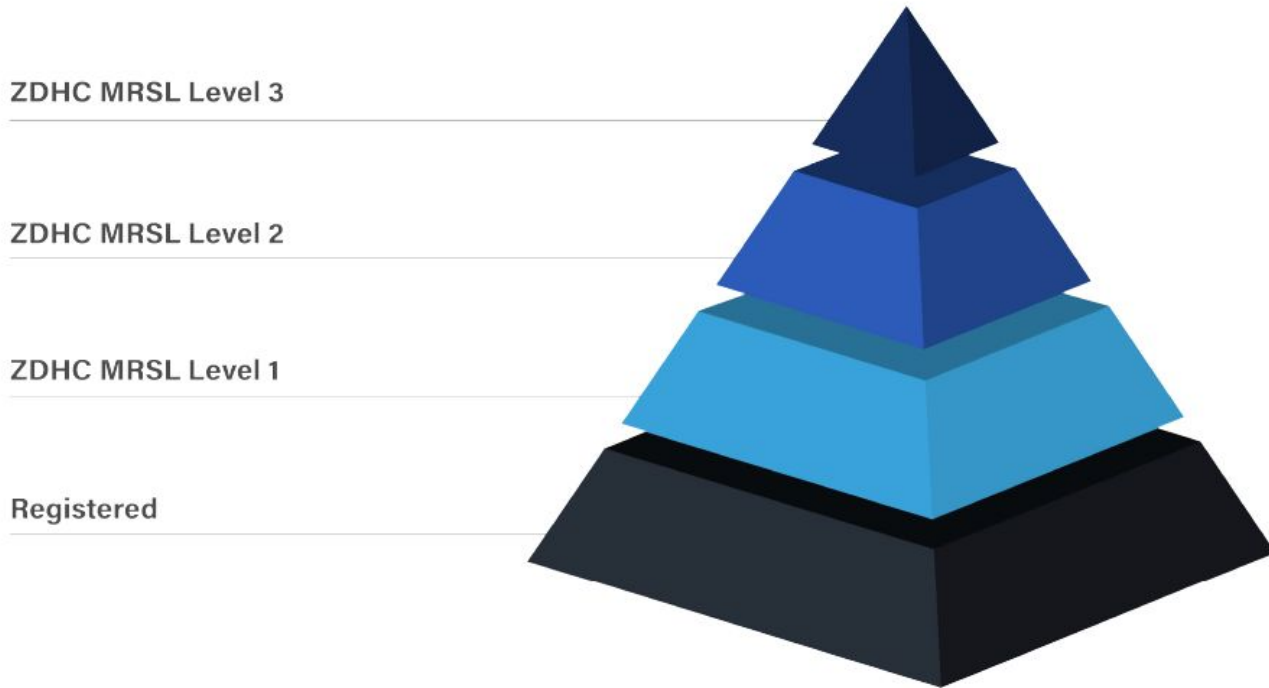
**Data & Disclosure  
ZDHC Gateway –  
Wastewater Module**




# ZDHC In-Scope Suppliers

- All Dyes, Pigments and Inks directly applied in process
- Functional finishes (such as antimicrobials, flames retardants, OWR)
- Printing thickeners and binders
- Chemicals used in wastewater/ effluent treatment process (except commodity chemicals)
- Sizing chemicals used for in-house warping or weaving
- Weaving or Knitting oils
- Beamhouse, wet-end and finishing auxiliaries for leather production
- Dyestuffes and Pigments used in wet-end and finishing for leather production
- Printing inks and auxiliaries used for printed leathers production
- Adhesives and rubbers used in footwear and leather goods production



# In-Scope Chemical Supplier ZDHC Target



- . 2024 : 
  - . Increase percentage of chemicals with level 1 or above conformance
  - . Increase conformance level to 2 and 3
- . 2023 : 
  - . Upload AD purchase chemical information onto ZDHC Gateway
  - . Achieve level 1 or above conformance
- . 2022 : 
  - . Complete supplier survey
  - . Attend ZDHC training
  - . Complete ZDHC Gateway company registration

# Questions?

Product compliance team email:

[rbis.www.productcompliance@averydennison.com](mailto:rbis.www.productcompliance@averydennison.com)

Q

&

A

# Thank you



**AVERY  
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