

German water hazard class (WGK) of Hydrocarbon Solvents according to the Ordinance on facilities for handling substances that are hazardous to water (AWSV)

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Changes to previous version, highlighted in yellow

Substance Name	H-Phrases Environment	H-Phrases Health	Floater	Evaluation Points	EC-Number	WGK	Identification Number	Classification Designation	additional explanation
Category 1 : C9 Aromatics									
Hydrocarbons, C9, aromatics	H411	H304, H335, H336	yes	7	918-668-5	2	775	Hydrocarbon solvents: > 5 % Aromatics, not characterized as carcinogenic (H350)	
Category 2 : C10-C12 Aromatics									
Hydrocarbons, C10, aromatics, >1% naphthalene	H411	H304, H336, H351	yes	9	919-284-0	2	775	Hydrocarbon solvents: > 5 % Aromatics, not characterized as carcinogenic (H350)	
Hydrocarbons, C10, aromatics, <1% naphthalene	H411	H304, H336	yes	7	918-811-1	2	775	Hydrocarbon solvents: > 5 % Aromatics, not characterized as carcinogenic (H350)	
Hydrocarbons, C10-C13, aromatics, <1% naphthalene	H411	H304	yes	7	922-153-0	2	775	Hydrocarbon solvents: > 5 % Aromatics, not characterized as carcinogenic (H350)	
Hydrocarbons, C10-C13, aromatics, >1% naphthalene	H411	H304, H351	yes	9	926-273-4	2	775	Hydrocarbon solvents: > 5 % Aromatics, not characterized as carcinogenic (H350)	
Category 3 : C9-C14 Aliphatics (2-25% Aromatics)									
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	H412	H304, H372 (inhalation)	yes	5	919-164-8	2	775	Hydrocarbon solvents: > 5 % Aromatics, not characterized as carcinogenic (H350)	
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	H411	H304, H336, H372 (inhalation)	yes	7	919-446-0	2	775	Hydrocarbon solvents: > 5 % Aromatics, not characterized as carcinogenic (H350)	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	H412	H304	yes	5	925-653-7	2	775	Hydrocarbon solvents: > 5 % Aromatics, not characterized as carcinogenic (H350)	
Category 4 : C14-C20 Aliphatics (2-30% Aromatics)									
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)	None	H304	yes	1	920-360-0	1	9167	Aliphatic Hydrocarbons with a content of aromatics < 30 % and boiling range between 180 °C and 280 °C	
Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)	H413	H304	yes	4	919-006-8	1	9167	Aliphatic Hydrocarbons with a content of aromatics < 30 % and boiling range between 180 °C and 280 °C	
Category 5 : C5 Aliphatics									
Normal-Pentane	H411	H304, H336	no	6	203-692-4	2	452	pentane	
Iso-Pentane (2-methylbutane)	H411	H304, H336	no	6	201-142-8	2	648	Isopentane	
Cyclopentane	H412	H304, H336	no	4	206-016-6	1	478	cyclopentane	
Hydrocarbons, C5, n-alkanes, isoalkanes	H411	H304, H336	no	6	921-577-3	2	648	Isopentane	more precise than 9175
Category 6 : 6 Aliphatics									
Normal-Hexane	H411	H304, H315, H336, H361, H373 (inhalation)	no	8	203-777-6	2	124	hexane	
Hydrocarbons, C6, isoalkanes, <5% n-hexane	H411	H304, H315, H336	no	6	931-254-9	2	9175	Isoparaffine, Siedebeginn <= 150 GradC	
Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich	H411	H304, H315, H336, H361, H373 (inhalation)	no	8	925-292-5	2	9040	Hydrocarbons, C6, n-alkanes, iso-alkanes, cyclics, n-hexane rich	10.08.2017 WGK 3 ?
Hydrocarbons, C5-C6, n-alkanes, isoalkanes, <5% n-hexane	H411	H304, H315, H336	no	6	922-114-8	2	9175	Isoparaffine, Siedebeginn <= 150 GradC	
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	H411	H304, H315, H336	no	6	926-605-8	2	120	heptane and isomers	

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Hydrocarbons, C5-C7, n-alkanes, isoalkanes, n-hexane rich	H411	H304, H315, H336, H361, H373 (inhalation)	no	8	930-397-4	2	120	heptane and isomers	
2,2-Dimethylbutane	H411	H304, H315, H336	no	6	200-906-8	2	9175	Isoparaffine, Siedebeginn <= 150 GradC	
2,3-Dimethylbutane	H411	H304, H315, H336	no	6	201-193-6	2	9175	Isoparaffine, Siedebeginn <= 150 GradC	
Category 7 : C7-C9 Aliphatics									
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	H411	H304, H315, H336	no	6	927-510-4	2	120	heptane and isomers	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane	H411	H304, H315, H336, H361, H373 (inhalation)	no	8	924-168-8	2	120	heptane and isomers	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	H411	H304, H315, H336	no	6	921-024-6	2	120	heptane and isomers	
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	H411	H304, H315, H336	no	6	920-750-0	2	479	n-Octane and isomers	
Hydrocarbons, C6-C10 (even numbered), n-alkanes, isoalkanes, >5% n-hexane	H411	H304, H315, H336, H361, H373 (inhalation)	no	8	701-352-4	2	9175	Isoparaffine, Siedebeginn <= 150 GradC	
Hydrocarbons, C7-C9, isoalkanes	H411	H304, H315, H336	no	6	921-728-3	2	9175	Isoparaffine, Siedebeginn <= 150 GradC	
Hydrocarbons, C7-C8, cyclics	H411	H304, H315, H336	no	6	927-033-1	2	2548	methylcyclohexane	
Normal-Heptane	H400-H410	H304, H315, H336	no	8	205-563-8	2	120	heptane and isomers	
Iso-Heptane	H400-H410	H304, H315, H336	no	8	250-610-8	2	120	heptane and isomers	
2,2,3-Trimethylbutane	H400-H410	H304, H315, H336	no	8	207-346-3	2	120	heptane and isomers	
Normal-Octane	H400-H410	H304, H315, H336	no	8	203-892-1	2	479	n-Octane and isomers	
Iso-Octane (2,2,4-trimethylpentane)	H400-H410	H304, H315, H336	no	8	208-759-1	2	479	n-Octane and isomers	
Isooctane	H400-H410	H304, H315, H336	no	8	247-861-0	2	479	n-Octane and isomers	
Nonane	H400-H410	H304, H315, H336	no	8	203-913-4	2	479	n-Octane and isomers	
Category 8 : C9-C14 Aliphatics (<2% Aromatics)									
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	None	H304, H315, H336	yes	1	919-857-5	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	H412	H304, H336	yes	5	927-241-2	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C9-C11, isoalkanes, cyclics, <2% aromatics	H411	H304	yes	7	920-134-1	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	918-481-9	1	10427	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	24.01.2022 new
Hydrocarbons, C10-C13, isoalkanes, cyclics, <2% aromatics	H412	H304	yes	5	918-317-6	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	926-141-6	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	917-488-4	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	920-107-4	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27

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Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	927-285-2	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	H413	H304	yes	4	923-037-2	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	None	H304	yes	1	918-167-1	1	8077	Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	None	H304	yes	1	920-901-0	1	9174	Isoparaffine, Siedebeginn > 150 GradC	
Hydrocarbons, C10-C13, n-alkanes, <2% aromatics	None	H304	yes	1	929-018-5	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	more precise than 9167
Hydrocarbons, C11-C14, n-alkanes, <2% aromatics	None	H304	yes	1	924-803-9	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C9-C11, cyclics, <2% aromatics	H411	H304, H315, H336	yes	7	925-894-8	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Decane	None	H304	yes	1	204-686-4	1	9420	decane	
Undecane	None	H304	yes	1	214-300-6	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Dodecane	None	H304	yes	1	203-967-9	1	7913	dodecane	
Tridecane	None	H304	yes	1	211-093-4	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Tetradecane	None	H304	yes	1	211-096-0	1	7914	tetradecane	
Isododecane (2,2,4,6,6-pentamethylheptane)	H413	H304	yes	4	236-757-0	1	8002	Isododecane	
Hydrocarbons, C10-C14 (even numbered), n-alkanes, isoalkanes, <2% aromatics	None	H304	yes	1	920-274-3	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C12-C16, isoalkanes, cyclics, < 2% aromatics	None	H304	yes	1	927-676-8	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, <2% aromatics	None	H304, H336	yes	1	940-725-8	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, <2% aromatics	None	H304	yes	1	940-726-3	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, <2% aromatics	None	H304	yes	1	940-727-9	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, <2% aromatics	None	H304, H315, H336	yes	1	941-718-2	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C11-C16, n-alkanes, isoalkanes, <2% aromatics	None	H304	yes	1	942-085-5	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Category 9 : C14-C20 Aliphatics (<2% Aromatics)									
Hydrocarbons, C13-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	928-253-0	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	927-632-8	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	919-029-3	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C13-C16, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	918-973-3	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	920-114-2	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C14-C17, n-alkanes, <2% aromatics	None	H304	yes	1	917-828-1	1	9615	Hydrocarbons, C14-C17, n-alkanes, <2% aromatics	09.04.2019 new

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Pentadecane	None	H304	yes	1	211-098-1	1	9053	pentadecane	
Hexadecane	None	H304	yes	1	208-878-9	1	7915	hexadecane	
Isohexadecane (2,2,4,4,6,8,8-heptamethylnonane)	None	H304, H332	yes	1	224-506-8	1	8533	Hydrocarbons, C4, 1,3-butadiene-free, polymd., tetraisobutylene fraction, hydrogenated	
Heptadecane	None	H304	yes	1	211-108-4	1	9421	n-heptadecane	21.08.2020 new
Octadecane	None	H304	yes	1	209-790-3	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Isoeicosane (Hydrocarbons, C4, 1,3-butadiene-free, polymd., pentaisobutylene fraction, hydrogenated)	None	H304	yes	1	297-627-7	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Icosane	None	H304	yes	1	204-018-1	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C14-C17, isoalkanes, cyclics, <2% aromatics	None	H304	yes	1	939-601-6	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C17-C19, n-alkanes, <2%aromatics	None	H304	yes	1	937-158-3	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C14-C15, n-alkanes, <2% aromatics	None	H304	yes	1	928-868-4	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C14-C16, n-alkanes, isoalkanes, <2% aromatics	None	H304	yes	1	940-728-4	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C15-C19, n-alkanes, isoalkanes, <2% aromatics	None	H304	yes	1	940-730-5	1	9166	Aliphatic Hydrocarbons with a content of aromatics < 1 % and boiling range beginning with > 140 °C	replacement of 27
Hydrocarbons, C16-C18, isoalkanes, < 2% aromatics	None	H304	yes	1	948-766-3	1	10428	Hydrocarbons, C16-C18, isoalkanes, < 2% aromatics	23.12.2021 new