

RUDOLF GmbH – commitment to the Zero Discharge of Hazardous Chemicals Manufacturing Restricted Substances List

Edition 4.0

www.rudolf-group.com

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In the Zero Discharge of Hazardous Chemicals (ZDHC) Joint Roadmap, ZDHC member brands are committed to define and develop a Manufacturing Restricted Substances List (MRSL) for the apparel and footwear industry. The ZDHC MRSL addresses hazardous substances potentially used and discharged into the environment during manufacturing and related processes, not just those substances that could be present in finished products.

The ZDHC MRSL is a list of chemical substances subject to a usage ban, meaning that the MRSL-listed chemical substance or group of substances may not be used to achieve a desired function or effect during production of the raw material or product (that is, no intentional use). Due to the existence of manufacturing impurities in chemical formulations, a minor or trace amount of the restricted substance is permitted within defined concentration limits. Chemical formulations containing restricted substances that exceed these limits are not compliant with the MRSL.

Restricted substances and groups of substances according to MRSL of ZDHC (details on chemicals and individual limits see MRSL) are:

- Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers
- Anti- Microbials & Biocides ¹⁾
- Chlorinated Paraffins
- Chlorobenzenes & Chlorotoluenes
- Chlorophenols
- Dyes – Azo (Forming Restricted Amines) ¹⁾
- Dyes – Carcinogenic or Equivalent Concern
- Dyes – Disperse (Sensitizing) ¹⁾
- Dyes – Navy Blue Colourant
- Flame Retardants ¹⁾
- Glycols / Glycol Ethers ¹⁾
- Halogenated Solvents
- Organotin Compounds
- Other/ Miscellaneous Chemicals ¹⁾
- Perfluorinated and Polyfluorinated Chemicals (PFCs) ^{1) 3)}
- Phthalates – including all other esters of ortho-phthalic acid
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Total Heavy Metals ¹⁾
- UV absorbers ¹⁾
- Volatile Organic Compounds (VOC) ¹⁾

Please be advised that, based on the information available to us from our raw material suppliers, the current products offered by **RUDOLF GmbH** Geretsried and listed below do not contain any of the substances or group of substances as intentionally added raw materials or as impurities above the limit specified in the MRSL of ZDHC Programm, current versions:

- **ZDHC – Manufacturing Restricted Substances List (ZDHC MRSL), version 1.1 ²⁾**
 - **Chapter 1: MRSL for Textiles and Coated Fabrics Processing**
- **ZDHC – Manufacturing Restricted Substances List (MRSL), version 2.0 ²⁾**
 - **Chapter 1: ZDHC MRSL / Textile**

To the best of our knowledge, none of these substances are intentionally generated during production.

This confirmation is only valid for the above mentioned MRSL versions ²⁾ and will expire when amended by **RUDOLF GmbH**.

The information given in this confirmation is based on our current knowledge on the date of issue of this document. It contains information which complements our Material Safety Data Sheets (MSDS) and Technical Data Sheets (TDS). However, as fields of application and/or conditions of use cannot be respected in this document, the users of our products should carefully check the information given in our MSDS and TDS and/or carry out tests for themselves in order to ensure the compliance with any legal requirements and/or specific requirements of any Restricted Substance List (RSL) of a Brand.

For any questions concerning the products listed below or any further product information needed, please contact:

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This list contains only selected products from **RUDOLF GmbH's** product range. Please do not hesitate to contact us in order to check the individual compliance status of any unlisted product of our product range.

- 1) the current ZDHC MRSL (as mentioned above) restricts only individual substances and not the whole substance group
- 2) <https://mrsl.roadmaptozero.com/>
 Please note, that the transition period for the new version (Version 2.0) is twelve months, beginning on January 1st, 2020. During this time, both versions (version 1.1 and version 2.0) of the ZDHC MRSL remain active.
- 3) The PFC water, oil and soil repellent products (RUCO-GUARD products) mentioned in this list of products are based on C6-chain technology and not on long-chain technology (C8 and higher) as banned according to the mentioned ZDHC MRSL version 1.1 and 2.0. For producing fluorocarbon polymers RUDOLF GmbH uses monomers from a process in which no perfluorooctanesulfonic acid (PFOS) accumulates as a by-product. Monomers of a shorter chain length are used for manufacturing C6 fluorocarbon products. They cannot biodegrade into perfluorooctanoic acid (PFOA), not even in the long run.

1. Textile Auxiliaries

FERAN	ASR	PERRUSTOL	MMX	RUCO-BLANC	ORH
FERAN	ICA	PERRUSTOL	MMX CONC	RUCO-BOND	HFR
FERAN	ICE	PERRUSTOL	RPP	RUCO-BOND	PFL
FERAN	ICS	PERRUSTOL	TIC 500	RUCO-BOND	PHA
FERAN	SSF CONC	PERRUSTOL	VNO 500 NEW	RUCO-CAT	MCC
FERAN	SSG 200	PERRUSTOL	VNO NEW	RUCO-CLEANER	MAL
FERAN	SSG 300	PERRUSTOL	WDD NEW	RUCO-CLEANER	MS
FERAN	SSG CONC	RUCO-ACID	ABS	RUCO-CLEANER	RAC
HYDROCOL	AFF	RUCO-ACID	ABS 200	RUCO-CLEANER	VB 133
HYDROCOL	APK	RUCO-ACID	ASC	RUCO-COAT	AC 1010
HYDROCOL	APR	RUCO-ACID	BSA	RUCO-COAT	AC 2510
HYDROCOL	ARD	RUCO-ACID	BSF	RUCO-COAT	AC 7610
HYDROCOL	HOT	RUCO-ACID	CSS	RUCO-COAT	ACF
HYDROCOL	KAE	RUCO-ACID	FDB	RUCO-COAT	AD 7005
HYDROCOL	KAN	RUCO-ACID	GBN	RUCO-COAT	AD 7021
HYDROCOL	KCI	RUCO-ACID	GBS	RUCO-COAT	AD 7050
HYDROCOL	KDF	RUCO-ACID	NYL	RUCO-COAT	AD 7070
HYDROCOL	KNI	RUCO-ACID	NYL 200	RUCO-COAT	AD 7090
HYDROCOL	KTQ	RUCO-ACID	RBT	RUCO-COAT	AD 7100
HYDROCOL	RVD	RUCO-BAC	AGP	RUCO-COAT	AV 7730
HYDROCOL	SCL	RUCO-BAC	CID NG	RUCO-COAT	BC 6040
HYDROCOL	SIC	RUCO-BAC	HSA CONC	RUCO-COAT	BC 6041
HYDROCOL	SIC SPEC	RUCO-BAC	ZPY	RUCO-COAT	BC 7060
HYDROCOL	SID	RUCO-BLANC	ABH	RUCO-COAT	BC 7065
HYDROCOL	SUN	RUCO-BLANC	ADE	RUCO-COAT	BC 7068
HYDROCOL	SUN 200	RUCO-BLANC	AMA	RUCO-COAT	DA 3500
HYDROCOL	SVN	RUCO-BLANC	AMA 375	RUCO-COAT	DA 3700
HYDROCOL	WRF NEW	RUCO-BLANC	AMR	RUCO-COAT	EC 2811
PERRUSTOL	AST NEW	RUCO-BLANC	ANF	RUCO-COAT	EC 4811
PERRUSTOL	CCA	RUCO-BLANC	AWL	RUCO-COAT	ECC NEW
PERRUSTOL	CCA 500	RUCO-BLANC	NFW	RUCO-COAT	DA 3500
PERRUSTOL	CCF	RUCO-BLANC	OAB	RUCO-COAT	FC 6005
PERRUSTOL	HIS	RUCO-BLANC	OAM	RUCO-COAT	FC 6009
PERRUSTOL	HNS NEW	RUCO-BLANC	OBC	RUCO-COAT	FC 6020
PERRUSTOL	IMA NEW	RUCO-BLANC	OBI	RUCO-COAT	FC 6021
PERRUSTOL	IPS 500 NEW	RUCO-BLANC	OBL	RUCO-COAT	FC 6025
PERRUSTOL	IPS NEW	RUCO-BLANC	OLF		
PERRUSTOL	MMU NEW				

RUCO-COAT FC 6035
RUCO-COAT FC 6105
RUCO-COAT FC 6111
RUCO-COAT FO 2000
RUCO-COAT FO 4010
RUCO-COAT FX 8011
RUCO-COAT FX 8021
RUCO-COAT FX 8031
RUCO-COAT FX 8041
RUCO-COAT FX 8051
RUCO-COAT KLE
RUCO-COAT PEH
RUCO-COAT PU 1130
RUCO-COAT PU 1110
RUCO-COAT PU 3511
RUCO-COAT PU 3710
RUCO-COAT PU 5511
RUCO-COAT PU 8521
RUCO-COAT PU 8551
RUCO-COAT SI 2621
RUCO-COAT TH 5005
RUCO-COAT TH 5020
RUCO-COAT VA 3210

RUCO-DIGITAL IDP

RUCO-DRY AQA
RUCO-DRY DFE
RUCO-DRY DFY
RUCO-DRY DHE
RUCO-DRY DHY
RUCO-DRY ECO
RUCO-DRY ECO ADV
RUCO-DRY ECO ADV
RUCO-DRY ECO PLUS
RUCO-DRY WFF

RUCO-FIL AMG
RUCO-FIL ASG
RUCO-FIL ASP
RUCO-FIL ASW
RUCO-FIL AWG
RUCO-FIL AWG-M
RUCO-FIL AWG NEW
RUCO-FIL AWH
RUCO-FIL AWI
RUCO-FIL AWP
RUCO-FIL AWU
RUCO-FIL AWU 200
RUCO-FIL CNW
RUCO-FIL CPW
RUCO-FIL DFW
RUCO-FIL LRO CONC
RUCO-FIL NFW
RUCO-FIL NPH
RUCO-FIL NPH 200
RUCO-FIL NPH CONC
RUCO-FIL PEA NEW
RUCO-FIL SAT
RUCO-FIL SAW
RUCO-FIL SCA
RUCO-FIL SCE
RUCO-FIL SCI
RUCO-FIL SDF6
RUCO-FIL SHP
RUCO-FIL SHQ
RUCO-FIL SNA-R
RUCO-FIL SNL
RUCO-FIL WAX
RUCO-FIL ZSA NEW

RUCO-FRESH FNB

RUCO-TAC PVA

RUCOFIN AEG
RUCOFIN AVO NEW
RUCOFIN EIQ
RUCOFIN EIQ 230
RUCOFIN ESQ 200
RUCOFIN GAA
RUCOFIN GES NEW
RUCOFIN GLS
RUCOFIN GN
RUCOFIN GNH
RUCOFIN GLX
RUCOFIN GSP 200 NEW
RUCOFIN GSP NEW
RUCOFIN GSP CONC NEW
RUCOFIN GSQ 200 NEW
RUCOFIN GSQ NEW
RUCOFIN GWA
RUCOFIN GWA NEW
RUCOFIN GWE
RUCOFIN GWG
RUCOFIN GWG 200
RUCOFIN GWM
RUCOFIN GWS
RUCOFIN GWT
RUCOFIN HFL
RUCOFIN HHM NEW
RUCOFIN HHS
RUCOFIN HNX
RUCOFIN HPU
RUCOFIN HSC CONC
RUCOFIN HSF
RUCOFIN HST
RUCOFIN HSV NEW
RUCOFIN HSX
RUCOFIN LAN NEW
RUCOFIN MAX
RUCOFIN MIN
RUCOFIN MIQ NEW
RUCOFIN MWS
RUCOFIN PSO
RUCOFIN RCD
RUCOFIN RMW
RUCOFIN SHF
RUCOFIN SIQ 230 NEW
RUCOFIN SIQ NEW
RUCOFIN SQS NEW
RUCOFIN STF
RUCOFIN STS
RUCOFIN SWE
RUCOFIN WSC NEW
RUCOFIN WSE NEW
RUCOFIN ZNZ

RUCO-FLAM NAF
RUCO-FLAM NCE
RUCO-FLAM NMP
RUCO-FLAM NMT
RUCO-FLAM NPK
RUCO-FLAM NSC
RUCO-FLAM NUV
RUCO-FLAM PCE
RUCO-FLAM PCE-E
RUCO-FLAM PSY-E
RUCO-FLAM SCO

RUCO-FLOW AIL

RUCO-FLOW AIM
RUCO-FLOW AIO
RUCO-FLOW ALX
RUCO-FLOW CPA
RUCO-FLOW CPN-P

RUCOGAL ACD
RUCOGAL EC
RUCOGAL ELD
RUCOGAL ELD 300
RUCOGAL ENE
RUCOGAL ERA
RUCOGAL ERB
RUCOGAL ERQ
RUCOGAL ERT
RUCOGAL ERX
RUCOGAL HUG
RUCOGAL HMF
RUCOGAL INT
RUCOGAL IPN
RUCOGAL JBM
RUCOGAL PAA
RUCOGAL PAB 300
RUCOGAL PAP
RUCOGAL PAT
RUCOGAL PAU
RUCOGAL PDI
RUCOGAL POS
RUCOGAL PVI
RUCOGAL RF LIQUID
RUCOGAL RLC
RUCOGAL SUR

RUCOGEN AFA
RUCOGEN BFA 200
RUCOGEN CD
RUCOGEN D 3
RUCOGEN DAB
RUCOGEN DEC
RUCOGEN DFL
RUCOGEN DFL 200
RUCOGEN DFL 300
RUCOGEN ENA
RUCOGEN ESC
RUCOGEN FBL
RUCOGEN FUD
RUCOGEN FUM
RUCOGEN FWK
RUCOGEN NED
RUCOGEN NZA
RUCOGEN RE
RUCOGEN REG
RUCOGEN RES
RUCOGEN RPD
RUCOGEN RPD 200
RUCOGEN SFE
RUCOGEN SFC
RUCOGEN SFW
RUCOGEN SFW-B
RUCOGEN SOC
RUCOGEN WBA
RUCOGEN WBL
RUCOGEN WBX
RUCOGEN WKT
RUCOGEN WKV
RUCOGEN WNF
RUCOGEN GRA
RUCOGEN KSH
RUCOGEN SOA

RUCO-GUARD	ACP6	RUCO-LINK	TIE	RUCO-RAISE	FFH
RUCO-GUARD	AFB6 CONC	RUCO-LINK	WEB	RUCO-RAISE	FFW
RUCO-GUARD	AFC6	RUCO-LINK	XCR	RUCO-RAISE	FHP
RUCO-GUARD	AFH6	RUCO-LINK	XHC	RUCO-RAISE	FLP
RUCO-GUARD	AFR6	RUCO-LINK	XTN	RUCO-RAISE	FSP
RUCO-GUARD	AFS6			RUCO-RAISE	PEW
RUCO-GUARD	AFT6	RUCO-LUB	KMA 400	RUCO-RAISE	PPA
RUCO-GUARD	AFU6	RUCO-LUB	KMK 400	RUCO-RAISE	PUV
RUCO-GUARD	AHF6	RUCO-LUB	KMN 400	RUCO-RAISE	ULP
RUCO-GUARD	AHP6	RUCO-LUB	KMN 600	RUCO-RAISE	USN
RUCO-GUARD	AIR6	RUCO-LUB	KPM		
RUCO-GUARD	CAN6	RUCO-LUB	KPM 400	RUCORIT	GUR
RUCO-GUARD	UCS6	RUCO-LUB	KSA	RUCORIT	RAL 250
RUCO-GUARD	USR6	RUCO-LUB	KSV NEW	RUCORIT	RAZ
		RUCO-LUB	KSW	RUCORIT	RGH
		RUCO-LUB	RSP	RUCORIT	RGI
RUCOLAN	IVS			RUCORIT	RSL
RUCOLAN	KUH			RUCORIT	SUG
RUCOLAN	NOD	RUCON	FAC		
RUCOLAN	NOP	RUCON	FAN-G	RUCOSAL	MD
RUCOLAN	PTC	RUCON	FAS-G		
RUCOLAN	UVP	RUCON	FEC	RUCO-SHIELD	RAY
RUCOLAN	UVT	RUCON	FEF		
RUCOLAN	VGA	RUCON	FND		
RUCOLAN	VGI	RUCON	FNF	RUCO-STAB	FWO
RUCOLAN	VGI-PLUS			RUCO-STAB	LGA-M
RUCOLAN	VGP	RUCO-PHOB	PZN CONC	RUCO-STAB	LGA
RUCOLAN	VNF			RUCO-STAB	LGE
RUCOLAN	WSH			RUCO-STAB	LGL
		RUCO-PLAST	AB 41	RUCO-STAB	LGL
RUCOLASE	CACL	RUCO-PLAST	BO	RUCO-STAB	OKB
RUCOLASE	HCH 250	RUCO-PLAST	HH	RUCO-STAB	OKE
RUCOLASE	CME	RUCO-PLAST	HLS	RUCO-STAB	OKG
RUCOLASE	CME BASE T	RUCO-PLAST	HVE	RUCO-STAB	OKK
RUCOLASE	CML	RUCO-PLAST	KLH	RUCO-STAB	OKM
RUCOLASE	CML 200	RUCO-PLAST	PAV	RUCO-STAB	OKS
RUCOLASE	HCH	RUCO-PLAST	PCA	RUCO-STAB	OKW
RUCOLASE	HGO	RUCO-PLAST	PSM		
RUCOLASE	JEA	RUCO-PLAST	PS-NET	RUCOSTAR	DDD6
RUCOLASE	KAT	RUCO-PLAST	PSP	RUCOSTAR	EEE6
RUCOLASE	KGO	RUCO-PLAST	PVR NEW	RUCOSTAR	EEN6
RUCOLASE	PROT			RUCOSTAR	EEW6
RUCOLASE	ZEL	RUCO-PRINT	DDE		
RUCOLASE	ZGO	RUCO-PRINT	FOP	RUCO-STAT	AAD
RUCOLASE	ZLA	RUCO-PRINT	ORF NEW	RUCO-STAT	ADF
RUCOLASE	ZLH	RUCO-PRINT	PCD	RUCO-STAT	ADM
RUCOLASE	ZLI 250	RUCO-PRINT	PCR	RUCO-STAT	AHE
RUCOLASE	ZLL	RUCO-PRINT	PMD	RUCO-STAT	ASY NEW
RUCOLASE	ZLN	RUCO-PRINT	PMH		
RUCOLASE	ZNS	RUCO-PRINT	PMI	RUCO-TEX	AKN
RUCOLASE	ZSS 500	RUCO-PRINT	PMP	RUCO-TEX	KST 150
		RUCO-PRINT	PMS	RUCO-TEX	KST POWDER
RUCOLIN	CS	RUCO-PRINT	PPB	RUCO-TEX	MUS-S
RUCOLIN	JED	RUCO-PRINT	PRP	RUCO-TEX	NKS 150
RUCOLIN	JET	RUCO-PRINT	PRV	RUCO-TEX	NKS 150
RUCOLIN	LPU	RUCO-PRINT	PWG	RUCO-TEX	OGS
RUCOLIN	LSI			RUCO-TEX	OGX
RUCOLIN	MDA	RUCO-PUR	FNH	RUCO-TEX	OLI
RUCOLIN	MDX	RUCO-PUR	FNS	RUCO-TEX	WRP
RUCOLIN	MPE	RUCO-PUR	FPC		
RUCOLIN	MPN	RUCO-PUR	FSA	RUCO-THERM	CMB-A
RUCOLIN	NOM	RUCO-PUR	FVH	RUCO-THERM	CMB
RUCOLIN	PED	RUCO-PUR	SEC	RUCO-THERM	PCM 28
RUCOLIN	PED 400	RUCO-PUR	SEC		
RUCOLIN	RCP	RUCO-PUR	SLR	RUCOWET	FIN CONC
RUCOLIN	RSK	RUCO-PUR	SLY	RUCOWET	FN
RUCOLIN	RSO	RUCO-PUR	SLY	RUCOWET	FRW
RUCOLIN	RUN	RUCO-PUR	SLY PLUS	RUCOWET	RDJ
		RUCO-PUR	SLY PLUS	RUCOWET	RDX
RUCO-LINK	NET	RUCO-PUR	SPH	RUCOWET	RFF
RUCO-LINK	RCX	RUCO-PUR	SPH	RUCOWET	RKB
				RUCOWET	RMB

RUCOWET RMD
RUCOWET RN
RUCOWET RN 200
RUCOWET RSS
RUCOWET TA 1866
RUCOWET VE
RUCOWET VF
RUCOWET VG
RUCOWET VH
RUCOWET VL
RUCOWET WS

RUSTOL ACA
RUSTOL ARC
RUSTOL ARR
RUSTOL ASA

RUSTOL ASN
RUSTOL BXB
RUSTOL DEA
RUSTOL DSL
RUSTOL ESD
RUSTOL ESF
RUSTOL ESH
RUSTOL NDC
RUSTOL NIE
RUSTOL OB 16
RUSTOL ZA 157

VEROLAN EMC
VEROLAN FEX
VEROLAN NAD
VEROLAN NBA

VEROLAN NBB
VEROLAN NBF
VEROLAN NBH 130
VEROLAN NBI
VEROLAN NBL
VEROLAN NBO
VEROLAN NBO 50
VEROLAN NBO 150
VEROLAN NBQ
VEROLAN NBX
VEROLAN NBZ
VEROLAN NCS
VEROLAN NEC
VEROLAN NEW
VEROLAN NFE
VEROLAN NMF 150

2. Garment Finishing Auxliaries

FERAN X-GU
FERAN X-SSG 200

HYDROCOL X-KNI
HYDROCOL X-WRF NEW

PERRUSTOL MMX CONC
PERRUSTOL X-IPS NEW
PERRUSTOL X-IPS 500 NEW
PERRUSTOL X-VNO NEW
PERRUSTOL X-VNO 500 NEW

RUCO-BAC AGP
RUCO-BAC AGL

RUCO-COAT FO 4010
RUCO-COAT PU 1110
RUCO-COAT TH 5020
RUCO-COAT X-ECC NEW

RUCO-DRY X-ECO ADV
RUCO-DRY X-ECO PLUS

RUCO-SPECIAL DPR
RUCO-SPECIAL LPC
RUCO-SPECIAL LPR

RUCOFIN DARK
RUCOFIN X-GWE
RUCOFIN X-GWM
RUCOFIN X-GWS
RUCOFIN X-GWA
RUCOFIN X-GWA NEW
RUCOFIN X-HSX
RUCOFIN X-SIQ NEW
RUCOFIN X-WSE NEW

RUCOGEN X-DAB

RUCOLAN IVS

RUCOLASE CACL
RUCOLASE CADS
RUCOLASE CHPL
RUCOLASE JEA
RUCOLASE ZLN
RUCOLASE ZSS

RUCOLIN JET

RUCO-LINK X-RCX

RUCO-LUB KMN 400

RUCON FNF
RUCON X-FAC

RUCO-PLAST BO
RUCO-PLAST HLS
RUCO-PLAST X-PCA

RUCO-PUR X-SLR

RUCORIT BBL
RUCORIT CBL
RUCORIT X-NOCL
RUCORIT X-NOPP
RUCORIT X-HYP

RUCO-SHIELD RAY

RUCO-STAB LGE

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Responsible Care®
OUR COMMITMENT TO SUSTAINABILITY