



Plastic Melting Temperature Chart: what's the Melting Point of Different Plastic Materials

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Injection molding temperature is critical for plastic injection molding; the proper injection molding temperature ensures product quality and manufacturing efficiency. We will demonstrate mold and melt temperature ranges for plastics and the optimal injection temperature ranges for various plastic materials. The aim here is to inform you of the temperature necessary in the melting and molding of plastic products. Do read on to find out more.

Plastic Material Melt and Mold Temperatures Table

Plastic Material Melt and Mould Temperatures	
MATERIAL	MELT TEMPERATURE RANGE (°C)
ABS - Acrylonitrile Butadiene Styrene	190-270
ABS/Polycarbonate ALLOY	245-265
ACETAL	180-210
ACRYLIC	220-250
CAB	170-240
HDPE	210-270
LDPE	180-240
NYLON 6	230-290
NYLON 6 (30% GF)	250-290
NYLON 6/6	270-300

NYLON 12	190-200
PEEK	350-390
POLYCARBONATE	280-320
POLYESTER PBT	240-275
PET (SEMI-CRYSTALLINE)	260-280
PET (AMORPHOUS)	260-280
POLYPROPYLENE (COPOLYMER)	200-280
POLYPROPYLENE (HOMOPOLYMER)	200-280
POLYPROPYLENE (30% TALC-FILLED)	240-290
POLYPROPYLENE (30% GF)	250-290
POLYSTYRENE	170-280
POLYSTYRENE (30% GF)	250-290
PVC P	170-190
PVC U	160-210
SAN	200-260
SAN (30% GF)	250-270
TPE	260-320

Recommended Temperature Ranges for Different Plastic Materials

Polymer Name	Minimum Temperature Value (°C)	Maximum Temperature (°C)
ABS - Acrylonitrile Butadiene Styrene	86	89
ABS Flame Retardant	65	95
ABS High Heat	75	110
ABS High Impact	65	100
ABS/PC Blend - Acrylonitrile Butadiene Styrene/Polycarbonate Blend	70	110
ABS/PC Blend 20% Glass Fiber	70	110
ABS/PC Flame Retardant	70	110
ASA - Acrylonitrile Styrene Acrylate	90	110
ASA/PC Flame Retardant	90	110
ASA/PVC Blend - Acrylonitrile Styrene Acrylate/Polyvinyl Chloride Blend	80	90
CA - Cellulose Acetate	45	95
CAB - Cellulose Acetate Butyrate	60	105
CP - Cellulose Propionate	60	105
CPVC - Chlorinated Polyvinyl Chloride	80	100

EVOH - Ethylene Vinyl Alcohol	80	100
FEP - Fluorinated Ethylene Propylene	205	205
HDPE - High-Density Polyethylene	100	120
HIPS - High Impact Polystyrene	60	80
HIPS Flame Retardant VO	60	80
Ionomer (Ethylene-Methyl Acrylate Copolymer)	34	48
LCP - Liquid Crystal Polymer	200	240
LCP Carbon Fiber-reinforced	200	240
LCP Glass Fiber-reinforced	200	240
LCP Mineral-filled	200	240
LDPE - Low-Density Polyethylene	80	100
LLDPE - Linear Low-Density Polyethylene	90	110
MABS - Transparent Acrylonitrile Butadiene Styrene	75	80
PA 46 - Polyamide 46	110	150
PA 46, 30% Glass Fiber	130	160
PA 6 - Polyamide 6	80	120
PA 6-10 - Polyamide 6-10	80	150
PA 66 - Polyamide 6-6	80	140
PA 66, 30% Glass Fiber	100	150
PA 66, 30% Mineral filled	120	140
PA 66, Impact Modified, 15-30% Glass Fiber	110	140
PA 66, Impact Modified	80	130
Polyamide semi-aromatic	88	135
PAI - Polyamide-Imide	220	280
PAI, 30% Glass Fiber	220	220
PAI, Low Friction	220	220
PAR - Polyarylate	130	130
PBT - Polybutylene Terephthalate	80	140
PBT, 30% Glass Fiber	80	140
PC (Polycarbonate) 20-40% Glass Fiber	90	125
PC (Polycarbonate) 20-40% Glass Fiber Flame Retardant	90	125
PC - Polycarbonate, high heat	100	140
PC/PBT Blend - Polycarbonate/Polybutylene Terephthalate Blend	60	121
PC/PBT blend, Glass Filled	121	193
PCL - Polycaprolactone	45	45
PCTFE - Polymonochlorotrifluoroethylene	150	175
PE - Polyethylene 30% Glass Fiber	100	130
PEEK - Polyetheretherketone	154	260
PEEK 30% Carbon Fiber-reinforced	-	240

PEI, 30% Glass Fiber-reinforced	170	170
PEI, Mineral Filled	170	170
PPESU - Polyethersulfone	175	180
PESU 10-30% glass fiber	180	180
PET - Polyethylene Terephthalate	80	140
PET, 30% Glass Fiber-reinforced	100	140
PET, 30/35% Glass Fiber-reinforced, Impact Modified	80	140
PETG - Polyethylene Terephthalate Glycol	63	63
PFA - Perfluoroalkoxy	240	260
PHB - V (5% valerate)	95	95
PI - Polyimide	260	360
PMMA - Polymethylmethacrylate/Acrylic	70	90
PMMA (Acrylic) High Heat	100	150
PMMA (Acrylic) Impact Modified	70	90
PMP - Polymethylpentene	90	110
PMP 30% Glass Fiber-reinforced	90	110
PMP Mineral Filled	90	110
POM - Polyoxymethylene (Acetal)	80	105
POM (Acetal) Impact Modified	80	100
POM (Acetal) Low Friction	80	105
POM (Acetal) Mineral Filled	80	105
PP - Polypropylene 10-20% Glass Fiber	100	130
PP, 10-40% Mineral Filled	100	130
PP, 10-40% Talc Filled	100	130
PP, 30-40% Glass Fiber-reinforced	100	130
PP (Polypropylene) Copolymer	100	130
PP (Polypropylene) Homopolymer	100	130
PP, Impact Modified	100	130
PPA - Polyphthalamide	140	140
PPA, 30% mineral-filled	154	156
PPA, 33% Glass Fiber-reinforced	184	186
PPA, 45% Glass Fiber-reinforced	184	186
PPE - Polyphenylene Ether	80	110
PPE, 30% Glass Fiber-reinforced	80	110
PPE, Flame Retardant	80	110
PPE, Impact Modified	80	110
PPE, Mineral Filled	80	110
PPS - Polyphenylene Sulfide	200	220
PPS, 20-30% Glass Fiber-reinforced	200	220
PPS, 40% Glass Fiber-reinforced	200	220

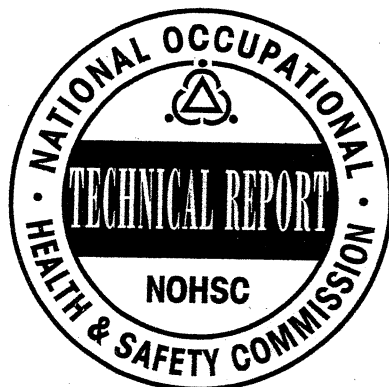
PPSU - Polyphenylene Sulfone	149	210
PS (Polystyrene) 30% glass fiber	75	122
PS (Polystyrene) Crystal	65	80
PS, High Heat	75	90
PSU - Polysulfone	150	180
PSU, 30% Glass fiber-reinforced	150	180
PSU Mineral Filled	150	150
PTFE - Polytetrafluoroethylene	260	290
PTFE, 25% Glass Fiber-reinforced	260	260
PVC (Polyvinyl Chloride), 20% Glass Fiber-reinforced	50	80
PVC, Plasticized	50	80
PVC, Plasticized Filled	50	80
PVC Rigid	50	80
PVDC - Polyvinylidene Chloride	70	90
PVDF - Polyvinylidene Fluoride	70	150
SAN - Styrene Acrylonitrile	65	95
SAN, 20% Glass Fiber-reinforced	65	95
SMA - Styrene Maleic Anhydride	75	100
SMA, 20% Glass Fiber-reinforced	75	100
SMA, Flame Retardant VO	75	100
SMMA - Styrene Methyl Methacrylate	94	100
UHMWPE - Ultra High Molecular Weight Polyethylene	110	130
XLPE - Crosslinked Polyethylene	67	82

Conclusion

The above temperature values are inclusive of the melting points of plastics and other polymers. The second table details the recommended temperature ranges for [plastic molding](#), that will ensure you get the best output out of your [molding process](#). For molding services, we do recommend you contact a [plastic injection molding OEM](#) that will offer the best ROI.

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LIST OF DESIGNATED HAZARDOUS SUBSTANCES

[NOHSC:10005(1999)]

363.176
0994
A938/2
C.2

APRIL 1999

Appendix I
Key to relevant Risk Phrases (health effects only)
Includes combination Risk Phrases

R20	Harmful by inhalation.
R21	Harmful in contact with skin.
R22	Harmful if swallowed.
R23	Toxic by inhalation.
R24	Toxic in contact with skin.
R25	Toxic if swallowed.
R26	Very toxic by inhalation.
R27	Very toxic in contact with skin.
R28	Very toxic if swallowed.
R29	Contact with water liberates toxic gas.
R31	Contact with acids liberates toxic gas.
R32	Contact with acids liberates very toxic gas.
R33	Danger of cumulative effects.
R34	Causes burns.
R35	Causes severe burns.
R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R39	Danger of very serious irreversible effects.
R40	Possible risks of irreversible effects.
R41	Risk of serious damage to eyes.
R42	May cause sensitisation by inhalation.
R43	May cause sensitisation by skin contact.
R45	May cause cancer.
R46	May cause heritable genetic damage.
R48	Danger of serious damage to health by prolonged exposure.
R49	May cause cancer by inhalation.
R60	May impair fertility

Risk Phrases (continued)

R61	May cause harm to the unborn child.
R62	Possible risk of impaired fertility.
R63	Possible risk of harm to the unborn child.
R64	May cause harm to breastfed babies.
R65	Harmful: May cause lung damage if swallowed.
R20/21	Harmful by inhalation and in contact with skin.
R20/22	Harmful by inhalation and if swallowed.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R21/22	Harmful in contact with skin and if swallowed.
R23/24	Toxic by inhalation and in contact with skin.
R23/25	Toxic by inhalation and if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R24/25	Toxic in contact with skin and if swallowed.
R26/27	Very toxic by inhalation and in contact with skin.
R26/28	Very toxic by inhalation and if swallowed.
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.
R27/28	Very toxic in contact with skin and if swallowed.
R36/37	Irritating to eyes and respiratory system.
R36/38	Irritating to eyes and skin.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37/38	Irritating to respiratory system and skin.
R39/23	Toxic: danger of very serious irreversible effects through inhalation.
R39/24	Toxic: danger of very serious irreversible effects in contact with skin.
R39/25	Toxic: danger of very serious irreversible effects if swallowed.
R39/23/24	Toxic: danger of very serious irreversible effects through inhalation and in contact with skin.
R39/23/25	Toxic: danger of very serious irreversible effects through inhalation and if swallowed.
R39/24/25	Toxic: danger of very serious irreversible effects in contact with skin and if swallowed.
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Risk Phrases (continued)

R39/26	Very toxic: danger of very serious irreversible effects through inhalation.
R39/27	Very toxic: danger of very serious irreversible effects in contact with skin.
R39/28	Very toxic: danger of very serious irreversible effects if swallowed.
R39/26/27	Very toxic: danger of very serious irreversible effects through inhalation and in contact with skin.
R39/26/28	Very toxic: danger of very serious irreversible effects through inhalation and if swallowed.
R39/27/28	Very toxic: danger of very serious irreversible effects in contact with skin and if swallowed.
R39/26/27/28	Very toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R40/20	Harmful: possible risk of irreversible effects through inhalation.
R40/21	Harmful: possible risk of irreversible effects in contact with skin.
R40/22	Harmful: possible risk of irreversible effects if swallowed.
R40/20/21	Harmful: possible risk of irreversible effects through inhalation and in contact with skin.
R40/20/22	Harmful: possible risk of irreversible effects through inhalation and if swallowed.
R40/21/22	Harmful: possible risk of irreversible effects in contact with skin and if swallowed.
R40/20/21/22	Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.
R42/43	May cause sensitisation by inhalation and skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R48/21	Harmful: danger of serious damage to health by prolonged exposure in contact with skin.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R48/20/21	Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
R48/20/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R48/21/22	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
R48/20/21/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

Risk Phrases (continued)

R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R48/24	Toxic: danger of serious damage to health by prolonged exposure in contact with skin.
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R48/23/24	Toxic: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
R48/23/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R48/24/25	Toxic: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
R48/23/24/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

Appendix II

Key to Non Health Effect Risk Phrases

Physico-chemical (R1-19) and Environmental (R51-59)

R1	Explosive when dry -
R2	Risk of explosion by shock, friction, fire or other sources of ignition -
R3	Extreme risk of explosion by shock, friction, fire or other sources of ignition -
R4	Forms very sensitive explosive metallic compounds -
R5	Heating may cause an explosion -
R6	Explosive with or without contact with air -
R7	May cause fire -
R8	Contact with combustible material may cause fire -
R9	Explosive when mixed with combustible material -
R10	Flammable -
R11	Highly Flammable -
R12	Extremely Flammable -
R14	Reacts violently with water -
R15	Contact with water liberates extremely flammable gases -
R16	Explosive when mixed with oxidising substances -
R17	Spontaneously flammable in air -
R18	In use may form flammable/explosive vapour-air mixture -
R19	May form explosive peroxides
R50:	Very toxic to aquatic organisms
R51:	Toxic to aquatic organisms
R52:	Harmful to aquatic organisms
R53:	May cause long term adverse effects in the aquatic environment
R54:	Toxic to flora
R55:	Toxic to fauna
R56:	Toxic to soil organisms
R57:	Toxic to bees
R58:	May cause long term adverse effects in the environment
R59:	Dangerous for the ozone layer

**LIST OF DESIGNATED
HAZARDOUS SUBSTANCES**

ALPHABETICAL INDEX

NAME [SYNONYMS]	CAS No	UN No	CLASSIFICATION	LABELLING	CUT-OFFS	Source
Solvent naphtha (petroleum), hydrotreated light naphthenic [Low boiling point hydrogen treated naphtha]	92062-15-2		Carc. Cat.2; R45 Xn; R65	T ; R: 45 - 65 , S: 53 - 45 ; Note: H ; P	Conc≥10%: T; R45; R65 ≥0.1%Conc<10%: T; R45	Eu
Solvent naphtha (petroleum), light aliph. [Low boiling point naphtha]	64742-89-8		Carc. Cat.2; R45 Xn; R65	T ; R: 45 - 65 , S: 53 - 45 ; Note: H ; P	Conc≥10%: T; R45; R65 ≥0.1%Conc<10%: T; R45	Eu
Solvent naphtha (petroleum), light arom. [Low boiling point naphtha unspecified]	64742-95-6		Carc. Cat.2; R45 Xn; R65	T ; R: 45 - 65 , S: 53 - 45 ; Note: H ; P	Conc≥10%: T; R45; R65 ≥0.1%Conc<10%: T; R45	Eu
Solvent naphtha (petroleum), light arom., hydrotreated [Low boiling point hydrogen treated naphtha]	68512-78-7		Carc. Cat.2; R45 Xn; R65	T ; R: 45 - 65 , S: 53 - 45 ; Note: H ; P	Conc≥10%: T; R45; R65 ≥0.1%Conc<10%: T; R45	Eu
Solvent naphtha (petroleum), medium aliph. [Straight run kerosine]	64742-88-7		Xn; R65	Xn ; R: 65 , S: (2) - 23 - 24 - 62 ; Note: H	Conc≥10%: Xn; R65	Eu
Stannic chloride	7646-78-8	1827 2440	C; R34. Xi; R37	C ; R: 34 - 37 , S: (1/2) - 7/8 - 26 - 45	Conc≥20%: C; R34, R37 ≥10%Conc<20%: C; R34 ≥5%Conc<10%: Xi; R36/38	Eu
Stibine	7803-52-3	2676				A
Stoddard solvent [White spirits]	8052-41-3		Carc. Cat.2; R45 Xn; R65	T ; R: 45 - 65 , S: 53 - 45 ; Note: H ; P	Conc≥10%: T; R45; R65 ≥0.1%Conc<10%: T; R45	Eu; A
Strontium chromate [Chromic acid (H ₂ CrO ₄), strontium salt (1:1)]	7789-06-2		Carc. Cat.2; R45 Xn; R22 N; R50-53	T ; N ; R: 45 - 22 - 50/53, S: 53 - 45 - 60 - 61; Note: E	Conc≥25%: T; R45, R22 ≥0.1%Conc<25%: T; R45	Eu
Strophantin-K	11005-63-3		T; R23/25 R33	T ; R: 23/25 - 33 , S: (1/2) - 45	Conc≥25%: T; R23/25; R33 ≥3%Conc<25%: Xn; R20/22; R33 ≥1%Conc<3%: Xn; R33	Eu
Strychnine	57-24-9	1692	T+; R27/28	T+ ; R: 27/28 , S: (1/2) - 36/37 - 45	Conc≥7%: T+; R27/28 ≥1%Conc<7%: T; R24/25 ≥0.1%Conc<1%: Xn; R21/22	Eu; A
Strychnine, salts of		1692	T+; R26/28	T+ ; R: 26/28 , S: (1/2) - 13 - 28 - 45; Note: A	Conc≥7%: T+; R26/28 ≥1%Conc<7%: T; R23/24 ≥0.1%Conc<1%: Xn; R20/21	Eu
Styrene monomer	100-42-5	2055	R10 Xn; R20 Xi; R36/38	Xn ; R: 10 - 20 - 36/38 S: (2) - 23 ; Note: D	Conc≥2.5%: Xn; R20; R36/38	Eu; A
Styrene oxide [(Epoxyethyl)benzene; Phenyloxirane]	96-09-3		Carc. Cat.2; R45 Xn; R21 Xi; R36	T ; R: 45 - 21 - 36, S: 53 - 45 ; Note: E	Conc≥25%: T; R45; R21; R36 ≥20%Conc<25%: T; R45; R36 ≥0.1%Conc<20%: T; R45	Eu
Styrene-4-sulfonyl chloride	2633-67-2		Xi; R38-41 R43	Xi ; R: 38 - 41 - 43 , S: (2) - 24 - 26 - 37/39	Conc≥20%: Xi; R41; R38; R43 ≥10%Conc<20%: Xi; R43; R41 ≥5%Conc<10%: Xi; R36; R43 ≥1%Conc<5%: Xi; R43	Eu
Subtilisin (Proteolytic enzymes as 100% pure crystalline enzyme)	9014-01-1		Xi; R 37/38 R41 Xn; R42	Xn ; R: 37/38 - 41 - 42, S: (2) - 22 - 24 - 26 - 36/37/39	Conc≥20%: Xn; R42; R37/38; R41 ≥10%Conc<20%: Xn; R42; R41 ≥5%Conc<10%: Xn; R42; R36 ≥1%Conc<5%: Xn; R42	Eu; A
Succinic anhydride	108-30-5		Xi; R36/37	Xi ; R: 36/37 , S: (2) - 25	Conc≥1%: Xi; R36/37	Eu
Sulfallate (ISO) [2-Chlorallyl diethyldithiocarbamate]	95-06-7		Carc. Cat.2; R45 Xn; R22	T ; R: 45 - 22 , S: 53 - 45 ; Note: E	Conc≥25%: T; R45, R22 ≥0.1%Conc<25%: T; R45	Eu
Sulfotep (ISO) [TEDP; o,o,o,o-Tetraethyl dithiopyrophosphate]	3689-24-5	1703 1704	T+; R27/28	T+ ; R: 27/28 , S: (1/2) - 23 - 28 - 36/37 - 45	Conc≥7%: T+; R27/28 ≥1%Conc<7%: T; R24/25 ≥0.1%Conc<1%: Xn; R21/22	Eu; A
Sulfur dioxide [Sulphur dioxide]	7446-09-5	1079	T; R23 C; R34	T ; R: 23 - 34 S: (1/2) - 9 - 26 - 36/37/39 - 45	Conc≥20%: T; R23, R34 ≥5%Conc<20%: Xn; R20, R34 ≥0.5%Conc<5%: Xi; R36/37/38	Eu; A
Sulphamic acid	5329-14-6	2967	Xi; R36/38	Xi ; R: 36/38 , S: (2) - 26 - 28	Conc≥20%: Xi; R36/38	Eu
Sulphur dichloride	10545-99-0	1828	R14 C; R34 Xi; R37	C ; R: 14 - 34 - 37 , S: (1/2) - 26 - 45	Conc≥20%: C; R34; R37 ≥10%Conc<20%: C; R34 ≥5%Conc<10%: Xi; R36/38	Eu
Sulphur dioxide [Sulfur dioxide]	7446-09-5	1079	T; R23 C; R34	T ; R: 23 - 34 S: (1/2) - 9 - 26 - 36/37/39 - 45	Conc≥20%: T; R23, R34 ≥5%Conc<20%: Xn; R20, R34 ≥0.5%Conc<5%: Xi; R36/37/38	Eu; A
Sulphur hexafluoride	2551-62-4	1080				A

NAME [SYNONYMS]	CAS No	UN No	CLASSIFICATION	LABELLING	CUT-OFFS	Source
Ethylene glycol monoisopropyl ether [2-Isopropoxyethanol]	109-59-1		Xn; R20/21 Xi; R36	Xn; R: 20/21 - 36, S: (2) - 24/25	Conc≥25%: Xn; R20/21; R36 ≥20%Conc<25%: Xi; R36	Eu; A
Ethylene glycol monomethyl ether [2-Methoxyethanol]	109-86-4	1188	R10 Repr. Cat.2; R60-61 Xn; R20/21/22	T; R: 60 - 61 - 10 - 20/21/22, S: 53 - 45; Note: E	Conc≥25%: T; R60; R61; R20/21/22 ≥0.5%Conc<25%: T; R60; R61	Eu; A
Ethylglycol acetate [2-Ethoxyethyl acetate; EGEEA]	111-15-9	1172	Repr. Cat.2; R60-61 Xn; R20/21/22	T; R: 60 - 61 - 20/21/22, S: 53 - 45; Note: E	Conc≥25%: T; R60; R61; R20/21/22 ≥0.5%Conc<25%: T; R60; R61	Eu; A
Ethyleneimine [Aziridine]	151-56-4	1185	F; R11 Carc. Cat.2; R45 Muta. Cat.2; R46 T+; R26/27/28 C; 34 N; R51-53	F; T+; N; R: 45 - 46 - 11 - 26/27/28 - 34 - 51/53, S: 53 - 45 - 61; Note: D; E	Conc≥10%: T+; R45; R46; R26/27/28; R34 ≥7%Conc<10%: T+; R45; R46; R26/27/28; R36/38 ≥5%Conc<7%: T; R45; R46; R23/24/25; R36/38 ≥1%Conc<5%: T; R45; R46; R23/24/25 ≥0.1%Conc<1%: T; R45; R46; R20/21/22	Eu; A
Ethylene oxide [Oxirane]	75-21-8	1040 1041 1952 2983	F+; R12 Carc. Cat.2; R45 Muta. Cat.2; R46 T; R23 Xi; R36/37/38	F+; T; R: 45 - 46 - 12 23 - 36/37/38, S: 53 - 45; Note: E	Conc≥5%: T; R45; R46; R23; R36/37/38 ≥0.5%Conc<5%: T; R45; R46; R20 ≥0.1%Conc<0.5%: T; R45; R46	Eu; A
Ethylene thiourea [imidazolidine-2-thione; 2-imidazoline-2-thiol]	96-45-7		Repr. Cat.2; R61 Xn; R22	T; R: 61 - 22, S: 53 - 45; Note: E	Conc≥25%: T; R61; R22 ≥0.5%Conc<25%: T; R61	Eu
2-Ethylhexane-1,3-diol [Dethylene glycol; Ethoxexadiol]	94-96-2		Xi; R36	Xi; R: 36, S: (2) - 26	Conc≥20%: Xi; R36	Eu
2-Ethylhexanoic acid [Hexanoic acid, 2-ethyl]	149-57-5		Repr. Cat.3; R63	Xn; R63, S: (2) - 36/37	Conc≥5%: Xn; R63	Eu
2-Ethylhexyl acrylate	103-11-7		Xi; R37/38 R43	Xi; R: 37/38 - 43, S: (2) - 24 - 37; Note: D	Conc≥20%: Xi; R37/38; R43 ≥1%Conc<20%: Xi; R43	Eu
2-Ethylhexyl 3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl methyl thio acetate	80387-97-9		Repr. Cat.2; R61 R43	T; R: 61 - 43, S: 53 - 45	Conc≥1%: T; R61; R43 ≥0.5%Conc<1%: T; R61	Eu
2-Ethylhydroxylamine	624-86-2		F; R11 T; R23/24/25 Xn; R48/20 Xi; R36 N; R50 R43	F; T; N; R: 11 - 23/24/25 - 36 - 43 - 48/20 - 50, S: (1/2) - 16 - 26 - 36/37/39 - 38 - 45 - 61	Conc≥25%: T; R23/24/25; R48/20; R36; R43 ≥20%Conc<25%: Xn; R20/21/22; R48/20; R36; R43 ≥10%Conc<20%: Xn; R20/21/22; R48/20; R43 ≥3%Conc<10%: Xn; R20/21/22; R43 ≥1%Conc<3%: Xi; R43	Eu
Endene norbornene	16219-75-3					A
2-Ethylmercaptan [Ethanethiol]	75-08-1	2363	F; R11 Xn; R20	F; Xn; R: 11 - 20, S: (2) - 16 - 25	Conc≥25%: Xn; R20	Eu; A
2-Ethyl methacrylate	97-63-2	2277	F; R11 Xi; R36/37/38 R43	F; Xi; R: 11 - 36/37/38 - 43, S: (2) - 9 - 16 - 29 - 33 Note: D	Conc≥20%: Xi; R36/37/38; R43 ≥1%Conc<20%: Xi; R43	Eu
2-Ethyl-N-2-(methanesulphonylaminoethyl)-2-phenylenediamine [2-Ethyl-N-(2-methanesulphonylaminoethyl)-2-phenylenediamine monohydrate [2-(4-Amino-N-ethyl-methanesulphonamido)ethyl]methanesulphonamide [2-Ethyl-N-(2-methanesulphonylaminoethyl)-2-phenylenediamine monohydrate]]	25646-71-3		Xn; R22 R43 N; R50-53	Xn; N; R: 22 - 43 - 50/53 S: (2) - 24 - 37 - 60 - 61	Conc≥25%: Xn; R22; R43 ≥1%Conc<25%: Xi; R43	Eu
2-Ethyl methyl ketone [2-Ethyl-2-butanone; 2-Ethyl methyl ketone]	78-93-3	1193	F; R11 Xi; R36/37	F; Xi; R11 - 36/37, S: (2) - 9 - 16 - 25 - 33	Conc≥20%: Xi; R36/37	Eu; A
2-Ethylthio-m-tolyl isopropyl isocyanate [2-Ethylthio-m-tolyl isopropyl isocyanate (ISO)]	22224-92-6	2783 3017	T+; R28 T; R24	T+; R: 24 - 28, S: (1/2) - 23 - 28 - 36/37 - 45	Conc≥25%: T+; R28; R24 ≥7%Conc<25%: T+; R28; R21 ≥3%Conc<7%: T; R25; R21 ≥1%Conc<3%: T; R25 ≥0.1%Conc<1%: Xn; R22	Eu; A
2-Morpholine	100-74-3					A
2-Nitroethane	109-95-5	1194	E; R2 Xn; R20/21/22	E; Xn; R: 2 - 20/21/22, S: (2)	Conc≥25%: Xn; R20/21/22	Eu