



Chemical resistance of plastics



Legend

Two values are given per substance. left number = value at +20°C / right number = value at +50°C

0	no data available
1	resistant
2	practically resistant
3	partially resistant
4	not resistant
K	no general information available
L	danger of pitting or stress-cracking corrosion
()	estimated value

Hazard notes

E	explosive
O	oxidizing
F	highly flammable
F+	extremely flammable
T	toxic
T+	very toxic
C	corrosive
Xn	harmful
Xi	irritant
N	dangerous for the environment

Description of the materials

Thermoplastics

HDPE	Polyethylene (high density)
LDPE	Polyethylene (low density)
PA	Polyamide (Nylon)
PC	Polycarbonate
PETG	Polyethylene terephthalate glycol (PET copolymer)
PMP	Polymethylpentene (TPX)
POM	Polyoxymethylene, polyacetal
PP	Polypropylene
PS	Polystyrene
PSU	Polysulfone
PVC	Polyvinyl chloride
SAN	Styrene-acrylnitrile

Fluoroplastics

E-CTFE	Ethylene-chlorotrifluoroethylene (Halar)
ETFE	Ethylene-tetrafluoroethylene
FEP	Tetrafluoroethylene-perfluoropropylene (Teflon, FEP)
PTFE	Polytetrafluoroethylene (Teflon)
PVDF	Polyvinylidene fluoride

Elastomers

EPDM	Ethylene-propylene-diene rubber
FPM/FKM	Fluorinated rubber (Viton)
NBR	Acryl-nitrile-butadiene rubber
SI	Silicone rubber

Metals

Al	Aluminium
V2A	Stainless steel 1.4301 (AISI 304)
V4A	Stainless steel 1.4401 (AISI 316)
Hastelloy C	Nickel-chromium-molybdenum alloy

Important information

The table „Chemical resistance of plastics“ was kindly provided by the company Bürkle GmbH to the Kendrion Kuhnke Automation GmbH and was integrated into the Kendrion layout. This table is based on information provided by various raw material manufacturers. These values are based solely on laboratory tests with raw materials. Plastic components produced from these raw materials are frequently subject to influences that cannot be recognized in laboratory tests (temperature, pressure, material stress, effects of chemicals, construction features, etc.). For this reason the values given are only to be regarded as being guidelines. In critical cases it is essential that a test is carried out first. No legal claims can be derived from this information; nor do Bürkle GmbH or we accept any liability for it. A knowledge of the chemical and mechanical resistance alone is not sufficient for the evaluation of the usability of a product. For example, the regulations concerning flammable liquids (explosion prevention) must also be taken into consideration.

Copyright

This table has been published and updated by Bürkle GmbH, D-79415 Bad Bellingen as a work of reference. This Copyright clause must not be removed. The table may be freely passed on and copied, provided that the information about the publisher is retained.

Herausgeber

Bürkle GmbH, Rheinauen 5, D-79415 Bad Bellingen, Phone +49 (7635) 82795-0, Fax +49 (7635) 82795-31, info@buerkle.de, www.buerkle.de

Version 3.2 (26.01.2015)

CHEMICALS	FORMULA	CAS-NR.	CONCENTRATION	HAZARD NOTE	thermoplastics													fluoroplastics		elastomers		metals		COMMENT								
					FLAMMABLE	HDPE	LDPE	PA	PC	PETG	PMP	POM	PP	PS	PSU	PVC HART	PVC WEICH	SAN	ECTFE /ETFE	FEP	PTFE	PVDF	EPDM		FPM /FKM	NBR	SI	AL	V2A	V4A	Hastelloy C	
Ammonium chloride	(NH ₄)Cl	012125-02-9	solid	Xn		1/1	1/1	1/0	1/0	(2)	0/0	2/3	1/1	0/0	0/0	1/0	0/0	0/0	0/0	(1)	1/1	1/1	1/0	1/0	1/1	0/0	3/4	1/3L	1/2L	1/1	sal ammoniac	
Ammonium chloride	(NH ₄)Cl	012125-02-9	aqueous	Xn		1/1	1/1	1/0	1/0	(2)	1/1	2/3	1/1	1/1	1/0	1/3	1/3	1/1	1/1	1/1	1/1	1/0	1/1	1/1	0/0	3/4	1/3L	1/2L	1/1	sal ammoniac		
Ammonium difluoride	F ₂ H ₃ N	001341-49-7	50 %	T, C		1/1	1/1	2/0	(4)	0/0	0/0	(4)	1/1	0/0	0/0	1/3	0/0	0/0	0/0	1/1	1/1	1/1	1/0	(3)	2/3	0/0	(3)	1/0	1/0			
Ammonium ferric sulfate	(NH ₄)Fe(SO ₄) ₂	007783-83-7	saturated	Xi		1/1	1/1	1/0	(2)	(2)	0/0	(3)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	(1)	1/0	(2)	(1)	0/0	(4)	0/0	0/0			
Ammonium ferrous sulfate	(NH ₄) ₂ Fe(SO ₄) ₂	007783-85-9		Xi		1/1	1/1	(2)	(2)	(2)	0/0	(3)	1/1	1/1	0/0	0/0	0/0	1/1	1/1	1/1	1/1	(1)	(1)	(1)	0/0	4/4	(1)	(1)				
Ammonium fluoride	(NH ₄)F	012125-01-8	saturated	T, C		1/1	1/1	1/0	4/4	(2)	1/0	(2)	1/1	0/0	0/0	1/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	2/3	1/1	0/0	(4)	(1)	(1)	?		
Ammonium fluoride	(NH ₄)F	012125-01-8	aqueous	T, C		1/1	1/1	1/0	(3)	(2)	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	2/3	1/1	0/0	(4)	1/3	1/3	1/1		
Ammonium glycolate	C ₂ H ₃ NO ₃	035249-89-9		(Xi)		1/1	1/2	(1)	2/3	(2)	1/2	(2)	1/2	1/1	2/2	1/1	0/0	0/0	1/1	1/1	1/1	(1)	1/0	(3)	(1)	0/0	(2)	(2)	(2)		Acetic acid	
Ammonium heptamolybdate	(NH ₄) ₆ Mo ₇ O ₂₄	012054-85-2		Xi		1/1	1/1	(1)	(2)	(2)	0/0	(1)	1/1	1/1	0/0	0/0	0/0	1/1	0/0	1/1	1/1	(1)	1/0	(3)	(1)	0/0	(1)	(1)	0/0			
Ammonium hydroxide	NH ₃ + H ₂ O	001336-21-6	30 %	C, N		1/1	1/2	(3)	4/4	2/4	1/2	1/2	2/3	1/2	2/3	1/2	0/0	0/0	1/1	1/1	1/1	(2)	1/0	(3)	2/3	0/0	1/1	1/1	1/1	1/1		
Ammonium hydroxide	NH ₃ + H ₂ O	001336-21-6	5 %	Xi		1/1	1/1	(2)	3/4	(2)	1/1	1/2	1/1	1/3	2/2	1/1	0/0	0/0	1/1	1/1	1/1	(2)	1/0	(2)	2/3	0/0	1/1	1/1	1/1	1/1		
Ammonium hydroxide	NH ₃ + H ₂ O	001336-21-6		C/Xi, N		1/1	1/1	(3)	4/4	2/4	1/1	1/2	1/1	2/3	2/3	1/2	1/3	2/2	1/1	1/1	1/1	1/3	1/0	(3)	4/4	0/0	1/1	1/1	1/1	1/1		
Ammonium mercaptan	-> see: Ammonium bisulfide																															
Ammonium nitrate	(NH ₄)NO ₃	006484-52-2	10 %	O		1/3	0/0	1/0	(1)	(2)	0/0	2/4	1/1	1/1	1/0	1/3	0/0	0/0	1/1	1/1	1/1	1/1	1/0	2/2	1/1	0/0	1/1	1/1	1/1	1/1	Nitric acid; Ammonium salt	
Ammonium nitrate	(NH ₄)NO ₃	006484-52-2	saturated	O		1/3	1/1	1/0	1/0	(2)	1/1	2/4	1/1	1/0	1/0	1/1	1/0	1/1	1/1	1/1	1/1	1/1	1/0	2/2	1/1	0/0	(2)	1/1	1/1	1/1		
Ammonium nitrite	(NH ₄)NO ₂	013446-48-5	aqueous	O, Xn		(1)	(1)	(2)	(2)	(2)	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	(3)	1/0	0/0	(2)	(1)	(1)				
Ammonium oxalate	C ₂ H ₄ N ₂ O ₄	014258-49-2		Xn		1/1	1/2	(1)	1/1	(2)	1/2	(2)	1/2	1/1	1/1	1/1	0/0	0/0	1/1	1/1	1/1	(1)	1/0	(3)	(1)	0/0	1/1	1/1	1/1	0/0		
Ammonium persulfate	(NH ₄) ₂ S ₂ O ₈	007727-54-0	saturated	O, Xn		0/0	0/0	4/4	(2)	0/0	0/0	(2)	1/1	0/0	0/0	1/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	(3)	4/4	0/0	4/4	(4)	3/4	0/0		
Ammonium persulfate	(NH ₄) ₂ S ₂ O ₈	007727-54-0	aqueous	O, Xn		0/0	0/0	4/4	(2)	0/0	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	(3)	4/4	0/0	4/4	(4)	3/4	0/0		
Ammonium phosphate, Mono-	(NH ₄)H ₂ PO ₄	007722-76-1	each	Xi		1/1	1/1	1/0	(2)	(2)	1/0	(2)	1/1	1/1	1/0	1/1	1/0	0/0	1/1	1/1	1/1	1/1	1/0	3/0	1/1	0/0	4/4	(1)	(1)	1/1		
Ammonium polyphosphate (APP)	(NH ₄ PO ₃) _n	068333-79-9		Xi		1/1	1/1	(1)	(2)	(2)	0/0	(1)	1/1	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	(1)	1/0	(3)	1/1	0/0	(3)	(1)	(1)			
Ammonium rhodanide	-> see: Ammonium thiocyanate																															
Ammonium salt	-> see: Ammonium nitrate																															
Ammonium sulfate	(NH ₄) ₂ SO ₄	007783-20-2	10 %	Xn		1/1	1/1	1/0	1/1	(2)	(1)	1/0	1/1	1/1	1/0	1/3	0/0	0/0	1/1	1/1	1/1	1/1	1/0	2/3	1/1	0/0	1/1	1/1	1/1	1/1		
Ammonium sulfate	(NH ₄) ₂ SO ₄	007783-20-2	saturated	Xn		1/1	1/1	1/0	1/1	(2)	1/1	2/0	1/1	1/0	1/0	1/1	1/0	1/1	1/1	1/1	1/1	1/1	1/0	2/3	1/1	0/0	1/1	1/1	1/2	1/1		
Ammonium sulfide	(NH ₄) ₂ S	012135-76-1	each	T, C	X	1/1	1/1	1/0	4/4	0/0	1/1	(2)	1/1	0/0	0/0	1/3	1/0	0/0	0/0	1/1	1/1	1/1	1/0	(3)	1/2	0/0	1/1	(1)	(1)	?	Diammonium sulfide;	
Ammonium sulfide	(NH ₄) ₂ S	012135-76-1	aqueous	T, C	X	1/1	1/1	1/0	(3)	0/0	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	(3)	3/3	0/0	1/1	(1)	(1)	1/1		
Ammonium sulfocyanide	-> see: Ammonium thiocyanate																															
Ammonium thiocyanate	CH ₄ N ₂ S	001762-95-4		Xn		1/1	1/1	(3)	1/0	(2)	1/1	1/0	1/1	1/3	0/0	1/0	0/0	1/1	1/1	1/1	1/1	(1)	1/0	(3)	1/0	0/0	(2)	(1)	(1)		Ammonium sulfocyanide; Ammonium rhodanide; Thiocyanic acid, Ammonium salt; Ammonium sulfocyanate	
Amomum	—	—		?		0/0	0/0	(2)	(2)	(2)	0/0	(2)	(2)	4/4	0/0	0/0	0/0	1/1	0/0	(1)	(1)	(1)	(2)	(1)	(2)	0/0	(1)	(1)	(1)			
Amyl acetate, normal	C ₇ H ₁₄ O ₂	000628-63-7		—	X	1/2	2/3	2/0	4/4	1/3	2/3	(1)	3/4	4/4	4/4	4/4	4/4	4/4	1/1	1/1	1/1	1/3	3/4	4/4	4/4	0/0	1/1	1/1	1/1	0/0		
Amyl alcohol, n-	-> see: Pentanol, 1-																															
Amyl chloride	C ₈ H ₁₇ Cl	000543-59-9		F, Xn	X	3/4	4/4	1/0	4/4	0/0	4/4	(2)	4/4	4/4	4/4	4/4	4/4	0/0	1/1	1/1	1/1	1/1	4/4	1/0	4/4	0/0	3/4	3/4L	3/4L	0/0		
Amyl cinnamic aldehyde	C ₁₄ H ₁₆ O	000122-40-7		Xi		0/0	0/0	0/0	(4)	0/0	(4)	(3)	(3)	0/0	0/0	0/0	0/0	4/4	0/0	(1)	(1)	(2)	(4)	(3)	(4)	0/0	(1)	(1)	(1)		odoriferous substance	
Aniline	C ₆ H ₇ N	000062-53-3		T		1/2	1/3	3/4	4/4	0/0	2/3	1/3	2/3	4/4	4/4	4/4	4/4	0/4	2/4	1/1	1/1	1/4	4/4	2/4	4/4	0/0	1/0	1/0	1/0	1/1		
Aniline hydrochloride	C ₆ H ₇ ClN	000142-04-1	saturated	T		1/3	0/0	(3)	(3)	0/0	0/0	(3)	1/3	0/0	0/0	1/0	0/0	0/0	0/0	1/1	1/1	1/1	3/0	2/2	3/3	0/0	4/4	4/4	4/4			
Anise	—	—		?		0/0	0/0	(2)	(2)	(2)	0/0	(2)	(2)	0/0	0/0	0/0	0/0	1/1	0/0	1/1	(1)	(1)	(2)	(2)	(2)	0/0	(1)	(1)	(1)			
Anise oil	—	084775-42-8		Xi		0/0	0/0	(3)	(3)	0/0	(4)	(2)	(3)	0/0	0/0	0/0	0/0	4/4	0/0	(1)	(1)	(3)	4/4	(3)	4/4	0/0	(1)	(1)	(1)	0/0		
Anisole	C ₇ H ₈ O	000100-66-3	100 %	Xi	X	1/4	3/4	1/0	4/4	0/0	2/3	(2)	3/3	4/4	0/0	0/0	0/0	0/0	0/0	1/1	1/1	(3)	4/4	4/4	4/4	0/0	1/0	(1)	(1)	0/0		
Antifreeze agent (car)	—	—		Xn		1/1	1/1	3/3	(1)	1/0	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	(1)	1/0	1/1	1/0	1/2	1/1	0/0	(1)	1/1	1/1		glycol-water-mixture		
Antimony pentachloride	SbCl ₅	007647-18-9		C		0/0	0/0	4/4	(3)	0/0	0/0	4/4	1/1	0/0	0/0	0/0	0/0	0/0	0/0	(2)	(2)	(2)	4/4	0/0	(3)	(4)	(4)	0/0				
Antimony trichloride	SbCl ₃	010025-91-9	90 %	C		1/1	1/1	4/4	1/0	0/0	0/0	4/4	1/1	0/0	0/0	1/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/1	3/0	0/0	4/4	4/4	4/4	0/0		
Antimony trichloride	SbCl ₃	010025-91-9	anhydrous	C		0/0	0/0	4/4	1/																							

CHEMICALS	thermoplastics															fluoroplastics			elastomers			metals			COMMENT										
	FORMULA	CAS-NR.	CONCENTRATION	HAZARD NOTE	FLAMMABLE	HDPE	LDPE	PA	PC	PETG	PMP	POM	PP	PS	PSU	PVC HART	PVC WEICH	SAN	ECTFE / ETFE	FEP	PTFE	PVDF	EPDM	FPM / FKM		NBR	SI	AL	V2A	V4A	Haselloy C				
Ginger	—	—	ground	?																															
Glucose	C ₆ H ₁₂ O ₆	000050-99-7	each	—																															
Glue (bone glue)	—	—	each	—																															
Glycerol	C ₃ H ₈ O ₃	000056-81-5	each	Xi																														Glycerin; Propanetriol, 1,2,3-; Trihydroxypropane, 1,2,3-	
Glycine	C ₂ H ₅ NO ₂	000056-40-6	10 %	—																														Glycoool; Aminoacetic acid	
Glycolic acid	C ₂ H ₄ O ₃	000079-14-1	37 %	Xn																															
Glycolic acid	C ₂ H ₄ O ₃	000079-14-1	70 %	C, Xn																															
Glysantin	—	—	—	Xn																														antifreeze agent, based on glycol; BASF	
Gum tragacanth	—	009000-65-1	—	—																															
HD-Oil motor oil, without aromatics	—	—	—	?																															
Helium	He	007440-59-7	—	—																															
Henkel-P3-solution	—	—	—	?																														cleaner	
Heptane, normal	C ₇ H ₁₆	000142-82-5	—	F, Xn	X																														
Heptanol, 1-	C ₇ H ₁₆ O	000111-70-6	—	Xn																															
Heptanone	C ₇ H ₁₄ O	—	—	(Xn)	X																													isomer not indicated in the source	
Hexachlorbenzene (HCB)	C ₆ Cl ₆	000118-74-1	—	T																															
Hexachlorocyclohexane (alpha-BHC)	C ₆ H ₆ Cl ₆	000319-84-6	—	T																															
Hexahydropyridine	-> see: Piperidine																																		
Hexaldehyde, n-	C ₆ H ₁₂ O	000066-25-1	—	F, Xi	X																														
Hexamethylenetetramine	C ₆ H ₁₂ N ₄	000100-97-0	—	F, Xn	X																														Methenamine; Hexamine; Urotropin
Hexane, n-	C ₆ H ₁₄	000110-54-3	—	F, Xn	X																														
Hexanedioic acid	-> see: Adipic acid																																		
Hexanetriol	C ₆ H ₁₄ O ₃	—	100 %	?																														isomer not indicated in the source	
Hexene, 1-	C ₆ H ₁₂	000592-41-6	—	F, Xn	X																														Butyl ethylene; Hexylene
Hexyl alcohol	C ₆ H ₁₄ O	000111-27-3	—	Xn																															
Honey	—	—	—	—																															
Hydraulic fluids, HFA	—	—	50°C	?																															
Hydraulic fluids, HFB	—	—	50°C	?																															
Hydraulic fluids, HFC	—	—	60°C	?																															
Hydraulic fluids, HFD-R	—	—	100°C	?																															
Hydraulic fluids, HFD-S	—	—	100°C	?																															
Hydraulic oil (based on mineral oil)	—	—	—	?																															
Hydrazine	N ₂ H ₄	000302-01-2	10 %	T	X																														Diamide; Diamine; Nitrogen hydride
Hydrazine hydrate	N ₂ H ₄ O	010217-52-4	aqueous	(T, C)	(X)																														
Hydrocyanic acid, sodium salt	-> see: Sodium cyanide																																		
Hydrogen	H ₂	001333-74-0	techn. pure	F+	X																														
Hydrogen bromide	HBr	010035-10-6	40 %	C																															
Hydrogen bromide	HBr	010035-10-6	50 %	C																															
Hydrogen bromide	HBr	010035-10-6	diluted	C																															
Hydrogen carboxylic acid	-> see: Formic acid																																		
Hydrogen chloride	HCl	007647-01-0	1-5 %	—																															
Hydrogen chloride	HCl	007647-01-0	35 %	C																															
Hydrogen chloride	HCl	007647-01-0	concentrated	C																															
Hydrogen chloride	HCl	007647-01-0	20 %	Xi																															
Hydrogen chloride (gas)	HCl	007647-01-0	anhydrous	T, C																															
Hydrogen cyanide	HCN	000074-90-8	techn. pure	F+, T+	X																														
Hydrogen cyanide	HCN	000074-90-8	aqueous	F+, T+	X																														
Hydrogen fluoride	HF	007664-39-3	anhydrous	T+, C+																															
Hydrogen fluoride	HF	007664-39-3	4 %	T, C																															
Hydrogen fluoride	HF	007664-39-3	50 %	T+, C																															
Hydrogen fluoride	HF	007664-39-3	70 %	T+, C																															
Hydrogen fluoride	HF	007664-39-3	100 %	T+, C+																															
Hydrogen peroxide	H ₂ O ₂	007722-84-1	30 %	C																															
Hydrogen peroxide	H ₂ O ₂	007722-84-1	100 %	O, C																															
Hydrogen peroxide	H ₂ O ₂	007722-84-1	90 %	O, C																															
Hydrogen peroxide	H ₂ O ₂	007722-84-1	3 %	Xi																															

CHEMICALS	FORMULA	CAS-NR.	CONCENTRATION	HAZARD NOTE	FLAMMABLE	thermoplastics													fluoroplastics		elastomers		metals		COMMENT					
						HDPE	LDPE	PA	PC	PETG	PMP	POM	PP	PS	PSU	PVC HART	PVC WEICH	SAN	ECTFE / ETFE	FEP	PTFE	PVDF	EPDM	FPM / FKM		NBR	SI	AL	V2A	V4A
Magnesium bromide	MgBr ₂	007789-48-2		Xi		1/1	1/1	(2)	(1)	0/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	(1)	(2)	0/0	(3)	0/0	0/0		
Magnesium carbonate	MgCO ₃	000546-93-0	saturated	—		1/1	1/1	1/0	1/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	
Magnesium chloride	MgCl ₂	007786-30-3	aqueous	Xi		1/1	1/1	1/0	1/0	1/0	1/2	1/1	1/1	1/0	1/1	1/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/0	1/1	1/1	1/0L	1/0L	
Magnesium chlorite	Mg(ClO ₂) ₂	??		O		0/0	0/0	0/0	0/0	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	1/1	0/0	0/0	1/1	0/0	0/0	0/0	0/0	1/1	0/0	0/0	0/0	
Magnesium hydroxide	Mg(OH) ₂	001309-42-8	saturated	—		1/1	1/1	1/0	(2)	1/1	1/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/0	1/1	1/1	1/1	0/0	
Magnesium iodide	MgI ₂	010377-58-9		(Xn)		1/1	1/1	(2)	(2)	(2)	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	(1)	1/1	(1)	(2)	0/0	(2)	0/0	0/0	
Magnesium nitrate	Mg(NO ₃) ₂	010377-60-3	saturated	O, Xi		1/1	1/1	1/0	(2)	(1)	1/0	1/1	1/1	1/0	1/0	1/1	1/0	0/0	1/1	1/1	1/1	1/1	1/1	(1)	(2)	0/0	1/0	1/0	1/0	1/1
Magnesiumsulfat	MgSO ₄	007487-88-9	each	—		1/1	1/1	1/0	1/0	1/0	1/0	1/1	1/1	1/0	1/1	1/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/0	0/0	1/1	1/1	1/1	
Maize-germ oil	—	008001-30-7	techn. pure	—		1/3	0/0	(2)	(1)	1/0	0/0	(2)	1/3	1/1	0/0	3/0	0/0	1/1	0/0	(1)	1/1	1/1	4/4	1/1	1/0	0/0	(1)	1/1	1/1	1/1
Maleic acid	C ₄ H ₂ O ₄	000110-16-7	saturated	Xn		1/1	1/1	4/4	(3)	0/0	0/0	(3)	1/1	0/0	0/0	1/3	1/0	0/0	1/1	1/1	1/1	1/1	4/4	1/1	4/4	0/0	1/1	1/1	1/1	
Maleic acid	C ₄ H ₂ O ₄	000110-16-7	aqueous	Xn		1/1	1/1	4/4	(3)	0/0	0/0	(3)	1/1	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/1	4/4	1/1	1/0	0/0	1/1	1/1	1/1	1/1	
Margarine	—	—	—	—		0/0	0/0	(2)	1/0	1/0	0/0	(2)	1/1	1/0	0/0	0/0	1/1	0/0	(1)	1/1	1/1	4/4	1/0	1/0	0/0	(1)	1/1	1/1	1/1	
Menthol	C ₁₀ H ₂₀ O	000089-78-1	solid	Xi		1/3	3/4	3/0	3/4	0/0	(2)	1/3	4/4	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	3/0	1/0	3/3	0/0	(1)	1/0	1/0	1/0	
Mercuric chloride	HgCl ₂	007487-94-7	aqueous	T+, C		1/1	1/1	4/4	1/0	(2)	1/1	3/0	1/1	1/3	1/0	1/3	1/0	1/1	1/1	1/1	1/1	1/0	1/1	1/3	0/0	4/4	(4)	(4)	1/1	
Mercuric cyanide	C ₂ HgN ₂	000592-04-1	saturated	T+		1/1	1/1	(3)	(2)	(2)	(3)	1/1	0/0	0/0	1/3	0/0	0/0	(1)	1/1	1/1	(1)	1/1	(2)	0/0	4/4	1/0	1/0	1/1	1/1	
Mercuric nitrate	Hg(NO ₃) ₂	010045-94-0	saturated	(T+)		1/1	1/1	1/0	(2)	(2)	(3)	1/1	1/0	0/0	1/3	1/0	0/0	(1)	1/1	1/1	1/1	1/0	1/1	1/3	0/0	4/4	1/1	1/1	1/1	
Mercury	Hg	007439-97-6	pure	T		1/1	1/1	1/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	3/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	(3)	1/1	1/1	1/1	
Mesityl oxide	C ₉ H ₁₀ O	000141-79-7		Xn	X	0/0	0/0	(2)	(4)	(4)	(4)	(2)	(3)	4/4	0/0	0/0	0/0	4/4	0/0	(1)	1/1	0/0	3/0	4/4	4/4	0/0	(1)	(1)	(1)	
Methacetone	—	—		-> see: Pentanone, 3-																										
Methacrylic acid	C ₅ H ₈ O ₂	000079-41-4		C		1/0	1/1	4/4	4/4	0/0	0/0	4/4	1/1	0/0	0/0	0/0	0/0	0/0	(1)	1/1	(3)	3/0	4/4	4/4	0/0	(4)	0/0	0/0	0/0	
Methane	CH ₄	000074-82-8	techn. pure	F+	X	1/0	0/0	1/0	1/0	1/0	0/0	1/0	1/0	0/0	0/0	1/0	0/0	0/0	0/0	1/1	1/1	1/1	4/4	1/0	1/0	0/0	1/1	1/1	1/1	0/0
Methanoic acid	—	—		-> see: Formic acid																										
Methenamine	—	—		-> see: Hexamethylenetetramine																										
Methoxy butanol	C ₇ H ₁₂ O ₂	—	100 %	?	X	0/0	1/3	(2)	(3)	0/0	0/0	(2)	1/3	0/0	0/0	0/0	0/0	0/0	(1)	1/1	(2)	3/0	1/0	1/0	0/0	(1)	(1)	(1)	isomer not indicated in the source	
Methoxyethane	C ₃ H ₈ O	000540-67-0	100 %	(F+)	X	0/0	3/0	(1)	(4)	0/0	(4)	(2)	(3)	4/4	0/0	0/0	0/0	0/0	(1)	1/0	(2)	4/4	4/4	4/4	0/0	1/1	(1)	(1)	Methyl ethyl ether;	
Methoxyethyl oleate	—	—		-> see: Ethylene glycol monomethyl ether oleate																										
Methyl acetate	C ₄ H ₈ O ₂	000079-20-9	techn. pure	F	X	1/0	1/1	1/0	4/4	3/0	(4)	2/0	1/3	4/4	0/0	4/4	4/4	4/4	0/0	1/0	1/1	1/4	3/0	4/4	4/4	0/0	(1)	1/1	1/1	0/0
Methyl acrylate	C ₅ H ₈ O ₂	000096-33-3		F, Xn	X	0/0	0/0	(2)	4/4	(4)	(4)	(2)	(2)	4/4	0/0	0/0	0/0	0/0	(1)	(1)	(3)	4/4	4/4	4/4	4/4	0/0	(1)	(1)	(1)	
Methyl alcohol	CH ₃ O	000067-56-1		F, T	X	1/1	1/1	2/0	4/4	1/0	1/1	1/1	1/1	3/4	3/3	1/3	3/3	3/4	1/1	1/1	1/1	1/1	1/0	3/4	3/3	0/0	1/0	1/1	(1)	
Methyl amine	CH ₃ N	000074-89-5	32 %	F+, C	X	1/0	1/0	4/4	4/4	0/0	0/0	1/0	1/0	0/0	0/0	3/0	4/4	0/0	(1)	1/0	3/0	1/0	4/4	4/4	0/0	1/0	1/0	1/0	0/0	
Methyl benzene	C ₆ H ₆	000108-88-3		F, Xn	X	3/4	3/4	1/0	4/4	1/0	3/3	1/3	3/4	4/4	4/4	4/4	4/4	1/1	1/1	1/0	1/1	4/4	3/3	4/4	0/0	1/1	1/1	1/1	1/1	
Methyl bromide	CH ₃ Br	000074-83-9	techn. pure	T		3/0	4/4	1/0	(3)	0/0	0/0	1/0	4/4	4/4	0/0	4/4	4/4	0/0	0/0	1/0	1/0	1/1	4/4	1/0	4/4	0/0	4/4	1/1L	1/1L	0/0
Methyl butanol	C ₅ H ₁₂ O	—		Xn	X	0/0	0/0	(2)	(2)	1/0	0/0	1/0	1/0	0/0	0/0	1/3	0/0	(1)	1/1	1/1	3/0	2/2	3/3	0/0	(1)	(1)	(1)	isomer not indicated in the source		
Methyl butyl ketone	C ₈ H ₁₆ O	000591-78-6		F, T	X	0/0	0/0	(2)	(4)	(4)	(2)	(3)	4/4	0/0	0/0	0/0	0/0	(1)	(1)	(3)	1/0	4/4	4/4	0/0	(1)	(1)	(1)	(1)		
Methyl cellosolveat oleate	—	—		-> see: Ethylene glycol monomethyl ether oleate																										
Methyl chloride	CH ₂ Cl	000074-87-3	techn. pure	F+, T	X	3/0	2/0	4/4	(3)	0/0	0/0	1/0	4/4	4/4	4/4	4/4	4/4	4/4	0/0	1/0	1/0	1/1	4/4	4/4	4/4	0/0	4/4	1/1L	1/1L	
Methyl cyanide	—	—		-> see: Acetonitrile																										
Methyl dichloroacetate	C ₂ H ₂ Cl ₂ O ₂	000116-54-1		(Xn)		1/1	0/0	(3)	(4)	(4)	(3)	1/1	0/0	0/0	4/4	0/0	0/0	0/0	(1)	1/1	3/3	4/4	4/4	4/4	0/0	(3)	0/0	0/0		
Methyl ethyl carbinol	—	—		-> see: Butyl alcohol, sec-																										
Methyl ethyl ether	—	—		-> see: Methoxyethane																										
Methyl ethyl ketone (MEK)	C ₄ H ₈ O	000078-93-3		F	X	1/3	3/4	1/0	4/4	4/4	4/4	1/2	1/3	4/4	4/4	4/4	4/4	4/4	2/3	1/1	1/1	3/4	3/0	4/4	4/4	0/0	(1)	(1)	(1)	0/0
Methyl ethylene oxide	—	—		-> see: Propylene oxid																										
Methyl formate	C ₂ H ₄ O ₂	000107-31-3		F+	X	0/0	0/0	(2)	4/4	0/0	(4)	(2)	(2)	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(3)	2/0	4/4	4/4	4/4	0/0	(1)	(1)	(1)	0/0
Methyl isobutyl ketone	C ₈ H ₁₆ O	000108-10-1		F	X	1/2	2/3	1/0	4/4	(4)	3/3	(2)	2/4	4/4	4/4	4/4	4/4	4/4	2/3	1/1	1/1	(3)	4/4	4/4	4/4	0/0	(1)	(1)	(1)	0/0
Methyl isopropyl ketone	C ₆ H ₁₀ O	000563-80-4		F	X	0/0	0/0	(2)	4/4	(4)	(4)	(2)	(3)	4/4	0/0	0/0	0/0	4/4	0/0	(1)	(1)	(3)	3/0	4/4	4/4	0/0	(1)	(1)	(1)	
Methyl ketone	—	—		-> see: Acetone																										
Methyl methacrylate	C ₅ H ₈ O ₂	0																												

CHEMICALS	FORMULA	CAS-NR.	CONCENTRATION	HAZARD NOTE	FLAMMABLE	thermoplastics													fluoroplastics		elastomers		metals		COMMENT						
						HDPE	LDPE	PA	PC	PETG	PMP	POM	PP	PS	PSU	PVC HART	PVC WEICH	SAN	ECTFE / ETFE	FEP	PTFE	PVDF	EPDM	FPM / FKM		NBR	SI	AL	V2A	V4A	Haselloy C
Oxalic acid	C ₂ H ₂ O ₄ x 2H ₂ O	000144-62-7		Xn		1/1	1/1	3/4	1/0	0/0	1/1	4/4	1/1	1/1	1/0	1/1	1/1	1/1	1/1	1/1	1/1	1/3	1/0	1/1	3/3	0/0	1/0	2/3	1/3	1/3	
Oxygen	O ₂	007782-44-7	techn. pure	O		1/3	1/3	2/0	1/0	(1)	0/0	1/0	1/3	1/0	0/0	1/1	1/0	0/0	0/0	1/1	1/1	1/1	1/0	1/0	3/3	0/0	(2)	(1)	(1)	0/0	
Ozone	O ₃	010028-15-6		(O, T)		3/4	3/4	4/4	1/2	0/0	1/1	4/4	3/4	2/2	1/1	1/2	0/0	1/1	1/1	1/1	(1)	1/3	1/0	1/0	4/4	0/0	(2)	0/0	0/0	0/0	
Ozone-air-mixture	—	—		(O, T)		0/0	0/0	4/4	(2)	0/0	0/0	4/4	3/4	0/0	0/0	0/0	0/0	0/0	1/1	1/1	(1)	(2)	1/0	1/0	4/4	0/0	(2)	0/0	0/0	0/0	
Palm kernel oil	—	008023-79-8		—		0/0	0/0	1/0	(2)	1/0	0/0	(2)	1/3	1/1	0/0	0/0	0/0	0/0	(1)	1/1	1/1	4/4	1/0	1/1	0/0	(1)	1/1	1/1	1/1		
Palm oil	—	008002-75-3		—		1/3	0/0	1/0	(2)	1/0	0/0	(2)	1/3	0/0	0/0	1/0	0/0	1/1	0/0	(1)	1/1	1/1	4/4	1/0	1/1	0/0	(1)	1/1	1/1		
Palmitic acid	C ₁₆ H ₃₂ O ₂	000057-10-3	techn. pure	Xi		3/3	2/2	1/1	(2)	1/0	0/0	1/0	3/4	1/1	0/0	1/1	3/0	1/1	0/0	(1)	1/1	1/1	4/4	1/1	3/3	0/0	1/1	1/1	1/1		
Paraffin wax	—	008002-74-2		melted	(—)	0	0	0	(2)	0	0	(2)	2	0	0	0	0	0	0	(1)	1	0	4	(2)	1	0	1	1	1	1	
Paraffin-emulsion	—	—		?		1/3	0/0	1/0	(2)	(2)	0/0	2	1/3	0/0	1/0	1/0	0/0	0/0	(1)	1/1	1/1	(4)	1/0	1/1	0/0	(2)	(1)	(1)	0/0		
Paraffins	C _n H _{2n+2}	—	100 %	?		1/0	1/1	1/0	1/0	1/0	1/1	1/1	1/0	1/0	1/0	1/0	0/0	0/0	(1)	1/1	(1)	4/4	1/0	1/3	0/0	1/1	1/1	1/1	1/1		
Paraformaldehyde	(CH ₂ O) _n ·H ₂ O	030525-89-4		F, T	X	0/0	0/0	0/0	(2)	1/0	0/0	(2)	1/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(2)	3/0	1/0	3/3	0/0	(1)	(1)	(1)	Polyoxymethylene;	
Peanut oil	—	008002-03-7		—		0/0	0/0	0/0	(2)	1/0	0/0	(2)	1/1	1/1	0/0	0/0	0/0	1/1	0/0	(1)	1/1	(1)	4/4	1/0	1/0	0/0	(1)	(1)	(1)	0/0	
Pectin	—	009000-69-5	aqueous	—		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1		
Pectin	—	009000-69-5		—		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1		
Pelargonic alcohol	-> see: Nonyl alcohol	—		—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Penicillin	—	—		Xn		(1)	(1)	(2)	(1)	(1)	0/0	(1)	(2)	0/0	0/0	0/0	0/0	1/1	(1)	1/1	(1)	(1)	(2)	(1)	(2)	0/0	(1)	(1)	(1)	antibiotic	
Pentachlorobiphenyl	C ₁₂ H ₂ Cl ₅	—		Xn		0/0	0/0	1/0	(3)	0/0	0/0	(2)	4/4	0/0	0/0	0/0	0/0	0/0	(1)	(2)	4/4	3/0	4/4	0/0	(1)	0/0	0/0	0/0	0/0		
Pentamethyleneimine	-> see: Piperidine	—		—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Pentane, normal	C ₅ H ₁₂	000109-66-0		F	X	1/3	1/3	1/0	1/0	1/1	(3)	1/0	(3)	3/0	0/0	0/0	0/0	1/0	0/0	(1)	(1)	4/4	1/0	1/2	0/0	1/1	1/1	1/1			
Pentanethiol, 1-	C ₅ H ₁₂ S	000110-66-7		Xn	X	0/0	0/0	(2)	(3)	0/0	(4)	(2)	(2)	0/0	0/0	0/0	0/0	4/4	0/0	(1)	(1)	(2)	4/4	(3)	(4)	0/0	(2)	(1)	(1)		
Pentanol, 1-	C ₅ H ₁₂ O	000071-41-0		Xn	X	1/1	1/2	1/0	1/0	1/0	2/3	1/0	1/1	1/3	3/0	2/3	3/0	0/4	1/1	1/1	1/1	1/1	3/0	2/4	3/0	0/0	1/2	1/1	1/1	Amyl alcohol, n-; Butyl carbinol, n-; Pentyl alcohol, n-	
Pentanone, 3-	C ₅ H ₁₀ O	000096-22-0		F		2/2	2/3	(3)	4/4	(4)	2/3	1/0	2/2	4/4	4/4	4/4	4/4	2/3	1/1	1/1	(3)	(3)	(4)	(4)	0/0	(1)	(1)	(1)	0/0	Diethyl ketone; Dimethylacetone; Methacetone	
Pentyl alcohol, n-	-> see: Pentanol, 1-	—		—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Pepper	—	—		ground	?	0/0	0/0	(2)	1/0	(1)	0/0	(2)	(2)	4/4	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(1)	(2)	(2)	(2)	0/0	(1)	(1)	(1)		
Perchloric acid	HClO ₄	007601-90-3	70 %	E, O, C+		2/4	3/4	4/4	4/4	(4)	2/4	4/4	4/4	2/3	4/4	3/4	4/4	0/0	1/2	1/1	1/1	1/1	3/0	1/1	4/4	0/0	4/4	0/0	0/0	?	
Perchloric acid	HClO ₄	007601-90-3	20 %	Xi		0/0	1/3	4/4	3/0	0/0	0/0	4/4	1/3	0/0	0/0	1/3	3/0	0/0	0/0	1/1	1/1	1/1	2/0	1/1	4/4	0/0	4/4	0/0	1/1		
Perchlorobutadiene	C ₄ Cl ₆	000087-68-3		T		0/0	0/0	(3)	4/4	0/0	(4)	1/0	(3)	4/4	0/0	0/0	0/0	0/0	0/0	(1)	(2)	(3)	4/4	1/0	4/4	0/0	(3)	0/0	0/0		
Perchloroethylene	-> see: Tetrachloroethylene	—		—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Perfluorocyclobutane	C ₄ F ₈	000115-25-3		?		0/0	0/0	1/0	(3)	0/0	0/0	1/0	(3)	0/0	0/0	0/0	0/0	0/0	0/0	(1)	0/0	1/0	3/0	1/0	0/0	(3)	0/0	0/0			
Perfumes	—	—		?		3/0	3/0	1/0	(3)	1/0	0/0	(2)	1/0	4/4	0/0	1/0	3/0	0/0	0/0	(1)	(1)	(1)	(3)	(2)	(3)	0/0	(1)	(1)	(1)		
Permanganic acid, potassium salt	-> see: Potassium permanganate	—		—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Petroleum	—	008002-05-9		(Xn)		0/0	0/0	1/0	(3)	1/0	0/0	1/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/0	1/1	4/4	1/0	3/3	0/0	(1)	(1)	(1)	0/0	
Petroleum ether	—	008032-32-4	techn. pure	(F, Xn)	X	1/3	1/3	1/0	3/0	1/0	1/1	(1)	3/3	4/4	1/0	1/1	3/3	3/3	0/0	(1)	1/1	1/1	4/4	1/0	1/3	0/0	1/1	1/1	1/1		
Phenacetin	C ₁₀ H ₁₃ NO ₂	000062-44-2		Xn		0/0	0/0	0/0	0/0	0/0	(2)	1/2	0/0	0/0	0/0	0/0	1/1	0/0	0/0	(1)	(1)	(2)	(2)	(2)	0/0	(2)	(1)	(1)			
Phenethyl alcohol	C ₈ H ₁₀ O	000060-12-8		Xn		0/0	0/0	3/0	4/4	0/0	0/0	(2)	1/0	0/0	0/0	0/0	0/0	4/4	0/0	(1)	(1)	(2)	(3)	(2)	4/4	0/0	(1)	(1)	(1)		
Phenetole	-> see: Ethoxybenzene	—		—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Phenol	C ₆ H ₆ O	000108-95-2	10 %	T		1/1	1/1	4/4	4/4	4/4	1/0	4/4	1/1	4/4	4/4	1/3	3/3	3/3	0/0	1/0	1/1	1/1	4/4	2/3	4/4	0/0	1/1	1/2	1/1	0/0	
Phenol	C ₆ H ₆ O	000108-95-2	100 %	T, C		2/3	3/3	4/4	4/4	4/4	1/1	4/4	1/2	4/4	3/3	4/4	3/0	4/4	1/1	1/1	1/1	1/1	4/4	3/0	4/4	0/0	1/1	1/2	1/1	0/0	
Phenolic resin mass	—	—		?		1/1	1/1	(3)	(3)	0/0	0/0	(3)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(1)	(4)	(3)	(3)	0/0	(2)	(1)	(1)	0/0	
Phenyl chloride	-> see: Chlorobenzene	—		—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Phenyl methyl ketone	-> see: Acetophenone	—		—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Phenylethanone, 1-	-> see: Acetophenone	—		—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Phenyldiazine	C ₆ H ₈ N ₂	000100-63-0	techn. pure	T		3/0	0/0	(3)	(3)	0/0	0/0	(2)	3/4	0/0	0/0	4/4	0/0	0/0	0/0	(1)	1/1	1/1	4/4	1/3	4/4	0/0	(2)	0/0	0/0	0/0	
Phenyldiazine hydrochloride	C ₆ H ₈ N ₂ ·HCl	000059-88-1		T		0/0	0/0	(3)	(2)	0/0	0/0	(3)	1/3	0/0	0/0	3/0	0/0	0/0	0/0	(1)	1/1	1/1	(3)	1/3	1/3	0/0	(4)	(4L)	(4L)		
Phenylsulfonate	—	070528-83-5		?		0/0	1/1	0/0	0/0	0/0	0/0	0/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0		
Phosgene	COCl ₂	000075-44-5	liquid	T+, C		0/0	0/0	1/0	(3)	0/0	0/0	(2)	0/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/1	(3)	(3)	1/0	3/0	0/0	(3)	3/4	3/4	0/0	Carbonyl chloride; Chloroformyl chloride
Phosgene	COCl ₂	000075-44-5	gaseous	T+, C		0/0	3/0	1/0	(3)	0/0	0/0	(2)	3/4	0/0	0/0	4/4	0/0	0/0	0/0	(1)	1/1	(3)	(3)	(3)	3/0	0/0	(3)	3/4	3/4	0/0	
Phosphates	—	—	aqueous	?		1/1	1/1	0/0	0/0	(1)	0/0	(2)	3/4	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	(1)	(1)	(1)	(2)	0/0	0/0	(1)	(1)	salts of phosphoric acid	
Phosphine	PH ₃	007803-51-2	concentrated	F+, T+	X																										

CHEMICALS	thermoplastics										fluoroplastics			elastomers			metals			COMMENT												
	FORMULA	CAS-NR.	CONCENTRATION	HAZARD NOTE	FLAMMABLE	HDPE	LDPE	PA	PC	PETG	PMP	POM	PP	PS	PSU	PVC HART	PVC WEICH	SAN	ECTFE / ETFE		FEP	PTFE	PVDF	EPDM	FPM / FKM	NBR	SI	AL	V2A	V4A	Haselloy C	
Pineapple juice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pink	—	—	ground	?	0/0	0/0	(2)	4/4	(1)	0/0	(2)	(2)	4/4	0/0	0/0	0/0	4/4	0/0	(1)	1/1	(2)	(2)	(2)	(2)	(2)	0/0	(1)	(1)	(1)	(1)	0/0	—
Piperidine	C ₄ H ₁₁ N	000110-89-4	—	F, T, C	0/0	0/0	(3)	(3)	0/0	0/0	(2)	(2)	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(2)	4/4	4/4	4/4	0/0	(1)	(1)	(1)	(1)	0/0	—	Hexahydropyridine; Azacyclohexane; Pentamethylenimine
Plasticiser	—	—	—	?	1/3	1/3	(2)	(3)	0/0	0/0	(2)	1/3	0/0	0/0	0/0	0/0	3/3	0/0	(1)	(1)	0/0	(2-3)	0/0	4/4	0/0	(1)	(1)	(1)	(1)	0/0	—	
Polish remover	—	—	—	?	(X)	0/0	0/0	(2)	4/4	0/0	(4)	(2)	1/3	4/4	0/0	0/0	0/0	0/0	(1)	(1)	(2)	(3)	4/4	0/0	(1)	(1)	(1)	(1)	(1)	0/0	—	
Polyester resins	—	—	—	(Xn)	(X)	3/4	3/4	1/0	4/4	1/0	0/0	(2)	3/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(2)	4/4	(3)	4/4	0/0	(1)	(1)	(1)	(1)	0/0	—
Polyethylene glycol	HO-(C ₂ H ₄ O) _n -H	025322-68-3	100 %	(—)	1/1	1/1	(3)	0/0	0/0	0/0	1/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(2)	(2-3)	(2)	(3)	0/0	(1)	(1)	(1)	(1)	0/0	—	
Polyoxymethylene	-> see: Paraformaldehyde																															
Polyran M25 N	—	—	80°C	?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	(1)	(1)	0/0	lubricating oil	
Polyran M400	—	—	80°C	?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(1)	(1)	0/0	lubricating oil	
Polysolvan O	C ₂ H ₂ O ₃	007397-62-8	100 %	Xi	0/0	1/1	(2)	(3)	1/0	0/0	1/0	(2)	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	0/0	0/0	0/0	(3)	0/0	(1)	(1)	(1)	(1)	0/0	solvent cleaner, butyl glycolate; Celanese AG	
Potassium acetate	C ₂ H ₃ KO ₂	000127-08-2	aqueous	Xi	1/1	1/1	1/0	(1)	(2)	0/0	1/1	1/1	0/0	0/0	1/0	1/0	0/0	1/1	1/1	1/0	1/1	1/1	1/1	3/0	3/3	0/0	1/3	1/1	0/0	—		
Potassium bisulfate	KHSO ₄	007646-93-7	aqueous	(C)	1/1	1/1	4/4	1/0	(2)	0/0	2/0	1/1	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/1	1/0	1/0	1/0	1/0	1/0	1/0	4/4	4/4	1/1	—	
Potassium bisulfate	KHSO ₄	007646-93-7	—	C	1/1	1/1	4/4	1/0	0/0	0/0	2/0	1/1	1/1	0/0	0/0	0/0	1/1	1/1	1/1	1/1	1/1	1/0	1/0	1/0	1/0	1/0	4/4	4/4	?	—		
Potassium bitartrate	C ₄ H ₄ KO ₆	000868-14-4	saturated	Xi	1/1	1/1	(2)	(2)	0/0	0/0	(2)	1/1	0/0	0/0	1/0	1/0	0/0	1/1	1/1	1/1	1/1	(2)	(1)	(1)	0/0	(4)	1/3	1/2	0/0	—		
Potassium borate	KBO ₂	012228-88-5	10 %	(Xn)	1/1	1/1	1/0	(2)	(2)	0/0	1/1	1/1	0/0	0/0	1/3	0/0	0/0	1/1	1/1	1/1	1/0	1/0	1/0	1/0	1/0	(3)	0/0	0/0	0/0	—		
Potassium borate	KBO ₂	012228-88-5	aqueous	(Xn)	1/1	1/1	1/0	(2)	(2)	0/0	1/1	1/1	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/0	1/0	1/0	1/0	1/0	(3)	0/0	0/0	0/0	—		
Potassium bromate	KBrO ₃	007758-01-2	saturated	O, T	1/3	1/3	(2)	1/0	0/0	0/0	(2)	1/1	1/1	0/0	1/3	0/0	1/1	0/0	(1)	1/1	1/1	1/0	1/1	1/1	0/0	(2)	0/0	0/0	0/0	—		
Potassium bromate	KBrO ₃	007758-01-2	aqueous	O, T	0/0	0/0	(2)	(2)	0/0	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	1/0	1/1	1/1	0/0	(2)	0/0	0/0	0/0	—		
Potassium bromide	KBr	007758-02-3	each	Xn	1/1	1/1	3/0	1/0	(1)	1/0	1/1	1/1	0/0	1/3	1/0	1/0	0/0	1/1	1/1	1/1	1/0	1/1	1/1	1/0	1/0	1/0	1/0	1/0L	1/0L	1/1	—	
Potassium carbonate	K ₂ CO ₃	000584-08-7	saturated	Xn	1/1	1/1	1/1	3/3	(2)	1/1	1/1	1/1	0/0	1/1	1/1	1/1	0/0	1/1	1/1	1/1	1/3	1/0	1/0	1/0	1/0	4/4	1/1	1/1	1/1	—		
Potassium carbonate	K ₂ CO ₃	000584-08-7	aqueous	Xn	1/1	1/1	1/0	(2)	(2)	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/0	1/0	1/0	1/0	4/4	1/1	1/1	1/1	—		
Potassium chlorate	KClO ₃	003811-04-9	saturated	O, Xn	1/1	0/0	1/0	(2)	0/0	0/0	2/0	1/1	1/0	0/0	1/1	0/0	0/0	(1)	1/1	1/1	1/0	1/1	4/4	0/0	1/1	1/1	1/1	1/1	1/1	—		
Potassium chlorate	KClO ₃	003811-04-9	aqueous	O, Xn	1/1	0/0	1/0	(2)	0/0	0/0	2/0	1/1	1/0	0/0	1/1	0/0	0/0	(1)	1/1	1/1	1/0	1/1	4/4	0/0	1/1	1/1	1/1	1/1	1/1	—		
Potassium chloride	KCl	007447-40-7	aqueous	Xi	1/1	1/1	1/0	1/0	1/0	1/0	1/1	1/1	1/1	1/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/0	1/1	1/1	0/0	1/3	1/1L	1/1L	1/1	—		
Potassium chromate	K ₂ CrO ₄	007789-00-6	saturated	T	1/0	1/1	2/0	(2)	0/0	1/0	(2)	1/1	1/1	0/0	1/1	1/0	1/1	0/0	(1)	1/1	1/1	1/0	1/0	3/3	0/0	1/1	(1)	(1)	1/1	—		
Potassium chromate	K ₂ CrO ₄	007789-00-6	aqueous	T	0/0	0/0	(2)	(2)	0/0	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	1/0	1/0	3/3	0/0	1/1	(1)	(1)	1/1	—			
Potassium cyanide	KCN	000151-50-8	saturated	T+	1/1	1/1	1/0	4/4	0/0	0/0	3/0	1/1	0/0	0/0	1/3	4/4	0/0	0/0	1/1	1/1	1/3	1/0	1/1	3/3	0/0	3/4	1/0	1/0	1/1	—		
Potassium cyanide	KCN	000151-50-8	aqueous	T+	1/1	1/1	1/0	4/4	0/0	0/0	3/0	1/1	0/0	0/0	1/3	1/4	0/0	0/0	1/1	1/1	1/3	1/0	1/1	3/3	0/0	3/4	1/0	1/0	1/1	—		
Potassium dichromate	K ₂ Cr ₂ O ₇	007778-50-9	saturated	T	1/1	1/0	4/4	3/0	3/0	1/0	3/0	1/1	1/3	0/0	1/3	1/0	1/3	0/0	(1)	1/1	1/1	1/0	2/0	3/3	0/0	1/1	1/1	1/1	1/1	—		
Potassium dichromate	K ₂ Cr ₂ O ₇	007778-50-9	aqueous	T	0/0	0/0	3/0	1/0	3/0	3/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	1/0	2/0	3/3	0/0	1/1	1/1	1/1	1/1	1/1	—		
Potassium ferricyanide	C ₆ FeK ₃ N ₆	013746-66-2	each	Xn	1/1	1/1	1/0	(1)	(1)	0/0	2/0	1/1	1/1	0/0	1/3	1/1	0/0	1/1	1/1	1/1	1/1	(1)	(1)	(1)	0/0	1/1	1/1	1/1	1/1	—		
Potassium ferrocyanide	C ₆ FeK ₄ N ₆ x 3H ₂ O	014459-95-1	saturated	—	1/1	1/1	1/0	(2)	(1)	0/0	2/0	1/1	0/0	0/0	1/1	1/1	0/0	1/1	1/1	1/1	1/1	(1)	(1)	(1)	0/0	(1)	1/1	1/1	—			
Potassium ferrocyanide	C ₆ FeK ₄ N ₆ x 3H ₂ O	014459-95-1	diluted	—	1/0	1/1	1/0	(1)	(1)	0/0	2/0	1/1	0/0	0/0	1/3	1/0	0/0	1/1	1/1	1/1	1/1	(1)	(1)	(1)	0/0	1/1	1/1	1/1	—			
Potassium fluoride	KF	007789-23-3	—	T	1/1	1/1	1/0	(2)	(2)	0/0	1/1	1/1	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/1	(1)	(1)	1/0	(1)	0/0	1/1	1/1	1/1	0/0	—		
Potassium hydrogen carbonate	CHKO ₃	000298-14-6	saturated	—	1/1	1/1	1/0	(2)	(2)	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/1	1/1	1/0	1/1	0/0	4/4	(1)	(1)	1/1	—		
Potassium hydroxide	KHO	001310-58-3	10 %	C+	1/1	1/1	1/0	4/4	4/4	0/0	1/1	1/1	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/1	1/1	1/0	4/4	3/3	0/0	4/4	1/1	1/1	1/1	—		
Potassium hydroxide	KHO	001310-58-3	30 %	C+	1/1	1/1	1/3	4/4	4/4	1/0	(3)	1/1	1/0	1/0	1/3	1/0	0/0	0/0	1/1	(2)	1/0	4/4	3/3	0/0	4/4	1/1	1/1	1/1	1/1	—		
Potassium hydroxide	KHO	001310-58-3	50 %	C+	1/1	1/1	1/3	4/4	4/4	1/1	3/0	1/1	2/2	1/1	1/3	1/0	1/3	1/1	1/1	1/1	3/3	1/0	4/4	3/4	0/0	4/4	1/1	1/1	1/1	—		
Potassium hydroxide	KHO	001310-58-3	concentrated	C+	1/1	1/1	1/0	4/4	4/4	1/1	3/0	1/1	2/2	1/1	1/2	1/0	1/3	1/1	1/1	1/1	3/3	1/0	4/4	3/4	0/0	4/4	1/1	1/1	1/1	—		
Potassium hydroxide	KHO	001310-58-3	1 %	Xi	1/1	1/1	1/0	3/4	(4)	1/1	1/1	1/1	2/2	1/1	1/1	0/0	0/0	1/1	1/1	1/1	1/1	1/0	1/3	3/3	0/0	4/4	1/1	1/1	1/1	—		
Potassium hypochlorite	KClO	007778-66-7	diluted	(O, C)	1/0	1/3	3/0	(3)	(3)	1/0	4/4	1/3	3/0	1/0	1/0	0/0	0/0	(1)	1/1	1/1	3/0	1/0	3/3	0/0	4/4	3/3L	2/2L	1/1	0/0	—		
Potassium iodate	KJO ₃	007758-05-6	—	O	0/0	0/0	(2)	(2)	(2)	0/0	(2)	1/																				

CHEMICALS	FORMULA	CAS-NR.	CONCENTRATION	HAZARD NOTE	FLAMMABLE	thermoplastics													fluoroplastics		elastomers		metals		COMMENT									
						HDPE	LDPE	PA	PC	PETG	PMP	POM	PP	PS	PSU	PVC HART	PVC WEICH	SAN	ECTFE / ETFE	FEP	PTFE	PVDF	EPDM	FPM / FKM		NBR	SI	AL	V2A	V4A	Haselloy C			
Sodium carbonate	Na ₂ CO ₃	000497-19-8		Xi		1/1	1/1	1/0	1/0	0/0	1/1	1/1	1/1	2/0	0/0	1/1	0/0	1/3	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/1	2/3	0/0	1/0	1/1L	1/1L	1/1	Chloric acid, sodium salt;	
Sodium chlorate	NaClO ₃	007775-09-9	each	O, Xn		1/1	1/0	1/0	1/0	0/0	1/0	2/0	1/1	1/0	0/0	1/3	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/1	2/3	0/0	1/0	1/1L	1/1L	1/1	Chloric acid, sodium salt;			
Sodium chlorate	NaClO ₃	007775-09-9	aqueous	O, Xn		0/0	0/0	3/0	1/0	1/0	0/0	2/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/1	3/3	0/0	1/0	1/1L	1/1L	1/1	Chloric acid, sodium salt;			
Sodium chloride	NaCl	007647-14-5	each	—		1/1	1/1	1/0	1/1	1/1	1/0	1/2	1/1	1/1	1/0	1/3	1/3	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/0	3/4	1/2	1/2	1/1			
Sodium chloride	NaCl	007647-14-5	aqueous	—		1/1	1/1	1/1	1/1	1/1	1/2	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	3/4	1/2	1/2	1/1			
Sodium chlorite	NaClO ₂	007758-19-2	diluted	(O, Xn)		1/0	1/3	1/4	(2)	0/0	0/0	(2)	1/3	0/0	0/0	3/0	4/4	0/0	0/0	(1)	1/1	1/1	1/0	1/1	4/4	0/0	3/4	3/4	3/3	0/0				
Sodium chromate	NaCrO ₄	007775-11-3	diluted	T		1/0	1/0	1/1	(2)	0/0	0/0	(2)	1/1	1/1	0/0	1/3	0/0	1/1	0/0	(1)	1/1	1/1	1/0	1/0	1/3	0/0	1/1	1/1	1/1	0/0				
Sodium cyanide	CNNa	000143-33-9	saturated	T		1/1	1/1	1/0	(3)	0/0	0/0	3/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/0	3/3	0/0	4/4	(2)	(2)	0/0		Hydrocyanic acid, sodium salt;		
Sodium cyanide	CNNa	000143-33-9	aqueous	T		1/1	1/1	1/0	(3)	1/0	0/0	3/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/0	1/0	0/0	4/4	(2)	(2)	0/0				
Sodium dichromate	Na ₂ Cr ₂ O ₇	010588-01-9		T		0/0	1/1	1/0	1/0	3/0	1/1	(3)	1/1	1/1	0/0	1/0	0/0	0/0	1/1	(1)	1/1	1/1	1/0	1/0	3/3	0/0	1/1	(1)	(1)	1/1				
Sodium dithionite	-> see: Sodium hydrosulfite																																	
Sodium dodecylbenzene sulfonate	C ₁₈ H ₂₉ NaSO ₃	025155-30-0		Xn		1/1	1/1	(2)	(2)	1/0	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/1	(1)	(1)	(1)	(1)	(2)	0/0	(2)	(1)	(1)				
Sodium ferrocyanide	C ₆ FeNa ₅	013601-19-9		Xn		1/1	1/1	(1)	(2)	(1)	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	(1)	(1)	(1)	(2)	0/0	(1)	(1)	(1)				
Sodium fluoride	NaF	007681-49-4	saturated	Xn		1/1	1/1	1/0	(2)	(1)	1/0	1/1	1/0	0/0	1/0	1/3	1/1	0/0	1/1	1/1	1/1	1/0	1/0	1/1	0/0	1/1	0/0	0/0	1/1					
Sodium hydrosulfite	Na ₂ S ₂ O ₄	007775-14-6	10 %	Xn		1/1	0/0	(2)	(2)	0/0	(2)	1/1	0/0	0/0	1/3	0/0	1/1	0/0	(1)	1/1	1/3	1/0	1/1	3/3	0/0	4/4	1/1	1/1				Sodium dithionite; Dithionous acid, disodium salt; Sodium sulfoxylate;		
Sodium hydrosulfite	Na ₂ S ₂ O ₄	007775-14-6		Xn		1/1	0/0	(2)	(2)	0/0	(2)	1/1	0/0	0/0	1/3	0/0	1/1	0/0	(1)	1/1	1/3	1/0	1/1	3/3	0/0	4/4	1/1	1/1						
Sodium hydroxide	NaOH	001310-73-2	concentrated	C		1/1	1/1	1/3	4/4	4/4	0/0	(3)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	(2)	1/0	4/4	3/4	0/0	4/4	(2)	(2)	?			caustic soda, sodium hydrate, soda lye		
Sodium hydroxide	NaOH	001310-73-2	30 %	C+		1/1	1/1	1/0	4/4	4/4	1/0	1/3	1/1	1/0	1/0	1/3	1/3	0/0	0/0	1/1	1/1	(2)	1/0	(3)	2/3	0/0	4/4	1/3	1/3	1/1			caustic soda, sodium hydrate, soda lye	
Sodium hydroxide	NaOH	001310-73-2	45 %	C+		1/1	1/1	1/0	4/4	4/4	1/0	1/3	1/1	1/1	1/0	1/3	1/3	1/1	0/0	0/0	1/1	(2)	1/0	2/4	2/3	0/0	4/4	1/3	1/3	1/1			caustic soda, sodium hydrate, soda lye	
Sodium hydroxide	NaOH	001310-73-2	50 %	C+		1/1	1/1	1/0	4/4	4/4	1/1	1/3	1/1	2/2	1/1	1/2	0/0	0/3	1/1	1/1	1/1	3/3	1/0	3/4	3/3	0/0	4/4	1/3	1/3	1/1			caustic soda, sodium hydrate, soda lye	
Sodium hydroxide	NaOH	001310-73-2	60 %	C+		1/1	1/1	1/0	4/4	4/4	1/0	(3)	1/1	1/0	1/0	0/0	0/0	0/0	0/0	0/0	1/1	(2)	1/0	3/4	2/3	0/0	4/4	1/3	1/3	1/1			caustic soda, sodium hydrate, soda lye	
Sodium hydroxide	NaOH	001310-73-2	1 %	Xi		1/1	1/1	1/0	3/4	(3)	1/1	1/1	1/1	2/2	1/1	1/1	0/0	0/0	1/1	1/1	1/1	1/0	1/1	1/0	1/1	1/3	0/0	(4)	1/1	1/1	1/1			caustic soda, sodium hydrate, soda lye
Sodium hypochlorite	NaClO	007681-52-9	diluted	(O, C)		2/3	2/3	4/4	(3)	3/0	1/3	4/4	2/3	1/3	1/1	1/3	1/0	1/1	0/0	1/1	1/1	1/1	1/1	3/0	1/3	4/4	0/0	4/4	3/3L	2/2L	0/0			sodium oxychloride, sodium chloride oxide
Sodium hypochlorite	NaClO	007681-52-9	15 %	O, C		2/3	2/3	4/4	2/3	(3)	1/3	4/4	2/3	1/3	1/1	1/1	0/0	1/1	1/1	1/1	1/1	3/4	3/0	1/3	4/4	0/0	4/4	3/3L	2/2L	0/0			sodium oxychloride, sodium chloride oxide	
Sodium hypochlorite	NaClO	007681-52-9	saturated	O, C		2/3	2/3	4/4	2/3	(3)	1/3	4/4	2/3	1/3	1/1	1/3	0/0	1/1	0/0	(1)	1/1	(3)	3/0	1/3	4/4	0/0	4/4	3/3L	2/2L	0/0			sodium oxychloride, sodium chloride oxide	
Sodium hypochlorite	NaClO	007681-52-9	12,5 % Cl	O, C		2/3	2/3	4/4	2/3	(3)	1/3	4/4	2/3	1/3	1/1	1/3	1/0	1/1	1/1	1/1	1/1	1/1	3/0	1/3	4/4	0/0	4/4	3/3L	2/2L	0/0			sodium oxychloride, sodium chloride oxide	
Sodium iodide	NaI	007681-82-5	each	Xi		1/1	1/1	(2)	(1)	(1)	0/0	1/1	1/0	0/0	1/3	0/0	0/0	1/1	1/1	1/1	1/3	(1)	(1)	1/1	0/0	1/1	3/4	3/4	0/0					
Sodium metabisulfite	Na ₂ S ₂ O ₅	007681-57-4	each	Xn		1/1	1/1	1/0	(2)	(2)	0/0	4/4	1/1	0/0	0/0	1/3	0/0	0/0	(1)	1/1	1/1	1/0	1/0	1/0	0/0	1/0	1/1	1/1						
Sodium nitrate	NaNO ₃	007631-99-4	saturated	O, Xn		1/1	1/1	1/0	1/0	(1)	1/1	1/0	1/1	1/1	1/0	1/3	1/3	1/1	1/1	1/1	1/1	1/0	1/1	2/3	0/0	1/1	1/1	1/1	1/1				chile salt peter	
Sodium nitrate	NaNO ₃	007631-99-4	aqueous	O, Xn		1/1	1/1	1/0	1/0	1/0	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/1	1/0	1/1	1/0	0/0	1/1	1/1	1/1	1/1			chile salt peter	
Sodium nitrite	NaNO ₂	007632-00-0	saturated	O, T		1/1	1/1	1/0	(2)	(1)	1/0	1/1	1/1	1/1	0/0	1/0	1/0	1/1	0/0	(1)	1/1	1/1	1/0	1/1	2/3	0/0	1/0	1/1	1/1	1/1			Nitrous acid, sodium salt;	
Sodium nitrite	NaNO ₂	007632-00-0	aqueous	O, T		1/1	1/1	1/0	(2)	1/0	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	1/0	1/1	1/0	0/0	1/0	1/1	1/1	1/1					
Sodium oxalate	C ₂ Na ₂ O ₄	000062-76-0	saturated	Xn		1/1	1/1	(1)	(1)	(1)	0/0	1/1	1/1	0/0	1/3	0/0	0/0	1/1	1/1	1/1	1/3	(1)	1/0	1/0	0/0	1/1	(2)	(2)						
Sodium perborate	NaBO ₂ (HO) ₂ x 3H ₂ O	013517-20-9	saturated	(O, Xn)		1/1	1/1	4/4	(2)	0/0	0/0	2/0	1/1	1/1	0/0	1/0	3/0	1/1	0/0	(1)	1/1	1/1	1/0	1/0	3/0	0/0	1/0	1/0	1/0	1/0				
Sodium perborate	NaBO ₂ (HO) ₂ x 3H ₂ O	013517-20-9	aqueous	(O, Xn)		1/1	1/1	4/4	(2)	3/0	0/0	2/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	1/0	1/0	3/0	0/0	1/0	1/0	1/0	1/0				
Sodium perchlorate	NaClO ₄	007601-89-0	saturated	O, Xn		1/1	1/1	(2)	(1)	(1)	0/0	1/1	1/1	0/0	0/0	1/0	0/0	0/0	0/0	(1)	1/1	1/1	1/0	1/0	(1)	0/0	1/1	1/1	1/1	1/1				
Sodium peroxide	Na ₂ O ₂	001313-60-6	10 %	O, C+		0/0	1/3	4/4	(3)	(4)	0/0	4/4	2/2	0/0	0/0	1/0	0/0	0/0	0/0	1/1	1/1	1/0	1/0	3/0	0/0	4/4	1/1	1/1	0/0					
Sodium peroxide	Na ₂ O ₂	001313-60-6	saturated	O, C+		0/0	3/3	4/4	(3)	(4)	0/0	4/4	2/2	0/0	0/0	1/0	0/0	0/0	0/0	0/0	1/1	1/1	1/0	1/0	(4)	0/0	4/4	(2)	(2)	0/0				
Sodium persulfate	Na ₂ S ₂ O ₈	007775-27-1	saturated	O, Xi		1/1	0/0	4/4	(2)	0/0	0/0	(3)	1/1	0/0	0/0	1/3	0/0	0/0	0/0	(1)	1/1	1/1	1/0	1/0	(3)	0/0	4/4	0/0	1/0	0/0				
Sodium phosphate	Na ₃ PO ₄ x 12H ₂ O	010101-89-0	saturated	Xi		1/1																												

CHEMICALS	thermoplastics										fluoroplastics		elastomers		metals		COMMENT															
	FORMULA	CAS-NR.	CONCENTRATION	HAZARD NOTE	FLAMMABLE	HDPE	LDPE	PA	PC	PETG	PMP	POM	PP	PS	PSU	PVC HART		PVC WEICH	SAN	ECTFE / ETFE	FEP	PTFE	PVDF	EPDM	FPM / FKM	NBR	SI	AL	V2A	V4A	Hastelloy C	
Spindle oil	—	—	—	?	3/3	2/3	(2)	(2)	1/0	0/0	(2)	1/4	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/0	(3)	(2)	4/4	0/0	(4)	3/4	2/4	0/0			
Spinning bath acid	—	—	100mg CS ₂ /l	?	1/0	0/0	4/4	(3)	0/0	0/0	4/4	1/0	0/0	0/0	1/0	0/0	0/0	0/0	(1)	1/1	1/0	(3)	(2)	4/4	0/0	(4)	3/4	2/4	0/0			
Spirit (of wine)	C ₂ H ₆ O	—	—	F	X	1/0	1/3	1/0	1/3	1/1	1/2	1/2	1/1	3/4	1/2	1/3	3/0	1/3	1/1	1/1	1/1	1/1	1/0	3/0	3/3	0/0	1/1	1/1	1/1		ethyl alcohol	
Spirits	C ₂ H ₆ O	—	—	—	—	1/1	1/0	1/0	1/1	1/1	0/0	1/2	1/1	0/0	1/0	1/1	0/0	0/0	1/1	1/1	1/1	1/1	1/0	1/0	1/1	0/0	1/1	1/1	1/1	0/0	ethyl alcohol 40 %	
Spirits of Turpentine	—	008006-64-2	—	Xn	X	2/2	3/4	1/0	4/4	1/0	3/3	1/1	4/4	4/4	4/4	2/3	4/4	3/3	1/1	1/1	1/0	1/3	4/4	1/1	3/3	0/0	1/1	1/1	1/1	1/1		
Spirits of wine	C ₂ H ₆ O	—	50 %	(F)	X	1/0	1/1	1/0	1/1	1/1	1/0	1/2	1/1	1/0	1/0	1/0	3/0	0/0	0/0	1/1	1/1	1/1	1/0	(2)	1/1	0/0	1/1	1/1	1/1	1/1		ethyl alcohol
Spirits of wine	C ₂ H ₆ O	—	96 %	F	X	1/0	1/3	1/0	1/3	1/1	1/2	1/2	1/1	3/4	1/2	1/3	3/0	1/3	1/1	1/1	1/1	1/1	1/0	3/0	3/3	0/0	1/1	1/1	1/1	1/1		ethyl alcohol
Spruce oil	—	008008-80-8	—	?	—	1/2	2/4	(2)	2/3	0/0	2/3	(2)	1/2	4/4	3/3	3/4	0/0	3/4	1/2	1/1	(1)	(2)	4/4	1/0	3/3	0/0	(1)	(1)	(1)		pinus sylvestris	
Stannic chloride	SnCl ₄	007646-78-8	aqueous	C	1/1	1/1	4/4	(3)	0/0	0/0	(4)	1/1	4/4	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/0	1/0	0/0	4/4	4/4	3/4				
Stannous chloride	SnCl ₂	007772-99-8	aqueous	(C, Xn)	—	1/1	1/1	(4)	(2)	0/0	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/0	1/1	0/0	4/4	4/4	3/4	1/1			
Stannous chloride	SnCl ₂	007772-99-8	saturated	C, Xn	1/1	1/1	4/4	1/0	0/0	0/0	(2)	1/1	1/1	0/0	1/0	1/0	1/1	0/0	1/1	1/1	1/1	1/0	1/1	1/1	0/0	4/4	4/4	3/4	1/1			
Starch solution	(C ₆ H ₁₀ O ₅) _n	—	each	—	1/1	1/1	1/1	1/1	1/1	0/0	1/1	1/1	0/0	1/1	0/0	1/1	0/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/0		
Starch syrup	—	—	—	—	1/1	1/1	1/1	1/1	1/1	0/0	1/1	1/1	0/0	1/1	0/0	1/1	0/0	0/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/0	1/1	1/1	1/1	0/0		
Stauffer grease, thick	—	—	—	(—)	0/0	0/0	(2)	(2)	(1)	0/0	(1)	(2)	1/4	0/0	0/0	0/0	1/1	0/0	(1)	1/1	(1)	4/4	(1)	(2)	0/0	(1)	1/1	1/1	0/0			
Steam	H ₂ O	—	up to 150°C	?	4	4	4/4	0/0	0	(3)	(3)	0	0	0	0	0	0	0	0	1	0	1	3	4/4	0	(1)	1/1	1/1				
Stearic acid	C ₁₈ H ₃₆ O ₂	000057-11-4	crystals	Xi	1/3	1/3	1/0	1/2	1/0	1/1	1/0	1/3	1/2	2/2	1/2	1/1	1/1	1/1	1/1	1/1	1/1	3/0	1/1	3/3	0/0	1/1	1/1	1/1	1/1			
Srtrontium bromide	SrBr ₂	010476-81-0	—	Xi	1/1	1/1	(2)	(1)	(1)	0/0	(1)	0/0	0/0	0/0	0/0	0/0	0/0	1/1	0/0	1/1	(1)	(1)	(1)	(2)	0/0	(3)	0/0	0/0				
Strychnine	C ₂₂ H ₂₂ N ₂ O ₂	000057-24-9	—	T+	1/1	1/1	(1)	(1)	(2)	0/0	(2)	(1)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	(1)	(2)	(2)	(2)	0/0	(2)	(1)	(1)			
Styrene	C ₈ H ₈	000100-42-5	100 %	Xn, Xi	X	4/4	3/4	1/1	4/4	1/1	(4)	1/1	3/4	0/0	0/0	4/4	4/4	0/0	0/0	1/0	1/1	(2)	4/4	3/0	4/4	0/0	1/1	1/1	1/1	0/0		
Succinic acid	C ₄ H ₆ O ₄	000110-15-6	50 %	Xi	1/1	1/1	(3)	(2)	0/0	0/0	(3)	1/1	0/0	0/0	2/0	0/0	0/0	1/1	1/1	1/1	1/0	1/1	(1)	0/0	1/1	1/0	1/0	1/1				
Succinic acid	C ₄ H ₆ O ₄	000110-15-6	saturated	Xi	1/1	1/1	(3)	(2)	0/0	0/0	(3)	1/1	1/1	0/0	1/3	1/0	0/0	1/1	1/1	1/1	1/1	1/0	1/1	1/1	0/0	1/1	1/0	1/0	?			
Sugar acid	—	—	saturated	(Xi)	1/1	1/1	(3)	(2)	0/0	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	(1)	1/0	(1)	(1)	0/0	(3)	0/0	0/0				
Sugar beet juice	—	—	—	—	1/1	1/1	1/0	1/0	0/0	1/0	1/1	1/1	1/0	0/0	1/0	0/0	1/1	1/1	1/1	1/1	1/1	1/0	1/0	1/1	0/0	(2)	(1)	(1)				
Sugar syrup	—	—	—	—	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/3	0/0	0/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1			
Sulfur	S ₈	007704-34-9	techn. pure	Xi	1/1	1/1	1/0	1/0	(2)	0/0	1/0	1/1	1/1	0/0	3/0	3/4	1/1	0/0	(1)	1/1	1/1	3/0	1/1	4/4	0/0	(1)	1/1	1/1	1/1		flower of sulfur	
Sulfur (mono)chloride	S ₂ Cl ₂	010025-67-9	—	C	0/0	0/0	4/4	(3)	0/0	0/0	4/4	4/4	0/0	0/0	0/0	0/0	0/0	0/0	1/0	1/1	1/0	4/4	1/0	4/4	0/0	3/4	1/1	1/1	1/0			
Sulfur dioxide	SO ₂	007446-09-5	damp	T, C	1/1	1/1	(3)	(3)	0/0	1/1	4/4	1/3	3/4	2/2	1/2	0/0	0/0	1/1	1/1	1/1	1/4	1/0	4/4	4/4	0/0	3/4	1/1	1/1	1/0		with H2O->sulfurous acid	
Sulfur dioxide	SO ₂	007446-09-5	liquid	T, C	3/4	4/4	(3)	3/4	0/0	4/4	4/4	4/4	4/4	2/2	3/4	0/0	0/0	1/2	1/1	1/1	4/4	1/0	4/4	4/4	0/0	(3)	(1)	(1)	1/0		with H2O->sulfurous acid	
Sulfur hexafluoride	SF ₆	002551-62-4	—	—	0/0	0/0	1/0	(2)	1/0	0/0	(2)	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/1	(2)	1/0	3/0	1/0	0/0	(1)	(1)	(1)					
Sulfur trioxide	SO ₃	007446-11-9	—	C+	4/4	4/4	4/4	(4)	(4)	0/0	4/4	4/4	0/0	4/4	0/0	0/0	0/0	(2)	(2)	3/4	3/0	1/0	4/4	0/0	(3)	(1)	(1)	0/0				
Sulfur, melted, 121 °C	S ₈	007704-34-9	?	?	0	0	(4)	(3)	0	4	4	4	0	0	0	0	0	0	(1)	0	4	1	4	0	(3)	1	1	0/0				
Sulfuric acid	H ₂ SO ₄	007664-93-9	40 %	C+	1/1	1/1	4/4	2/0	(4)	1/2	4/4	1/1	2/0	3/0	1/3	1/3	1/1	1/1	1/1	1/1	1/1	(3)	1/1	4/4	0/0	3/4	2/3	2/3	0/0			
Sulfuric acid	H ₂ SO ₄	007664-93-9	60 %	C+	1/3	1/3	4/4	3/3	(4)	1/2	4/4	1/3	2/4	1/1	1/2	0/0	0/0	1/1	1/1	1/1	1/1	4/4	1/1	4/4	0/0	4/4	4/4	3/4	0/0			
Sulfuric acid	H ₂ SO ₄	007664-93-9	80 %	C+	1/1	1/1	4/4	3/4	4/4	1/2	4/4	1/1	3/4	3/0	1/1	1/3	0/0	1/1	1/1	1/1	1/1	4/4	1/1	4/4	0/0	4/4	2/4	2/3	0/0			
Sulfuric acid	H ₂ SO ₄	007664-93-9	95 %	C+	3/4	3/4	4/4	4/4	4/4	2/2	4/4	3/4	4/4	4/4	2/4	0/0	4/4	1/1	1/1	1/1	1/1	4/4	1/1	4/4	0/0	4/4	1/3	1/3	0/0			
Sulfuric acid	H ₂ SO ₄	007664-93-9	fuming	C+	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	0/0	(1)	1/0	4/4	4/4	1/0	4/4	0/0	(3)	1/2	1/1	0/0		oleum	
Sulfuric acid	H ₂ SO ₄	007664-93-9	1-6 %	Xi	1/1	1/1	4/4	1/1	0/0	1/1	4/4	1/1	1/2	1/1	1/2	0/0	1/1	1/1	1/1	1/1	1/1	1/0	1/1	3/0	0/0	(3)	2/2	1/2	0/0			
Sulfuric acid	H ₂ SO ₄	007664-93-9	20 %	Xi	1/1	1/1	4/4	1/2	0/0	1/2	4/4	1/2	1/2	1/1	1/2	0/0	0/0	1/1	1/1	1/1	1/1	2/0	1/1	4/4	0/0	(3)	2/3	2/3				
Sulfuric acid	-> see: Battery acid																															
Sulfurous acid	H ₂ SO ₃	007782-99-2	saturated	(C)	1/1	1/1	4/4	4/4	1/0	0/0	4/4	1/1	0/0	0/0	1/1	0/0	0/0	0/0	1/1	1/1	1/1	3/0	(3)	3/4	0/0	3/4	1/1	1/1	1/1			
Sulfurous acid, disodium salt	-> see: Sodium sulfite																															
Sulfuryl chloride	Cl ₂ SO ₂	007791-25-5	techn. pure	C	4/4	4/4	4/4	1/0	0/0	0/0	4/4	4/4	0/0	0/0	4/4	4/4	0/0	0/0	0/0	1/0	3/0	3/0	1/0	4/4	0/0	3/4	0/0	0/0				
Tallow	—	—	techn. pure	—	1/1	1/1	1/0	(1)	1/0	0/0	1/0	1/1	0/0	0/0	1/1																	

CHEMICALS	FORMULA	CAS-NR.	CONCENTRATION	HAZARD NOTE	FLAMMABLE	thermoplastics																	fluoroplastics		elastomers		metals		COMMENT					
						HDPE	LDPE	PA	PC	PETG	PMP	POM	PP	PS	PSU	PVC HART	PVC WEICH	SAN	ECTFE / ETFE	FEP	PTFE	PVDF	EPDM	FPM / FKM	NBR	SI	AL	V2A		V4A	Haselloy C			
Titanium (tetra)chloride	TiCl ₄	007550-45-0		C		0/0	0/0	4/4	(3)	0/0	0/0	(3)	(3)	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(2)	4/4	3/0	4/4	0/0	(1)	1/1	1/1	
Toluene	—	092045-38-0	100 %	T		1/0	1/3	1/0	(3)	0/0	0/0	1/0	1/3	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(2)	4/4	3/0	4/4	0/0	(1)	1/1	1/1		
Train oil	—	—	—	—		0/0	0/0	1/0	(2)	1/0	0/0	(1)	(2)	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(1)	3/4	1/0	1/0	0/0	(1)	(1)	(1)		
Transformer oil	—	—	—	?		1/3	3/3	1/0	(3)	1/1	1/0	3/3	1/3	1/3	1/0	1/0	0/0	1/3	0/0	(1)	1/1	(3)	4/4	2/3	3/3	0/0	1/1	(1)	(1)	(1)	0/0			
Triacetin	C ₉ H ₁₄ O ₆	000102-76-1		Xn		0/0	0/0	0/0	(3)	0/0	0/0	(2)	(2)	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(2)	1/0	4/4	3/3	0/0	(1)	(1)	(1)	(1)				
Tribromomethane	CHBr ₃	000075-25-2		T		4/4	4/4	4/4	4/4	4/4	4/4	(4)	4/4	4/4	4/4	4/4	0/0	0/0	2/3	1/1	(1)	(2)	4/4	(4)	4/4	0/0	(3)	0/0	0/0	0/0				
Tributyl citrate (TBC)	C ₁₈ H ₃₂ O ₇	000077-94-1		—		1/2	2/3	(2)	4/4	0/0	2/3	(2)	2/3	4/4	3/3	3/4	0/0	0/0	1/2	1/1	(1)	(2)	(3)	(3)	(3)	(3)	(3)	(3)	(1)	(1)	(1)			
Tributyl phosphate (TBP)	C ₁₂ H ₂₇ PO ₄	000126-73-8	techn. pure	Xn		1/1	1/1	1/0	(3)	0/0	0/0	(2)	1/3	0/0	0/0	4/4	4/4	0/0	0/0	(1)	1/1	1/0	3/0	4/4	4/4	0/0	(1)	(1)	(1)	1/1				
Trichloroacetaldehyde	C ₂ HCl ₃ O	000075-87-6	100 %	T/Xi		1/1	1/1	4/4	(3)	(4)	0/0	(3)	1/1	0/0	0/0	4/4	4/4	0/0	0/0	(1)	0/0	(4)	3/0	(4)	4/4	0/0	4/4	0/0	0/0	0/0				
Trichloroacetic acid (TCA)	C ₂ HCl ₃ O ₂	000076-03-9		C+		1/4	3/4	4/4	4/4	0/0	4/4	1/1	4/4	0/0	4/4	4/4	0/0	0/0	1/0	1/1	1/4	3/0	4/4	4/4	0/0	1/3	3/0L	2/0L	1/1					
Trichlorobenzene	C ₆ H ₃ Cl ₃	—	100 %	(Xn)		4/4	4/4	(3)	(3)	0/0	(4)	(2)	4/4	4/4	0/0	4/4	4/4	4/4	0/0	(1)	(2)	(3)	(4)	(3)	4/4	0/0	(2)	0/0	0/0	0/0	isomer not indicated in the source			
Trichloroethane	C ₂ H ₂ Cl ₃	—		Xn		3/4	4/4	3/0	4/4	4/4	4/4	(2)	4/4	4/4	4/4	4/4	4/4	1/2	1/1	(1)	1/3	4/4	1/0	4/4	0/0	4/4	0/0	4/4	0/0	0/0	isomer not indicated in the source			
Trichloroethylene (TRI)	C ₂ HCl ₃	000079-01-6	100 %	Xn		3/4	4/4	3/0	4/4	4/4	4/4	(2)	4/4	4/4	4/4	4/4	4/4	0/4	1/2	1/1	1/0	1/1	4/4	1/3	4/4	0/0	1/3	1/1L	1/1L	1/0				
Trichlorofluoromethane	CCl ₃ F	000075-69-4		N		0/0	0/0	1/0	(3)	0/0	0/0	1/0	(3)	0/0	0/0	0/0	0/0	0/0	0/0	(3)	(1)	0/0	4/4	2/0	1/0	0/0	(3)	0/0	0/0	0/0				
Trichlorophenol	C ₆ H ₂ Cl ₃ O	—		(Xn, Xi)		0/0	0/0	(3)	(4)	0/0	0/0	(3)	(3)	0/0	0/0	0/0	0/0	4/4	0/0	(1)	(1)	(3)	(4)	(3)	(4)	0/0	(3)	0/0	0/0	0/0	isomer not indicated in the source			
Trichlorotrifluoroethane	C ₂ Cl ₃ F ₃	000076-13-1		?		0/0	0/0	1/0	(3)	1/0	0/0	1/0	(3)	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/0	4/4	3/0	1/0	0/0	(3)	0/0	0/0	0/0					
Trichlorotrifluoroethane	C ₂ Cl ₂ F ₃	—	100 %	?		4/4	3/4	1/0	3/0	0/0	0/0	1/0	4/4	1/0	3/4	4/4	3/3	0/0	0/0	(1)	1/0	4/4	3/0	1/0	0/0	(3)	0/0	0/0	0/0	isomer not indicated in the source				
Tricresyl phosphate (TCF)	C ₂₁ H ₂₇ PO ₄	—	techn. pure	T/Xn, N		1/1	1/1	1/0	4/4	1/0	0/0	1/0	1/3	4/4	0/0	4/4	4/4	4/4	0/0	(1)	1/1	(3)	3/0	3/4	4/4	0/0	1/1	1/1	1/1	1/1	isomer not indicated in the source			
Triethanolamine (TEA)	C ₆ H ₁₅ NO ₃	000102-71-6	techn. pure	Xi		1/1	1/2	(2)	1/0	0/0	2/2	1/1	1/1	0/0	3/0	4/4	1/1	0/0	1/1	1/0	1/0	2/0	4/4	4/4	0/0	(1)	(1)	(1)	0/0					
Triethylamine (TEA)	C ₆ H ₁₅ N	000121-44-8	techn. pure	F, C, Xn	X	0/0	0/0	(2)	(3)	0/0	0/0	1/1	4/4	0/0	0/0	0/0	0/0	0/0	(1)	1/1	3/4	4/4	3/0	3/4	0/0	(1)	(1)	(1)	0/0					
Triethylene glycol	C ₈ H ₁₈ O ₄	000112-27-6		Xi		1/1	1/1	(3)	1/2	0/0	1/1	1/0	1/1	1/2	1/1	2/3	0/0	1/1	1/1	1/1	(1)	(2)	(2)	(1)	(3)	0/0	(1)	(1)	0/0					
Triethylene glycol diacetate	C ₁₀ H ₁₈ O ₆	000111-21-7		?		0/0	0/0	(3)	(3)	0/0	0/0	1/0	(2)	0/0	0/0	0/0	0/0	4/4	0/0	(1)	(1)	(3)	(3)	(4)	(4)	0/0	(1)	(1)	(1)					
Trihydroxypropane, 1,2,3-	—	—	—	-> see: Glycerol																														
Triiodomethane	—	—	—	-> see: Iodoform																														
Triisopropylbenzene	C ₉ H ₁₂	000171-74-8		—		0/0	0/0	(2)	(3)	0/0	(4)	(2)	(3)	4/4	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(2)	4/4	1/0	1/0	0/0	1/1	(1)	(1)					
Trimethylbenzene, 1,2,4-	C ₉ H ₁₂	000095-63-6		Xn	X	0/0	0/0	(1)	(4)	0/0	(2)	3/3	4/4	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(2)	4/4	(2)	4/4	0/0	1/1	1/1	1/1	0/0					
Trimethylolpropane	C ₈ H ₁₆ O ₃	000077-99-6	aqueous	—		0/0	0/0	(2)	(2)	0/0	1/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	(1)	(1)	(2)	(2)	0/0	(1)	(1)	(1)						
Trimethylpentane, 2,2,4-	C ₈ H ₁₈	000540-84-1	techn. pure	F, Xn	X	1/3	1/3	1/0	(2)	1/0	(4)	1/0	1/3	3/4	1/0	1/0	4/4	1/1	0/0	(1)	1/1	1/1	4/4	1/0	1/0	0/0	1/1	1/1	0/0	Iso-octane; Isobutyltrimethylmethane				
Trioctyl phosphate	C ₂₄ H ₅₂ PO ₄	000078-42-2	techn. pure	(Xn)		3/0	1/0	1/0	(3)	0/0	0/0	(2)	1/3	0/0	0/0	4/4	0/0	0/0	(1)	1/1	(3)	3/0	3/4	4/4	0/0	(1)	(1)	(1)	0/0	Tris(2-ethylhexyl) phosphate				
Tripolypropylene glycol (TPG)	C ₂₄ H ₄₈ O ₄	024800-44-0		(—)		1/1	1/1	(3)	1/2	0/0	1/1	1/0	1/1	1/1	1/1	2/3	0/0	0/0	1/1	1/1	1/1	(2)	(3)	(2)	(3)	0/0	(1)	(1)	(1)					
Trisodium phosphate	Na ₃ PO ₄	007601-54-9		Xi		1/1	1/1	1/0	(2)	0/0	1/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/1	1/1	1/1	0/0	(4)	1/1	1/1						
Turbine oil (based on mineral oil)	—	—	—	?		0/0	0/0	(1)	(2)	1/0	0/0	(2)	1/3	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	4/4	(2)	1/0	0/0	1/1	1/1	1/1					
Turpentine surrogate	—	—	—	Xn, N	X	0/0	0/0	1/0	(3)	1/0	(4)	1/0	(3)	4/4	0/0	0/0	0/0	1/3	0/0	(1)	1/1	(1)	4/4	1/1	(3)	0/0	1/1	1/1	1/1					
Two-stroke oil	—	—	100 %	—		0/0	1/3	1/0	(2)	1/0	0/0	1/1	1/3	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	4/4	1/0	1/0	0/0	1/1	1/1	1/1						
Undecanol	C ₁₁ H ₂₄ O	000112-42-5		Xi		1/2	1/3	(1)	2/3	(1)	1/2	1/0	1/2	2/2	3/3	1/3	0/0	1/1	1/2	1/1	1/1	(1)	(3)	(1)	(2)	0/0	(1)	(1)	(1)					
Urea	CH ₄ N ₂ O	000057-13-6	aqueous	Xi		1/1	1/1	1/0	1/1	1/0	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/1	1/1	1/0	1/1	0/0	1/1	1/0	1/0	1/1				
Urea	CH ₄ N ₂ O	000057-13-6		Xi		1/1	1/1	1/0	1/1	0/0	1/2	1/1	1/1	1/2	3/3	2/4	3/3	1/1	1/1	1/1	1/1	1/1	1/0	1/1	1/1	0/0	1/1	1/0	1/0	1/1				
Uric acid	C ₅ H ₄ N ₄ O ₃	000069-93-2		Xi		1/1	1/1	(2)	1/0	1/0	0/0	1/0	1/0	0/0	1/0	1/0	0/0	1/1	1/1	1/1	1/1	1/0	(1)	(1)	0/0	4/4	1/1	1/1	0/0					
Urine	—	—	—	—		1/1	1/1	1/0	1/0	1/0	0/0	1/1	1/1	3/0	0/0	1/3	1/0	0/0	1/1	1/1	1/1	1/1	1/0	1/0	1/1	0/0	(2)	1/1	1/1	1/1				
Urotropin	—	—	—	-> see: Hexamethylenetetramine																														
Valerian drops	—	—	—	?		0/0	0/0	(2)	(2)	(2)	0/0	(2)	(2)	4/4	0/0	0/0	0/0	1/0	0/0	1/1	1/1	(1)	(3)	(3)	(2)	0/0	(2)	(1)	(1)					
Vaseline	—	008009-03-8	techn. pure	(—)		3/4	2/3	1/0	1/0	1/0	0/0	0/0	1/3	1/1	0/0	3/0	0/0	1/1	0/0	(1)	1/1	1/1	3/0	1/1	1/1	0/0	1/1	1/1	1/1	petrolatum				
Vaseline oil	—	008012-95-1	100 %	?		0/0	1/3	1/0	(2)	1/0	1/0	1/0	1/3	1/0	1/0	1/0	3/0	0/0	0/0	(1)	(1)	(1)	3/0	1/0	1/0	0/0	1/1	1/1	1/1	1/1	paraffin oil			
Vaseline oil	—	008012-95-1		?		1/1	1/3	1/0	1/0	0/0	0/0	1/1	1/3	1/1	0/0	1/3	1/0	1/1	0/0	(1)	1/1	1/1	4/4	1/1	1/3	0/0	1/1	1/1	1/1	1/1	paraffin oil			
Vegetable oils	—	—	—	—		0/0	0/0	0/0	(2)	1/0	0/0	(2)	1/3	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	4/4	1/0	1/0	0/0	(1)	1/1	1/1						
Vinegar	C ₂ H ₄ O ₂	000064-19-7		(Xi)		1/1	1/3	4/4	1/2	1/1	1/0	1/3	1/1	1/0	1/0	1/0	3/0	1/1	1/1	1/1	1/1	1/1	1/1	1/0	3/3	3/3	0/0	1/3	1/2	1/2	1/1			

CHEMICALS	FORMULA	CAS-NR.	CONCENTRATION	HAZARD NOTE	thermoplastics													fluoroplastics			elastomers			metals		COMMENT								
					FLAMMABLE	HDPE	LDPE	PA	PC	PETG	PMP	POM	PP	PS	PSU	PVC HART	PVC WEICH	SAN	ECTFE / ETFE	FEP	PTFE	PVDF	EPDM	FPM / FKM	NBR		SI	AL	V2A	V4A	Hastelloy C			
Wines	—	—	—	—	1/1	1/1	1/0	1/0	1/1	1/0	(2)	1/1	1/1	1/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/1	1/0	1/0	0/0	(4)	1/1	1/1	1/1	
Wort for fermentation	—	—	—	?	1/1	1/1	(2)	(2)	(1)	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	1/1	1/0	1/0	0/0	1/1	1/1	(1)	(1)	0/0	
Xenon	Xe	007440-63-3	—	—	0/0	0/0	1/0	(1)	1/1	0/0	1/1	(2)	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	1/1	1/1	1/1	1/0	1/0	0/0	1/1	1/1	1/1			
Xylene	C ₈ H ₁₀	001330-20-7	—	(F), Xn X	3/4	3/4	1/0	4/4	0/0	3/4	1/2	4/4	4/4	4/4	4/4	4/4	4/4	1/2	1/1	1/0	1/3	4/4	1/3	4/4	0/0	1/1	1/1	1/1	1/1	1/1				
Yeast	—	—	each	—	1/1	1/1	1/0	(1)	1/0	0/0	1/1	1/1	0/0	0/0	1/0	1/0	0/0	1/1	1/1	1/1	1/1	1/0	1/0	1/1	0/0	1/1	(1)	(1)						
Zinc acetate	C ₄ H ₆ ZnO ₄	000557-34-6	aqueous	Xn, Xi	1/1	1/1	(2)	(2)	(2)	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	(1)	1/0	(3)	3/3	0/0	(3)	(1)	(1)				
Zinc bromide	ZnBr ₂	007699-45-8	—	C, Xn	1/1	1/1	4/4	(2)	0/0	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	1/1	0/0	1/1	1/1	(1)	(2)	(1)	(2)	0/0	(3)	0/0	0/0					
Zinc carbonate	ZnCO ₃	003486-35-9	saturated	?	1/1	1/1	(1)	1/1	1/1	0/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	(2)	(1)	(1)	0/0		small solubility - no chemical effect expected	
Zinc chloride	ZnCl ₂	007646-85-7	aqueous	(C, Xn)	1/1	1/1	3/4	(2)	0/0	0/0	2/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	1/1	1/0	1/1	1/1	0/0	3/4	1/4L	1/3L	1/1					
Zinc nitrate	Zn(NO ₃) ₂	007779-88-6	—	O, C, Xn	1/1	1/1	1/4	(2)	0/0	0/0	(2)	1/1	1/0	1/0	1/0	1/0	1/1	0/0	1/1	1/1	(1)	1/0	(1)	(2)	0/0	(3)	(1)	(1)	0/0					
Zinc oxide	ZnO	001314-13-2	solid	Xn, Xi	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	(2)	1/1	1/1			small solubility - no chemical effect expected	
Zinc oxide ointment	—	—	—	?	0/0	0/0	(1)	(2)	(2)	0/0	(2)	(2)	1/1	0/0	0/0	0/0	1/1	0/0	(1)	1/1	(2)	(4)	(2)	(2)	0/0	(2)	(1)	(1)						
Zinc phosphate	Zn ₃ (PO ₄) ₂	007779-90-0	saturated	?	1/1	1/1	(1)	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	(2)	(1)	(1)	0/0				
Zinc sludge	—	—	—	?	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(2)	0/0	0/0	0/0	(3)	0/0	0/0							
Zinc stearate	C ₃₆ H ₇₀ ZnO ₄	000557-05-1	—	Xi	1/1	1/1	(1)	1/1	0/0	1/1	1/1	1/1	1/1	1/1	1/1	1/2	1/1	1/1	1/1	1/1	1/1	(2)	1/1	(2)	0/0	(2)	(1)	(1)						
Zinc sulfate	ZnSO ₄	007733-02-0	10 %	—	1/1	1/1	(3)	1/0	(2)	1/0	2/0	1/1	1/1	0/0	1/1	1/0	1/1	1/1	1/1	1/1	1/1	1/0	1/1	1/0	0/0	3/4	1/1	1/1	1/1					
Zinkchlorid	ZnCl ₂	007646-85-7	10 %	C, Xn	1/1	1/1	3/4	1/0	0/0	1/1	2/0	1/1	1/3	0/0	1/3	1/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/0	3/4	1/4L	1/3L	1/1					

Kendrion Kuhnke Automation GmbH
Lütjenburger Straße 101
23714 Malente
Germany
Phone: +49 4523 402-0
Fax: +49 4523 402-201
sales-ics@kendrion.com
www.kuhnke.kendrion.com