



Chemical resistance of plastics

To the website Kuhnke fluid isolation solenoid valves



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.

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Herausgeber

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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	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																								

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	0/0	(1)	1/1	(3)	3/0	4/4	4/4	0/0	(4)	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	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	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	0/0	(1)	(1)	(3)	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	0/0	(1)	1/0	3/0	1/0	4/4	4/4	0/0	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	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	0/0	(1)	(1)	(3)	1/0	4/4	4/4	0/0	(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	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	0/0	(1)	(1)	(3)	2/0	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	000080-62-6	100 %	F, Xi	X	0/0	0/0	(2)	4/4	(4)	(4)	(2)	(2)	4/4	0/0	4/4	4/4	0/0	0/0	1/0	1/1	(3)	4/4	4/4	4/4	0/0	1/1	(1)	(1)	0/0
Methyl propyl ketone	C ₇ H ₁₄ O	000107-87-9		(F)	X	1/2	2/3	(2)	4/4	(4)	3/3	(2)	2/3	4/4	4/4	4/4	0/0	4/4	1/2	1/1	(1)	(2)	(3)	4/4	4/4	0/0	(1)	(1)	(1)	
Methyl salicylate	C ₉ H ₈ O ₃	000119-36-8		Xn, Xi		0/0	0/0	(3)	(3)	0/0	0/0	(3)	1/0	4/4	0/0	0/0	4/4	0/0	(1)	(1)	(3)	2/0	(3)	4/4	0/0	(2)	(1)	(1)	0/0	synthetic oil of wintergreen
Methyl sulfuric acid	CH ₃ SO ₄	000077-78-1	50 %	(C)		0/0	1/1	4/4	(4)	(4)	0/0	4/4	2/4	0/0	0/0	1/3	0/0	0/0	(1)	1/1	(2)									

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					
Molasses	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Molasses wort	—	—	—	?	—	1/1	1/1	1/0	(2)	(2)	0/0	(2)	1/1	0/0	0/0	1/1	0/0	0/0	1/1	1/1	1/1	1/1	1/0	1/0	1/1	0/0	(2)	(1)	(1)	—	—	—				
Monochlorobenzene (MCB)	-> see: Chlorobenzene																																			
Monochloroethane	C ₂ H ₅ Cl	000075-00-3	—	F+, Xn	X	3/3	3/4	1/0	4/4	0/0	3/4	1/0	3/4	4/4	4/4	4/4	4/4	1/1	1/1	1/0	1/1	4/4	3/0	4/4	0/0	(3)	1/1L	1/1L	0/0	—	—	—	Ethyl chloride; Chloroethane, 1-			
Morpholine	C ₄ H ₉ NO	000110-91-8	techn. pure	C, Xn	X	1/1	1/1	(3)	(3)	0/0	0/0	(2)	1/1	0/0	0/0	4/4	4/4	0/0	0/0	(1)	1/1	1/3	3/0	2/3	4/4	0/0	1/0	(1)	(1)	0/0	—	—	—	—		
Motor oil	—	—	—	?	—	0/0	0/0	1/0	(2)	(1)	0/0	1/1	1/3	0/0	0/0	0/0	0/0	0/0	(1)	(1)	1/1	4/4	1/0	1/0	0/0	1/1	1/1	1/1	—	—	—	—	—			
Mowliith D	—	—	—	?	—	1/0	0/0	(2)	0/0	(2)	0/0	(2)	1/0	0/0	0/0	1/0	0/0	0/0	(1)	1/1	1/0	(2)	(2)	(2)	0/0	(2)	(1)	(1)	0/0	—	—	—	—	dispersion of polyvinyl acetate; Clariant		
Muscat	—	—	ground	?	—	0/0	0/0	(2)	4/4	(2)	0/0	(2)	4/4	0/0	0/0	0/0	3/3	0/0	(1)	(2)	(2)	(2)	(2)	0/0	(1)	(1)	(1)	—	—	—	—	—	—			
Mustard	—	—	—	—	—	0/0	0/0	(2)	1/0	(1)	0/0	1/0	1/1	1/1	0/0	0/0	1/1	0/0	1/1	(1)	(1)	(2)	1/0	1/0	0/0	(2)	1/0L	1/0L	—	—	—	—	—	—		
Naphtha	—	008032-32-4	—	(Xn)	—	1/3	3/4	1/0	(2)	(1)	1/0	1/0	1/3	3/0	1/0	1/0	4/4	0/0	(1)	1/1	1/1	4/4	1/1	4/4	0/0	1/1	1/1	1/1	0/0	—	—	—	—	petroleum ether		
Naphthalene	C ₁₀ H ₈	000091-20-3	100 %	F, Xn	X	0/0	1/3	1/0	(3)	0/0	0/0	1/2	1/3	3/4	1/0	4/4	4/4	1/4	0/0	(1)	1/1	1/3	4/4	1/1	4/4	0/0	1/1	1/1	1/1	0/0	—	—	—	—		
Naphthalene (in alcohol)	—	—	—	F, Xn	X	1/4	1/4	(2)	(3)	0/0	0/0	1/2	1/3	3/4	0/0	0/0	0/0	3/4	0/0	(1)	1/1	(2)	4/4	(3)	(3)	0/0	(1)	(1)	(1)	0/0	—	—	—	—		
Neon	Ne	007440-01-9	—	—	—	0/0	0/0	1/0	(1)	1/1	0/0	1/1	(1)	0/0	0/0	0/0	0/0	0/0	1/1	(1)	1/1	1/1	1/1	1/0	0/0	1/1	1/1	1/1	—	—	—	—	—	—		
Nickel acetate	C ₂ H ₃ NO ₄	000373-02-4	aqueous	(T, N)	—	1/1	1/1	(3)	(2)	(1)	0/0	(2)	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1	(1)	1/0	(3)	3/0	0/0	4/4	0/0	0/0	—	—	—	—	—	—	
Nickel dichloride	NiCl ₂	00718-54-9	saturated	T	—	1/1	1/1	1/0	(2)	(1)	0/0	2/0	1/1	0/0	0/0	1/1	1/1	0/0	0/0	1/1	1/1	1/0	1/0	1/0	0/0	4/4	2/0L	2/0L	1/1	—	—	—	—	—		
Nickel dichloride	NiCl ₂	00718-54-9	aqueous	T	—	1/1	1/1	(3)	(2)	(1)	0/0	2/0	1/1	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	2/0L	2/0L	1/1	—	—	—	—	—		
Nickel sulfate	NiSO ₄	007786-81-4	saturated	Xn	—	1/1	1/1	1/0	1/0	(1)	1/0	2/0	1/1	1/1	0/0	1/1	1/3	1/1	0/0	1/1	1/1	1/0	1/1	1/1	0/0	4/4	1/1	1/1	—	—	—	—	—	—		
Nickel sulfate	NiSO ₄	007786-81-4	aqueous	Xn	—	1/1	1/1	(3)	1/0	(1)	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	4/4	1/1	1/1	—	—	—	—	—		
Nickelous nitrate	Ni(NO ₃) ₂	013138-45-9	saturated	(O, Xn)	—	1/1	1/1	(3)	(2)	(1)	1/0	(2)	1/1	1/0	1/0	1/1	1/1	0/0	0/0	1/1	1/1	1/1	1/0	1/0	1/0	0/0	4/4	1/0	1/0	—	—	—	—	—		
Nicotine	C ₁₀ H ₁₄ N ₂	000054-11-5	—	T+	—	1/0	1/0	(3)	(3)	0/0	0/0	(2)	1/0	1/0	0/0	1/0	0/0	0/0	(1)	(1)	(2)	1/0	1/0	1/0	0/0	(1)	(1)	(1)	0/0	—	—	—	—	—		
Nicotinic acid	C ₆ H ₇ NO ₂	000059-67-6	diluted	Xi	—	1/1	1/1	(3)	(2)	0/0	0/0	(3)	1/0	0/0	0/0	1/1	0/0	0/0	0/0	1/1	(1)	(2)	(2)	(3)	(2)	0/0	(3)	0/0	0/0	0/0	—	—	—	—	—	
Nitric acid	HNO ₃	007697-37-2	1-10 %	C	—	1/1	1/1	4/4	1/2	(2)	1/1	4/4	1/1	2/4	1/3	1/2	0/0	1/3	1/1	1/1	1/1	2/0	1/1	4/4	0/0	3/4	1/1	1/1	1/1	—	—	—	—	—		
Nitric acid	HNO ₃	007697-37-2	50 %	C+	—	2/4	3/4	4/4	4/4	(2)	2/4	4/4	3/4	4/4	2/3	2/3	0/0	0/3	1/1	1/1	1/1	1/1	4/4	1/0	4/4	0/0	4/4	1/2	1/2	1/2	—	—	—	—	—	
Nitric acid	HNO ₃	007697-37-2	66 %	C+	—	2/4	3/4	4/4	4/4	(4)	2/3	4/4	4/4	4/4	3/4	0/0	0/0	1/1	1/1	1/1	1/1	4/4	1/0	4/4	0/0	4/4	1/2	1/2	1/2	—	—	—	—	—		
Nitric acid	HNO ₃	007697-37-2	100 %	O, C+	—	4/4	4/4	4/4	4/4	(4)	0/0	4/4	4/4	0/0	0/0	4/4	0/0	4/4	0/0	0/0	1/1	4/4	4/4	4/4	4/4	0/0	1/1	2/3	3/3	?	—	—	—	—		
Nitric acid	HNO ₃	007697-37-2	70 %	O, C+	—	2/4	3/4	4/4	4/4	(4)	2/3	4/4	4/4	4/4	3/4	0/0	0/0	1/1	1/1	1/1	1/1	4/4	2/3	4/4	0/0	4/4	1/2	1/2	1/2	—	—	—	—	—		
Nitric acid	-> see: Ammonium nitrate																																			
Nitric acid, magnesium salt	-> see: Magnesium nitrate																																			
Nitric acid, potassium salt	-> see: Potassium nitrate																																			
Nitro benzoic acid	C ₇ H ₅ NO ₄	—	—	(Xn)	—	1/0	1/0	(3)	(3)	0/0	0/0	(3)	1/0	0/0	0/0	1/0	0/0	0/0	0/0	(1)	(1)	(2)	3/0	(3)	(2)	0/0	(3)	0/0	0/0	—	—	—	—	—	isomer not indicated in the source	
Nitro reducer	—	—	—	?	X	0/0	0/0	3/0	(4)	0/0	(4)	(3)	(3)	4/4	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(3)	(3)	(4)	4/4	0/0	(1)	(1)	(1)	—	—	—	—	—	solvent cleaner mixture	
Nitrobenzene	C ₆ H ₅ NO ₂	000098-95-3	—	T	—	3/4	4/4	4/4	4/4	1/0	4/4	3/0	2/4	4/4	4/4	4/4	4/4	1/2	1/1	1/1	1/1	4/4	4/4	4/4	0/0	(1)	1/1	1/1	1/1	—	—	—	—	—	—	
Nitroethane	C ₂ H ₅ NO ₂	000079-24-3	—	Xn	X	0/0	0/0	(3)	(4)	0/0	(3)	(2)	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(3)	3/0	4/4	4/4	0/0	(1)	(1)	(1)	—	—	—	—	—	—	—	
Nitrogen	N ₂	007727-37-9	—	—	—	0/0	0/0	1/0	1/1	1/1	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	0/0	1/1	1/1	1/1	—	—	—	—	—	—	—	
Nitrogen hydride	-> see: Hydrazine																																			
Nitrogen tetroxide	N ₂ O ₄	010544-72-6	—	(O), T+, C	—	0/0	0/0	3/0	(3)	1/0	0/0	4/4	1/0	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(2)	4/4	4/4	4/4	0/0	(2)	(1)	(1)	—	—	—	—	—	—	—	
Nitroglycerine	C ₃ H ₅ (NO ₃) ₃	000055-63-0	diluted	(E, T+)	—	0/0	0/0	(3)	(3)	0/0	0/0	(2)	(2)	0/0	0/0	3/0	4/4	0/0	0/0	(1)	(1)	(3)	1/0	1/0	4/4	0/0	0/0	0/0	0/0	0/0	—	—	—	—	—	—
Nitrohydrochloric acid	HNO ₃ + HCl	008007-56-5	—	C	—	4/4	4/4	4/4	4/4	3/3	4/4	4/4	4/4	4/4	4/4	4/4	3/4	1/1	(2)	1/1	3/0	4/4	4/4	4/4	0/0	4/4	4/4	4/4	4/4	—	—	—	—	—	aqua regia: mixture of hydrochloric acid and nitric acid	
Nitropropane	C ₃ H ₇ NO ₂	—	—	(T)	—	0/0	0/0	(3)	(4)	0/0	0/0	(3)	(2)	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(3)	3/0	4/4	4/4	0/0	(1)	(1)	(1)	—	—	—	—	—	—	isomer not indicated in the source	
Nitrose gases	—	—	diluted	T	—	1/1	0/0	3/0	4/4	0/0	0/0	4/4	1/4	0/0	1/3	0/0	0/0	0/0	(1)	1/1	1/1	3/0	3/0	4/4	0/0	(2)	(1)	(1)	0/0	—	—	—	—	—	nitrogen monoxide + nitrogen dioxide	
Nitrotoluene	C ₇ H ₇ NO ₂	001321-12-6	techn. pure	T	—	1/3	1/3	4/4	4/4	1/0	(4)	3/0	1/3	4/4	0/0	4/4	4/4	0/0	0/0	(1)	1/1	1/1	4/4	4/4	4/4	0/0	(1)	1/1	1/1	1/1	—	—	—	—	—	
Nitrous acid, sodium salt	-> see: Sodium nitrite																																			
Nitrous oxide	N ₂ O	010024-97-2	—	(O)	—	0/0	0/0	(2)	(2)	(1)	0/0	(2)	(2)	0/0	0/0	0/0	0/0	0/0	0/0	(1)	(1)	(1)	2/0	1/0	1/0	0/0	1/1	(1)	(1)	—	—	—	—	—	nitric oxide	
Nonanol	-> see: Nonyl alcohol																																			
Nonyl alcohol	C ₉ H ₂₀ O	000143-08-8	100 %	Xn, Xi	—	0/0	1/1	(2)	(2)	(1)	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	0/0	1/1	0/0	(1)	1/1	(1)	4/4	1/0	1/0	0/0	(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				
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)	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	?		
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)	1/3	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	0/0	
Phenacetin	C ₁₀ H ₁₃ NO ₂	000062-44-2		Xn		0/0	0/0	0/0	0/0	0/0	(2)	1/0	0/0	0/0	0/0	0/0	0/0	1/1	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	0/0	0/0	1/0	(3)	0/0	0/0	1/0	(3)	0/0	0/0	1/0	0/0	0/0	0/0	1/0	1/1	1/0	1/0	4/4	0/0	(1)	0/0	0/0			
Phosphoric acid	H ₃ PO ₄	007664-38-2	30 %	C		1/1	1/1	4/4	1/0	0/0	0/0	4/4	1/1	1/1	0/0	0/0	0/0	1/1	0/0	1/1	1/1	1/1	1/0	1/1	3/3	0/0	4/4	1/3	1/2	1/1	
Phosphoric acid	H ₃ PO ₄	007664-38-2																													

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			
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			
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	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	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)	1/1	0/0	0/0	3/0	0/0	0/0	0/0	0/0	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	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)	(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	1/3	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	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	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 saltpeter			
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	1/0	1/1	1/0	0/0	1/1	1/1	1/1	1/1	chile saltpeter			
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	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				
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				
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				
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	1/1	1/0	(2)	(1)	0/0	1/1	1/1	1/1	0/0	1/3	1/3	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/0	1/1	1/1	1/1	1/1				
Sodium phosphate	Na ₃ PO ₄ x 12H ₂ O	010101-89-0	aqueous	Xi		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	1/1	1/1	1/1	0/0	1/1	1/1	1/1	1/1				
Sodium polyphosphates	(NaPO ₃) ₆	068915-31-1	saturated	—		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	1/1	1/1	(1)	1/0	1/0	1/0	(3)	0/0	0/0					
Sodium silicate	Na ₂ Si ₂ O ₇	001344-09-8	each	C, Xn		1/1	1/1	1/0	1/0	1/0	0/0	(2)	1/1	1/0	0/0	1/3	1/4	1/1	0/0	1/1	1/1	1/3	1/0	1/0	1/1	0/0	1/1	1/1	1/1				
Sodium silicate	Na ₂ Si ₂ O ₇	001344-09-8	saturated	C, Xn		1/1	1/1	1/0	1/0	1/0	0/0	0/0	1/1	1/1	0/0	1/3	1/4	1/1	0/0	1/1	1/1	1/3	1/0	1/1	0/0	1/1	1/1	1/1	1/1	waterglass			
Sodium stearate	C ₁₈ H ₃₅ NaO ₂	000822-16-2	aqueous	(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	2/0	1/4	0/0	0/0	3/0	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	1/1	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	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	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	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	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	1/1	0/0	
Steam	H ₂ O	—	up to 150°C	?	4	4	4/4	0/0	0	0	(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	1/1	1/0	1/1	(1)	0/0	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	1/1	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	1/1	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	1/1	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																											

CHEMICALS	FORMULA	CAS-NR.	CONCENTRATION	HAZARD NOTE	FLAMMABLE	thermoplastics																	fluoroelastics		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)	(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	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	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	0/1	4/4	0/0	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 ₆ H ₁₄ 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	000717-74-8		—		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	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	0/0	(1)	1/1	(3)	3/0	3/4	4/4	0/0	(1)	(1)	0/0	Tris(2-ethylhexyl) phosphate				
Tripolypropylene glycol (TPG)	C ₂₄ H ₄₂ 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)	(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	1/0	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	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	1/0	1/1	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	1/1					
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					
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	1/3	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	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	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	1/0	3/3	3/3	0/0	1/3	1/2	1/2	1/1				
Vinyl acetate	C ₄ H ₆ O ₂	000108-05-4	techn. pure	F	X	0/0	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)	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	(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	(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	(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	1/1	1/1	1/1	1/1	1/1	(2)	1/1	(2)	0/0	(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					

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