

VOC Identifying Information (Tentative Identification; Molecular formula; Molar Mass (g/mol); Cas #)	Reason for Inclusion	Is it a Byproduct?	Potential Breakdown Products (Air); Half- life	Sources	Function	Health Impacts (Accessibility Barriers)	Exposure Routes	Odour threshold	Category (ED, carcinogen, sensitizer (possible sensitization of TRP receptors)	Environmental Presence (Air, Water, Soil)	Indoor Air Threshold Limit Values (Canada)	Chemical International Lists	Listed on IFRA Transparency List ?	References
(S)(+)-6-Methyl-1-octanol C9H20O 144.3 #: 110453-78-6	Cas health data	—	—	—	—	—	—	—	—	—	Not specified	—	No	—
1-Decanol 158.8 #: 112-30-1	C10H22O Cas health data	Synthetic; Used as a chemical intermediate in the production of esters and fragrances	Degraded in the atmosphere by reaction with photo chemically-produced hydroxyl radicals (SRC); 25 hours	Cleaning products (laundry detergent, air fresheners); Cosmetics	Fragrance	Ongoing testing	Inhalation, ingestion, dermal	Sweet smell; 0.006 ppm	Neurotoxin	Air, soil, water (toxic to aquatic life)	Not specified	See here: Presence on lists: https://comptox.epa.gov/dashboard/chemical/details/DTXSID7021946	Yes	NCBI, (n.d).
1-Dodecene 168.3 #: 112-41-4	C10H21 Cas health data	Synthetic; Used as a chemical intermediate in the production of fragrances	Degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; 23 hours	Cleaning products	Fragrance, defoaming agent, solvent	No active testing done to date	Inhalation, ingestion, dermal	—	Neurotoxin	Air, soil, water	Not specified	See here: Presence on lists: https://comptox.epa.gov/dashboard/chemical/details/DTXSID5026914	No	NCBI, (n.d.); EPA, (n.d.)
1-Heptanol, 4-methyl- C8H18O Cas #: 817-91-4	130.2 health data	Chemical intermediate	—	—	Chemical intermediate	No studies located	—	—	—	—	Not specified	—	No	NCBI, (n.d).
1-Heptene C7H14 98.2 #: 592-76-7	Cas health data	Chemical intermediate; Synthesis of flavors, perfumes, pharmaceuticals, dyes, oils, and resins	Degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; 9.5 hours	—	Chemical intermediate	No active testing done to date; data taken from similar chemicals	—	Gasoline odour; 0.37ppm	Potential Neurotoxin	Air, soil, water (toxic to aquatic life)	Not specified	See here: Presence on lists: https://comptox.epa.gov/dashboard/chemical/details/DTXSID2060466	No	NCBI, (n.d).
1-Hexadecene (Cetene) C16H32 Cas #: 629-73-2	224.4 health data	Synthetic; Used as a chemical intermediate	—	Cleaning products (industrial cleaning supplies or laundry detergent, eye wash, spill kits)	Colourant, dye; key intermediate in the chemical industry for producing surfactants, biodegradable detergents, specialized lubricants, and synthetic fatty acids	No studies located	—	—	—	Water (toxic to aquatic life)	Not specified	See here: Presence on lists: https://comptox.epa.gov/dashboard/chemical/details/DTXSID1027269	No	NCBI, (n.d).
1-Propene, 3-methoxy- C4H8O Cas #: 627-40-7	72.1 health data	Synthetic; Used as a chemical intermediate in organic synthesis	—	—	—	Harmful if swallowed; No long-term studies located	—	—	—	—	Not specified	—	No	NCBI, (n.d).
1,3-Dimethyl-2,4,5-trioximidazolidine	—	—	—	—	—	—	—	—	—	—	—	—	No	—
2-Propanol, 1-(2-methoxy-1-methylethoxy)- [DPGME] □ C7H16O3 148.2 #: 20324-32-7	Cas health data	Synthetic	—	Cleaning products (laundry detergent)	Solvent, fragrance ingredient	Irritation eyes, nose, throat; lassitude (weakness, exhaustion), dizziness, headache; Long-term studies not located	Inhalation, ingestion, dermal	—	Neurotoxin	—	Not specified	—	Yes	NCBI, (n.d).
2-Propanol, 1-(2-methoxypropoxy)- C7H16O3 148.2 #: 13429-07-7	Cas health data	—	—	—	Solvent in cosmetics	—	—	—	—	—	Not specified	—	No	NCBI, (n.d).
2-Chloro-3,3,3-trifluoropropene C3H2ClF3 130.5 #: 2730-62-3	Cas health data	Synthetic; Used as a chemical intermediate	—	—	Chemical intermediate in the production of 2,3,3,3-tetrafluoropropene	No studies located; GHS warns potential skin and eye irritation	—	—	Eye and skin irritant	—	Not specified	—	No	NCBI, (n.d).

5-Hepten-2-one, 6-methyl-(Sulcatone) □ C8H14O 126.2 #: 110-93-0	Limited health data Cas	Oxidative degradation product from terpenes	–	Cleaning products (air fresheners, bathroom cleaners, laundry products); Essential oils (lemongrass and citronella)	Fragrance and perfume ingredient	Skin irritation occurred during one animal study; no human results or long-term studies located	–	Strong, fruity, citrus-like odour; 50 µg/L	–	Air, soil, water	Not specified	See here: Presence on lists: https://comptox.epa.gov/dashboard/chemical/details/DTXSID5021629	Yes	NCBI, (n.d).
Butane, 1,1,1,3,3-pentafluoro- □ C4H5F5 148.1 Cas #: 406-58-6	Limited health data	Synthetic	–	Insulation foams	Blowing agent	No studies located	–	–	–	Air, water	Not specified	See here: Presence on lists: https://comptox.epa.gov/dashboard/chemical/details/DTXSID5073901	No	NCBI, (n.d).
Cyclohexane, 1-methyl-4-(1-methylethyl)-, cis- C11H22O 140.3 #: 6069-98-3	Limited health data Cas	This compound is a saturated derivative of terpenes , such as limonene or menthol, typically formed through hydrogenation	–	It is often used in research related to hydrocarbon combustion, as a solvent, and in studies of conformational analysis of substituted cyclohexanes	Chemical intermediate to create terpene compounds	No studies located	–	–	–	–	Not specified	–	No	NCBI, (n.d).
Cyclohexane, 1-methyl-4-(1-methylethylidene)- □ C10H18 138.2 #: 1124-27-2	Limited health data Cas	Synthetic	–	Found in children's handheld toys		Specific studies focusing solely on this compound are limited, as it is often analyzed within the context of complex botanical	–	–	–	–	Not specified	–	No	NCBI, (n.d.); Miljødirektoratet et al., (2021)
Cyclopentene, 1,3-dimethyl-2-(1-methylethyl)- C10H18 138.3 #: 61142-32-3	Limited health data Cas	Synthetic	–	–	Chemical intermediate	No studies located	–	–	–	–	Not specified	–	No	NCBI, (n.d).
Cyclobutane, methyl- C5H10 Cas #: 598-61-8	Limited health data 70.1	Synthetic	–	–	Solvent	No studies located for this single compound	–	–	Potential Neurotoxin ; based off of studies on cyclobutane	–	Not specified	–	No	NCBI, (n.d).
Decane, 2,3,4-trimethyl- C13H28 Cas #: 62238-15-7	Limited health data 184.4	–	–	Fuel, oil	–	No studies located	–	–	–	–	Not specified	–	No	NCBI, (n.d).
Decane, 3,7-dimethyl- C12H26 Cas #: 17312-54-8	Limited health data 170.3	Synthetic; chemical intermediate	–	Used as a research chemical, laboratory reagent, or chemical intermediate	Used primarily in chemical research, as a reference standard in gas chromatography, and potentially as a component in specialized solvent or fuel mixtures	No studies located	–	–	–	–	Not specified	–	No	NCBI, (n.d).
Dodecane, 2,6,1,1-trimethyl- C15H32 Cas #: 31295-56-4	Limited health data 212.4	Synthetic; chemical intermediate	–	Used in research and industrial applications, particularly as a component in lubricants and as a reference compound in chemical analyses	Chemical intermediate	No studies located	–	–	–	–	Not specified	–	No	NCBI, (n.d).

Ethene, 1-chloro-1-fluoro- C2H2ClF Cas #: 2317-91-1	80.5 Limited health data	Synthetic; chemical intermediate		Used as an intermediate in organic synthesis, particularly in the production of specialty fluoropolymers or as a refrigerant	Chemical intermediate, refrigerant	No studies located		Sweet smell; odour threshold not determined		Not specified	No	NCBI, (n.d).
			–				–	–	–	–		
Ethene, 1-chloro-2-fluoro- □ C2H2ClF 80.5 #: 2268-32-8	□ Cas	Synthetic; chemical intermediate		Used as a reactive intermediate in chemical synthesis, such as the production of polymers	Chemical intermediate	No studies located				Not specified	No	NCBI, (n.d).
			–				–	–	–	–		
Heptadecane, 7-methyl- C18H38 Cas #: 20959-33-5	254.5 Limited health data	Plant extract	Aldehydes, Ketones, and Carboxylic Acids	Found in certain essential oils (e.g., Opuntia littoralis, Annona squamosa)	Saturated hydrocarbon constituent	May be fatal if swallowed and enters airways ; no single health studies located				Not specified	No	NCBI, (n.d); The Good Scents Company, n.d.
							–	–	–	–		
Nonane, 3-methyl-5-propyl- □ C13H28 184.4 #: 31081-18-2	□ Cas	Plant extract		Natural Product Sources ; It has been identified as a component in chili peppers, and human breath		No studies located			Potential byproduct from certain plants	Not specified	No	NCBI, (n.d).
			–		–		–	–		–		
Nonane, 4-methyl- □ C10H22 142.3 #: 17301-94-9	□ Cas	Synthetic		Often found within kerosene or gasoline components		High exposure levels (inhalation) can cause respiratory irritation, headache, or dizziness ; No long-term studies located	Inhalation		Potential neurotoxin	Not specified	No	NCBI, (n.d).
			–		–			–		–		
Octane, 2,3,3-trimethyl- □ C11H24 156.3 Cas #: 62016-30-2	□ Limited health data		–	Often as a component of fuel or petroleum	Gasoline additive	No studies located		Gasoline odour; threshold not determined		Not specified	No	NCBI, (n.d).
			–				–		–	–		
Octane, 2,4,6-trimethyl- □ C11H24 156.3 #: 62016-37-9	□ Cas		–	Primarily used as a specialized solvent, industrial cleaner component, or lubricant base oil component	Solvent	No studies located		Gasoline odour; threshold not determined		Not specified	No	NCBI, (n.d).
			–				–		–	–		
Octane, 2,5,6-trimethyl- C11H24 Cas #: 62016-14-2	156.3 Limited health data		–	Component in petroleum distillates and acts as a solvent or a structural unit in chemical research	Solvent	No studies located		Gasoline odour; threshold not determined		Not specified	No	NCBI, (n.d).
			–				–		–	–		
Octane, 3,6-dimethyl- □ C10H22 142.3 #: 15869-94-0	□ Cas	Synthetic; chemical intermediate	Smaller hydrocarbons	Refined petroleum products	Solvent	No studies located		Gasoline odour; threshold not determined		Not specified	No	NCBI, (n.d).
							–		–	–		
Pentadecane, 6-methyl- C16H34 Cas #: 10105-38-1	226.4 Limited health data	Synthetic; chemical intermediate		Present in refined petroleum products, such as lubricants or diesel	Solvent, emollient, and lubricant component	No studies located		Citrus/grapefruit peel odour; threshold not determined		Not specified	No	NCBI, (n.d).
			–				–		–	–		

Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(2-hydroxy-1-methylethyl) propyl ester C14H28O3 Cas #: 156477	244.4	Limited health data	Synthetic; chemical intermediate	–	Used primarily in chemical synthesis, often as a specialty intermediate in the development of industrial materials, pharmaceutical ingredients, paint, coatings, inks, and adhesives	Chemical intermediate	No studies located	–	Fruit smell; odour threshold not determined	–	–	Not specified	–	No	NCBI, (n.d).
Propene, 1,3,3,3-tetrafluoro- □ C3H2F4 114.0 #: 1645-83-6	Cas	Limited health data	Synthetic; designed to replace high-GWP refrigerants because it has low ozone	–	Building materials	Refrigerant, blowing agent	Skin and eye irritation; No long-term studies located	–	–	–	–	Air, soil, water	Not specified	No	NCBI, (n.d).
Undecane, 5-methyl- □ C12H26 170.3 #: 1632-70-8	Cas	Limited health data	Thermal degradation of carotenoids	–	–	–	No studies located	–	Oily odour; threshold not determined	–	–	Not specified	–	No	NCBI, (n.d).
Undecane, 6,6-dimethyl- C13H28 Cas #: 17312-76-4	184.4	Limited health data	–	–	Natural products, potentially fuel and gasoline	Industrial or chemical research purposes	No studies located	–	–	–	–	Not specified	–	No	NCBI, (n.d).