

SYENSQO **A**ceptable **E**xposure **L**imits **LIST**

JUNE 2025



IND-TERA contact: B.Doornaert

GLOSSARY

TWA: the Time-Weighted Average exposure limit - the maximum average concentration of a chemical in air for a normal 8-hour working day and 40-hour week.

STEL: the Short-Term Exposure Limit - the maximum average concentration to which workers can be exposed for a short period (15 minutes).

CEILING: the concentration that should not be exceeded at any time.

SKIN notation: refers to the potential contribution to the overall exposure by the cutaneous route, including mucous membranes and the eye. Exposure can be either by airborne or direct contact with the substance. This "attention calling" designation suggests appropriate measures be taken to prevent skin absorption.

SAEL LIST - June 2025

Substance (year of latest update)	CAS number	SAEL	mg/m ³	ppm	Notation	Remarks / synonyms
Aceto-penta-amine cobalt (III) dinitrate (2025)	14854-63-8	TWA	0.035			Update, May 2025 / No change in the SAEL value between 2014 and 2025.
ADV 7004 (2014)	220182-27-4 <i>Obsolete to be checked</i>	TWA	0.0035		SKIN	<i>Fluoropolyether monocarboxylic acid and its salts.</i>
ADV 7004 S (2014)	220207-15-8 <i>Obsolete to be checked</i>	TWA	0.0035		SKIN	
ADV 7850 / ADV 7800 (2014)	329238-24-6	TWA	0.0035		SKIN	
ADV 7850 A / ADV 7800 A (2014)	330809-92-2 <i>Obsolete to be checked</i>	TWA	0.0035		SKIN	
ADV 7850 K / ADV 7800 K (2014)	330809-93-3 <i>Obsolete to be checked</i>	TWA	0.0035		SKIN	
ADV 7850 S / ADV 7800 S (2014)	330809-80-8 <i>Obsolete to be checked</i>	TWA	0.0035		SKIN	
Aluminium potassium fluoride (2022)	60304-36-1	TWA	0.14			<i>Reaction mass of potassium aluminium tetrafluoride and dipotassium aluminium pentafluoride, monohydrate (EC number 701-199-3). Respirable fraction.</i>

Substance (year of latest update)	CAS number	SAEL	mg/m ³	ppm	Notation	Remarks / synonyms
Aminoethylethanolamine (2021)	111-41-1	TWA	0.74	0.17		<i>AEEA</i>
Benzene, 1,1'-oxybis-, tetrapropylene derivs., sulfonated, sodium salts, (Multi-constituent substance) (2024)	119345-04-9	TWA	5	0.21		New value, December 2024.
Bisphenol A (2018)	80-05-7	TWA	1.1		SKIN	
2-Bromopropane (2020)	75-26-3	TWA	1.5	0.30	SKIN	
Calcium chloride (2014)	10043-52-4	TWA	5			Anhydrous form.
Calcium chloride dihydrate (2019)	10035-04-8	TWA	6.6			
Carbon tetrachloride (2020)	56-23-5	TWA	3.2	0.5	SKIN	
Chloroform (2024)	67-66-3	TWA	2.5	0.5	SKIN	New value, December 2024.
Chlorotrifluoroethylene (2019)	79-38-9	TWA	2.9	0.6		<i>CFC-1113 (CTFE)</i> .
Cryolite (2019)	13775-53-6	TWA	0.1			Respirable fraction.
Cyclic-C ₆ O ₄ ammonium salt (2025)	1190931-27-1	TWA	0.051	0.0035		Update, May 2025 / The revised value is reflecting the significant improvement of the process / Previous value calculated in 2014 = 0.035 mg/m ³

Substance (year of latest update)	CAS number	SAEL	mg/m ³	ppm	Notation	Remarks / synonyms
4,4'-Dichlorodiphenyl sulfone (2011)	80-07-9	TWA	0.8			Applicable for dust and vapour form.
1,1-Dichloroethylene (2017)	75-35-4	TWA	1.8	0.45	SKIN	<i>Vinylidene chloride (VDC).</i>
1,3-Dichloro-2-propanol (2014)	96-23-1	TWA	0.16	0.030	SKIN	<i>Inovyn.</i>
2,2-Dichloro-1,1,1-trifluoroethane (2017)	306-83-2	TWA	31	5		<i>HCFC-123.</i>
1,2-Diiodoperfluoroethane (2018)	354-65-4	Ceiling	14	1		
1,4-Diiodoperfluorobutane (2012)	375-50-8	TWA	0.37	0.02		
1,6-Diiodoperfluorohexane (2014)	375-80-4	TWA	0.050	0.0022		
Dimethyl sulfate (2019)	77-78-1	TWA	0.052	0.01	SKIN	
Diphenyl sulphone (2018)	127-63-9	TWA	0.9			<i>Applicable for dust and vapour form</i>
2-Ethylanthraquinone (2016)	84-51-5	TWA	0.47		SKIN	<i>See also SAEL for dermal route</i>
Fluorolink© 7900 (2017)	69991-62-4	TWA	0.0035		SKIN	

Substance (year of latest update)	CAS number	SAEL	mg/m ³	ppm	Notation	Remarks / synonyms
Galden LMW (2015)	161075-00-9	TWA	(*)	555		Hexafluoropropene, oxidized, oligomers, reduced, fluorinated
Hexafluoro-1,3-butadiene (2012)	685-63-2	TWA	3.3	0.5	SKIN	Sifren®
Methyl-L-chloropropionate (2015)	73246-45-4	TWA	0.65	0.13	SKIN	No more active to be deleted.
1-Methyl-2-pyrrolidone (2024)	872-50-4	TWA	24	6	SKIN	NMP. New value, December 2024.
Methylene bis(thiocyanate) (2011)	6317-18-6	TWA	0.01			MBT
Monochlorobenzene (2016)	108-90-7	TWA	23	5	SKIN	
Octafluoroisobutyl methyl ether (2017)	382-26-3	Ceiling	9.5	1		OFIB methyl ether
4,4'-Oxydianiline (2016)	101-80-4	TWA	0.0063		SKIN	ODA
Perfluoromethylvinyl ether (2016)	1187-93-5	TWA	68	10		PMVE
6-(Phthalimido)peroxyhexanoic acid (2019)	128275-31-0	TWA	3			PAP – Eureco.

(*) To be calculated on basis of the molecular weight of the grade

Substance (year of latest update)	CAS number	SAEL	mg/m ³	ppm	Notation	Remarks / synonyms
Potassium hydrogen difluoride (2014)	7789-29-9	TWA	3.1			
Pyrocatechol (2021)	120-80-9	TWA	1.5		SKIN	<i>1,2-Dihydroxybenzene</i>
Reaction mass of dimethyl-adipate, glutarate and succinate (2024)	1119-40-0 106-67-0 627-93-0	TWA	8.3	1.26 ppm	SKIN	<i>Rhodiasolv RPDE.</i> Update, September 2024 / No change in the SAEL value between 2014 and 2024.
Sodium carbonate (2018)	497-19-8	TWA	10			
Sodium hydrogensulfide (2017)	16721-80-5	TWA STEL	0.77	1.5		
Sodium percarbonate (2016)	15630-89-4	TWA	5			
Sodium sulfide (2017)	1313-82-2	TWA STEL	1.0	2.0		
Sulfolane (2020)	126-33-0	TWA	1.8	0.37	SKIN	
Sulfur (2014)	7704-34-9	TWA	4			

Substance (year of latest update)	CAS number	SAEL	mg/m ³	ppm	Notation	Remarks / synonyms
Synthetic amorphous silica (2016)	112926-00-8 112945-52-5 67762-90-7 68611-44-9 68909-20-6	TWA	4			<i>SAS</i> ; includes silica gel, precipitated silica, colloidal silica, surface treated silica and pyrogenic silica
Tetrakis(hydroxymethyl)phosphonium sulphate(2:1) (2017)	55566-30-8	TWA	0.43			<i>THPS</i>
Trifluoroacetic acid (2015)	76-05-1	STEL	16	3.4		<i>TFA</i>
Trifluoroacetic anhydride (2017)	407-25-0					TFAH hydrolyses to TFA : the SAEL-STEL of TFA can be used.
Trifluoroacetyl chloride (2015)	354-32-5	Ceiling	1.6	0.3		<i>TFAc</i> <i>IH</i>
2,2,2-Trifluoroethanol (2015)	75-89-8	TWA	0.25	0.06	SKIN	

SAEL LIST - June 2025 (cont'd)

DERMAL EXPOSURE LIMITS

Substance (year of latest update)	CAS number	SAEL mg/worker/day		Notation	Remarks / synonyms
2-Ethylanthraquinone (2016)	84-51-5	Dermal	9.3	SKIN	Exposure via working solution
2-Ethylanthraquinone (2016)	84-51-5	Dermal	230	SKIN	Exposure to pure substance

* The substance 2-amylanthraquinone contains two isomers in significant quantities: 2-(1,1-dimethylpropyl)anthraquinone (CAS nr. 32588-54-8) and 2-(1,2-dimethylpropyl)anthraquinone (CAS nr. 68892-28-4). The SAEL value of these individual isomers is similar to the SAEL value of 2-amylanthraquinone.