

ESIG/ESVOC GES Titles & Use Descriptor mapping (Master 3/02/2010)

Blue text indicates updates to original

Note: Check with ESIG for latest GES Titles & Use Descriptor mapping document

GES Reference	GES Title	Area of Application / UD	Draft GES scope / definition	Applicable Use Descriptors (PROC or PC)	Applicable Use Descriptors (ERC) Note: ERCs listed in brackets may also be appropriate Low values to add statement on use of specific	Low Volatility Narrative Status			Moderate Volatility Narrative Status			High Volatility Narrative Status			
						Low DNEL	Moderate DNEL	High DNEL	Low DNEL	Moderate DNEL	High DNEL	Low DNEL	Moderate DNEL	High DNEL	
General Titles															
1	Manufacture of substance	Industrial (SU3, SU8, SU9)	Manufacture of the substance or use as an intermediate or process chemical or extraction agent. Includes recycling/ recovery, material transfers, storage, maintenance and loading (including marine vessel/ barge, road/rail car and bulk container), sampling and associated laboratory activities	PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC15	a. Manufacture of substance or use as a process chemical: ERC1 (ERC4) b. Use as an intermediate: ERC6A. Note: A separate environmental assessment is required as indicated. The same health assessment applies in both cases.										
		Professional (SU22)	not applicable												
		Consumer (SU21)	not applicable												
1A	Distribution of substance	Industrial (SU3, SU8, SU9)	Loading (including marine vessel/ barge, rail/road car and IBC loading) and repacking (including drums and small packs) or substance, including its sampling, storage, unloading distribution and associated laboratory activities	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC15	ERC1 (loading) ERC2 (repacking)										
		Professional (SU22)	not applicable												
		Consumer (SU21)	not applicable												
2	Formulation & (re)packing of substances and mixtures	Industrial (SU10)	Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfer, mixing, labelling, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities	PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC14, PROC15	ERC2										
		Professional (SU22)	not applicable												
		Consumer (SU21)	not applicable												
Identified Solvent Titles (ESVOC)															
3	Uses in Coatings	Industrial (SU3)	Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, sprayer, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities	PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15	ERC 4										
		Professional (SU22)	Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, sprayer by hand or similar methods, and film formation), and equipment cleaning, maintenance and associated laboratory activities	PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19	ERC 8A, ERC 8D (ERC8C, ERC8F)										
		Consumer (SU21)	Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.	PC1, PC4, PC5, PC8 (except only) PC9, PC10, PC15, PC18, PC23, PC24, PC31, PC34	ERC 8A, ERC 8D (ERC8C, ERC8F)							GES expected soon	GES expected soon		
4	Use in Cleaning Agents	Industrial (SU3)	Covers the use as a component of cleaning products including transfer from storage, pouring/unloading from drums or containers. Exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.	PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13	ERC4										
		Professional (SU22)	Covers the use as a component of cleaning products including pouring/unloading from drums or containers, and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping automated and by hand)	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13	ERC 8A, ERC 8D										
		Consumer (SU21)	Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products	PC3, PC4, PC9, PC24, PC35, PC38	ERC 8A, ERC 8D							GES expected soon	GES expected soon		
5	Use in Oil and Gas field drilling and production operations	Industrial (SU3)	Oil field well drilling and production operations (including drilling muds and well cleaning) including material transfers, on-site formulation, well head operations, shaker room activities and related maintenance.	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b	ERC 4										
		Professional (SU22)	Oil field well drilling operations (including drilling muds and well cleaning) including material transfers, on-site formulation, well head operations, shaker room activities and related maintenance.	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b	ERC 8D										
		Consumer (SU21)	not applicable												
6	Lubricants	Industrial (SU3)	Covers the use of formulated lubricants in closed or open systems including transfer operations, operation of machinery/engines and similar articles, reworking on reject articles, equipment maintenance and disposal of wastes.	PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18	ERC 7, ERC 4										
		Professional (SU22)	Covers the use of formulated lubricants in closed or open systems including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil.	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20	ERC 8A, ERC 8D ERC 9A, ERC 9B										
		Consumer (SU21)	Covers the consumer use of formulated lubricants in closed and open systems including transfer operations, application, operation of engines and similar articles, equipment maintenance and disposal of waste oil.	PC1, PC6, PC24, PC31	ERC 8A, ERC 8D ERC 9A, ERC 9B							GES expected soon	GES expected soon		
7	Metal working fluids / rolling oils	Industrial (SU3)	Covers the use in formulated MWF/rolling oils including transfer operations, mixing, application (including spraying and brushing), mould forming and casting, and handling of waste.	PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17	ERC 4										
		Professional (SU22)	Covers the use in formulated MWFs including transfer operations, open and contained cutting/machining activities, automated and manual application of corrosion protectors, draining and working on contaminated/ reject articles, and disposal of waste oils.	PROC1, PROC2, PROC3, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17	ERC 8A (ERC9A)										
		Consumer (SU21)	not applicable												
9	Blowing agents	Industrial (SU3)	Use as a blowing agent for rigid and flexible foams, including material transfers, mixing and injection, curing, cutting, storage and packing	PROC1, PROC2, PROC3, PROC8b, PROC9, PROC12	ERC 4										
		Professional (SU22)	not applicable												
		Consumer (SU21)	not applicable												
10	Use as binders and release agents	Industrial (SU3)	Covers the use as binders and release agents including material transfers, mixing, application (including spraying and brushing), mould forming and casting, and handling of waste.	PROC1, PROC2, PROC3, PROC4, PROC6, PROC7, PROC8a, PROC10, PROC13, PROC14	ERC4 (ERC5)										
		Professional (SU22)	Covers the use as binders and release agents including material transfers, mixing, application by spraying, brushing, and handling of waste.	PROC1, PROC2, PROC3, PROC4, PROC6, PROC8a, PROC8b, PROC10, PROC11, PROC14	ERC 8A, ERC 8D (ERC8B, 8C, 8E, 8F)										
		Consumer (SU21)	not applicable												
11	Use in Agrochemicals uses	Industrial (SU3)	not applicable												
		Professional (SU22)	Use as an agrochemical excipient for application by manual or machine spraying, smokes and fogging, including equipment clean-downs and disposal.	PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC11, PROC13	ERC8A, ERC 8D										
		Consumer (SU21)	Covers the consumer use in agrochemicals in liquid and solid forms.	PC12, PC22, PC27	ERC8A, ERC 8D							GES expected soon	GES expected soon		
12	Use as a fuel	Industrial (SU3)	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC16	ERC7 (ERC8B)										
		Professional (SU22)	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC16	ERC9A, ERC9B (ERC 8B, ERC 8E)										
		Consumer (SU21)	Covers consumer uses in liquid fuels	PC13	ERC8A, ERC9B (ERC 8B, ERC 8E)							GES expected soon	GES expected soon		
13	Functional Fluids	Industrial (SU3)	Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in industrial equipment including maintenance and related material transfers	PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9	ERC 7										
		Professional (SU22)	Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in professional equipment including maintenance and related material transfers.	PROC1, PROC2, PROC3, PROC8a, PROC9, PROC20	ERC 9A, ERC 9B										
		Consumer (SU21)	Use of sealed items containing functional fluids e.g. transfer oils, hydraulic fluids, refrigerants	PC16, PC17	ERC 9A, ERC 9B							GES expected soon	GES expected soon		
14	De-icing and anti-icing applications	Industrial (SU3)	not applicable												
		Professional (SU22)	Ice prevention and de-icing of vehicles, aircraft and other equipment by spraying	PROC1, PROC2, PROC8a, PROC8b, PROC11	ERC 8D										
		Consumer (SU21)	De-icing of vehicles and similar equipment by spraying	PC4	ERC 8D							0	GES expected soon	GES expected soon	
15	Road and construction applications	Industrial (SU3)	not applicable - Refers to bitumen blending. Covered under Formulation												
		Professional (SU22)	Application of surface coatings and binders in road and construction activities, including paving uses, manual mastic and in the application of roofing and water-proofing membranes	PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13	ERC8D (ERC8F)										
		Consumer (SU21)	not applicable												

C9 Aromatics		TONNES PER ANNUM (Estimate)	
GES Reference	GES Title - refer to GES Titles & Use Mapping worksheet for Use Descriptor details.	Hydrocarbons, C9, aromatics	
General Titles			
1	Manufacture of substance or use as process chemical or extraction agent <i>Use as intermediate (not subject to strictly controlled conditions)</i>	Industrial (SU3, SU8, SU9)	YES
1A	Distribution of substance	Industrial (SU3, SU8, SU9)	YES
		Professional (SU22)	n/a
		Consumer (SU21)	n/a
2	Formulation & (re)packing of substances and mixtures	Industrial (SU10)	YES
		Professional (SU22)	n/a
		Consumer (SU21)	n/a
Identified Solvent Titles (ESVOC)			
3	Uses in Coatings	Industrial (SU3)	YES
		Professional (SU22)	YES
		Consumer (SU21)	YES
4	Use in Cleaning Agents	Industrial (SU3)	YES
		Professional (SU22)	YES
		Consumer (SU21)	YES
5	Use in Oil field drilling and production operations	Industrial (SU3)	YES
		Professional (SU22)	
		Consumer (SU21)	n/a
6	Lubricants	Industrial (SU3)	YES
		Professional (SU22)	YES
		Consumer (SU21)	YES
7	Metal working fluids / rolling oils	Industrial (SU3)	YES
		Professional (SU22)	YES
		Consumer (SU21)	n/a
9	Blowing agents	Industrial (SU3)	
		Professional (SU22)	n/a
		Consumer (SU21)	n/a
10	Use as binders and release agents	Industrial (SU3)	YES
		Professional (SU22)	YES
		Consumer (SU21)	n/a
11	Agrochemical uses	Industrial (SU3)	n/a
		Professional (SU22)	YES
		Consumer (SU21)	YES
12	Use as a fuel	Industrial (SU3)	YES
		Professional (SU22)	YES
		Consumer (SU21)	YES
13	Functional Fluids	Industrial (SU3)	YES
		Professional (SU22)	YES
		Consumer (SU21)	YES
14	De-icing and anti-icing applications	Industrial (SU3)	n/a
		Professional (SU22)	
		Consumer (SU21)	
15	Road and construction applications	Industrial (SU3)	n/a
		Professional (SU22)	YES
		Consumer (SU21)	n/a
16	Other Consumer Uses	Consumer (SU21)	
17	Use in laboratories	Industrial (SU3)	YES
		Professional (SU22)	YES
		Consumer (SU21)	n/a
CONCAWE Titles (additional to ESVOC)			
18	Explosives manufacture & use	Industrial (SU3)	n/a
		Professional (SU22)	
		Consumer (SU21)	n/a
21	Rubber production and processing	Industrial (SU3, SU10)	
		Professional (SU22)	n/a
		Consumer (SU21)	n/a
Other Tentative Titles (ATEL, polymers, etc.)			
23	Polymer processing	Industrial (SU10)	YES
		Professional (SU22)	YES
		Consumer (SU21)	n/a
Other Possible Titles			
21	Water treatment chemicals	Industrial (SU3)	YES
		Professional (SU22)	YES
		Consumer (SU21)	
22	Mining chemicals	Industrial (SU3)	
		Professional (SU22)	n/a
		Consumer (SU21)	n/a

C10-12 Aromatics

GES Reference	GES Title - refer to GES Titles & Use Mapping worksheet for Use Descriptor details	USE COVERED	Hydrocarbons, C10, aromatics, >1% naphthalene	Hydrocarbons, C10, aromatics, <1% naphthalene	Hydrocarbons, C10-C13, aromatics, <1% naphthalene	Hydrocarbons, C10-C13, aromatics, >1% naphthalene
General Titles						
1	Manufacture of substance or use as process chemical or extraction agent <i>Use as intermediate (not subject to strictly controlled conditions)</i>	Industrial (SU3, SU8, SU9)	YES	YES	YES	YES
1A	Distribution of substance	Industrial (SU3, SU8, SU9)	YES	YES	YES	YES
		Professional (SU22)	n/a			
		Consumer (SU21)	n/a			
2	Formulation & (re)packing of substances and mixtures	Industrial (SU10)	YES	YES	YES	YES
		Professional (SU22)	n/a			
		Consumer (SU21)	n/a			
Identified Solvent Titles (ESVOC)						
3	Uses in Coatings	Industrial (SU3)	YES	YES	YES	YES
		Professional (SU22)	YES	YES	YES	
		Consumer (SU21)	YES	YES	YES	
4	Use in Cleaning Agents	Industrial (SU3)	YES	YES	YES	YES
		Professional (SU22)	YES	YES		
		Consumer (SU21)	YES	YES		
5	Use in Oil field drilling and production operations	Industrial (SU3)	YES	YES		
		Professional (SU22)				
		Consumer (SU21)	n/a			
6	Lubricants	Industrial (SU3)	YES	YES	YES	
		Professional (SU22)	YES	YES		
		Consumer (SU21)	YES	YES		
7	Metal working fluids / rolling oils	Industrial (SU3)	YES	YES		
		Professional (SU22)	YES	YES		
		Consumer (SU21)	n/a			
9	Blowing agents	Industrial (SU3)				
		Professional (SU22)	n/a			
		Consumer (SU21)	n/a			
10	Use as binders and release agents	Industrial (SU3)	YES	YES	YES	
		Professional (SU22)	YES	YES		
		Consumer (SU21)	n/a			
11	Agrochemical uses	Industrial (SU3)	n/a			
		Professional (SU22)	YES	YES	YES	YES
		Consumer (SU21)	YES	YES	YES	YES
12	Use as a fuel	Industrial (SU3)	YES	YES	YES	YES
		Professional (SU22)	YES	YES	YES	
		Consumer (SU21)	YES	YES	YES	YES
13	Functional Fluids	Industrial (SU3)	YES	YES		
		Professional (SU22)	YES	YES		
		Consumer (SU21)	YES	YES		
14	De-icing and anti-icing applications	Industrial (SU3)	n/a			
		Professional (SU22)				
		Consumer (SU21)				
15	Road and construction applications	Industrial (SU3)	n/a			
		Professional (SU22)	YES	YES		
		Consumer (SU21)	n/a			
16	Other Consumer Uses	Consumer (SU21)				
17	Use in laboratories	Industrial (SU3)	YES	YES		
		Professional (SU22)	YES	YES		
		Consumer (SU21)	n/a			
CONCAWE Titles (additional to ESVOC)						
18	Explosives manufacture & use	Industrial (SU3)	n/a			
		Professional (SU22)				
		Consumer (SU21)	n/a			
21	Rubber production and processing	Industrial (SU3, SU10)				
		Professional (SU22)	n/a			
		Consumer (SU21)	n/a			
Other Tentative Titles (ATIEL, polymers, etc.)						
23	Polymer processing	Industrial (SU10)		YES	YES	
		Professional (SU22)	YES		YES	
		Consumer (SU21)	n/a			
Other Possible Titles						
21	Water treatment chemicals	Industrial (SU3)	YES	YES		
		Professional (SU22)	YES	YES		
		Consumer (SU21)				
22	Mining chemicals	Industrial (SU3)				
		Professional (SU22)	n/a			
		Consumer (SU21)	n/a			

C9-14 Aliphatics (2-25% aromatics)

GES Reference	GES Title - refer to GES Titles & Use Mapping worksheet for Use Descriptor details.	USES COVERED						
General Titles		Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Hydrocarbons, C8-12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Hydrocarbons, C10-C14: isoalkanes, cyclics, aromatics(2-25%)	
1	Manufacture of substance or use as process chemical or extraction agent <i>Use as Intermediate (not subject to strictly controlled conditions)</i>	Industrial (SU3, SU8, SU9)	YES	YES	YES	YES	YES	YES
1A	Distribution of substance	Industrial (SU3, SU8, SU9)	n/a	YES	YES	YES	YES	
		Professional (SU22)	n/a					
		Consumer (SU21)	n/a					
2	Formulation & (re)packing of substances and mixtures	Industrial (SU10)	YES	YES	YES	YES	YES	
		Professional (SU22)	n/a					
		Consumer (SU21)	n/a					
Identified Solvent Titles (ESVOC)								
3	Uses in Coatings	Industrial (SU3)	YES	YES	YES	YES		YES
		Professional (SU22)		YES	YES	YES		
		Consumer (SU21)	YES	YES	YES	YES		YES
4	Use in Cleaning Agents	Industrial (SU3)	YES	YES	YES	YES	YES	YES
		Professional (SU22)	YES	YES	YES	YES	YES	
		Consumer (SU21)		YES	YES	YES	YES	
5	Use in Oil field drilling and production operations	Industrial (SU3)						
		Professional (SU22)						
		Consumer (SU21)	n/a					
6	Lubricants	Industrial (SU3)		YES	YES	YES	YES	YES
		Professional (SU22)		YES	YES	YES		
		Consumer (SU21)		YES	YES	YES		
7	Metal working fluids / rolling oils	Industrial (SU3)		YES	YES	YES		YES
		Professional (SU22)		YES	YES	YES		
		Consumer (SU21)	n/a					
9	Blowing agents	Industrial (SU3)	n/a					
		Professional (SU22)	n/a					
		Consumer (SU21)	n/a					
10	Use as binders and release agents	Industrial (SU3)		YES			YES	
		Professional (SU22)					YES	
		Consumer (SU21)	n/a					
11	Agrochemical uses	Industrial (SU3)	n/a					
		Professional (SU22)		YES		YES		
		Consumer (SU21)				YES		
12	Use as a fuel	Industrial (SU3)		YES	YES	YES	YES	
		Professional (SU22)		YES	YES	YES		
		Consumer (SU21)		YES	YES	YES		
13	Functional Fluids	Industrial (SU3)		YES	YES	YES		YES
		Professional (SU22)		YES	YES	YES		
		Consumer (SU21)		YES	YES	YES		
14	De-icing and anti-icing applications	Industrial (SU3)	n/a					
		Professional (SU22)						
		Consumer (SU21)						
15	Road and construction applications	Industrial (SU3)	n/a					
		Professional (SU22)		YES	YES	YES	YES	
		Consumer (SU21)	n/a					
16	Other Consumer Uses	Consumer (SU21)						
17	Use in laboratories	Industrial (SU3)		YES	YES	YES		
		Professional (SU22)		YES	YES	YES		
		Consumer (SU21)	n/a					
CONCAWE Titles (additional to ESVOC)								
18	Explosives manufacture & use	Industrial (SU3)	n/a					
		Professional (SU22)						
		Consumer (SU21)	n/a					
21	Rubber production and processing	Industrial (SU3, SU10)	n/a					
		Professional (SU22)	n/a					
		Consumer (SU21)	n/a					
Other Tentative Titles (ATIEL, polymers, etc.)								
23	Polymer processing	Industrial (SU10)						
		Professional (SU22)						
		Consumer (SU21)	n/a					
Other Possible Titles								
21	Water treatment chemicals	Industrial (SU3)					YES	
		Professional (SU22)					YES	
		Consumer (SU21)						
22	Mining chemicals	Industrial (SU3)						
		Professional (SU22)	n/a					
		Consumer (SU21)	n/a					

C14-20 Aliphatics (2-30% aromatic)

GES Reference	GES Title - refer to GES Titles & Use Mapping worksheet for Use Descriptor details.	USES COVERED	
General Titles		Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)	Hydrocarbons, C16-C20, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)
1	Manufacture of substance or use as process chemical or extraction agent <i>Use as intermediate (not subject to strictly controlled conditions)</i>	Industrial (SU3, SU8, SU9) Industrial (SU3, SU8, SU9)	YES YES
1A	Distribution of substance	Industrial (SU3, SU8, SU9) Professional (SU22) Consumer (SU21)	YES n/a n/a
2	Formulation & (re)packing of substances and mixtures	Industrial (SU10) Professional (SU22) Consumer (SU21)	YES n/a n/a
Identified Solvent Titles (ESVOC)			
3	Uses in Coatings	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES YES YES
4	Use in Cleaning Agents	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES YES YES
5	Use in Oil field drilling and production operations	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES YES n/a
6	Lubricants	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES YES YES
7	Metal working fluids / rolling oils	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES YES n/a
9	Blowing agents	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES n/a n/a
10	Use as binders and release agents	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES YES n/a
11	Agrochemical uses	Industrial (SU3) Professional (SU22) Consumer (SU21)	n/a n/a n/a
12	Use as a fuel	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES YES YES
13	Functional Fluids	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES YES YES
14	De-icing and anti-icing applications	Industrial (SU3) Professional (SU22) Consumer (SU21)	n/a n/a n/a
15	Road and construction applications	Industrial (SU3) Professional (SU22) Consumer (SU21)	n/a n/a n/a
16	Other Consumer Uses	Consumer (SU21)	n/a
17	<i>Use in laboratories</i>	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES YES n/a
CONCAWE Titles (additional to ESVOC)			
18	Explosives manufacture & use	Industrial (SU3) Professional (SU22) Consumer (SU21)	n/a n/a YES
21	Rubber production and processing	Industrial (SU3, SU10) Professional (SU22) Consumer (SU21)	n/a n/a n/a
Other Tentative Titles (ATIEL, polymers, etc.)			
23	Polymer processing	Industrial (SU10) Professional (SU22) Consumer (SU21)	YES YES n/a
Other Possible Titles			
21	Water treatment chemicals	Industrial (SU3) Professional (SU22) Consumer (SU21)	YES YES YES
22	Mining chemicals	Industrial (SU3) Professional (SU22) Consumer (SU21)	n/a n/a n/a

C5 Aliphatics						
GES Reference	GES Title - refer to GES Titles & Use Mapping worksheet for Use Descriptor details.	USES COVERED				
General Titles		Normal-Pentane	ISO-Pentane	Cyclopentane	Hydrocarbons, C5, n-alkanes, isoalkanes	
1	Manufacture of substance or use as process chemical or extraction agent <i>Use as intermediate (not subject to strictly controlled conditions)</i>	Industrial (SU3, SU8, SU9) Industrial (SU3, SU8, SU9)	YES	YES	YES	YES
1A	Distribution of substance	Industrial (SU3, SU8, SU9)	YES	YES	YES	YES
		Professional (SU22)	n/a			
		Consumer (SU21)	n/a			
2	Formulation & (re)packing of substances and mixtures	Industrial (SU10)	YES	YES	YES	YES
		Professional (SU22)	n/a			
		Consumer (SU21)	n/a			
Identified Solvent Titles (ESVOC)						
3	Uses in Coatings	Industrial (SU3)	YES	YES		YES
		Professional (SU22)				
		Consumer (SU21)	YES			YES
4	Use in Cleaning Agents	Industrial (SU3)	YES	YES		
		Professional (SU22)	YES			
		Consumer (SU21)	YES			YES
5	Use in Oil field drilling and production operations	Industrial (SU3)				
		Professional (SU22)				
		Consumer (SU21)	n/a			
6	Lubricants	Industrial (SU3)				
		Professional (SU22)				
		Consumer (SU21)				
7	Metal working fluids / rolling oils	Industrial (SU3)				
		Professional (SU22)				
		Consumer (SU21)	n/a			
9	Blowing agents	Industrial (SU3)	YES	YES	YES	YES
		Professional (SU22)	n/a			
		Consumer (SU21)	n/a			
10	Use as binders and release agents	Industrial (SU3)				
		Professional (SU22)				
		Consumer (SU21)	n/a			
11	Agrochemical uses	Industrial (SU3)	n/a			
		Professional (SU22)				
		Consumer (SU21)				
12	Use as a fuel	Industrial (SU3)	YES		YES	
		Professional (SU22)		YES		
		Consumer (SU21)	YES	YES		
13	Functional Fluids	Industrial (SU3)	YES	YES		YES
		Professional (SU22)	YES	YES		YES
		Consumer (SU21)				
14	De-icing and anti-icing applications	Industrial (SU3)	n/a			
		Professional (SU22)				
		Consumer (SU21)				
15	Road and construction applications	Industrial (SU3)	n/a			
		Professional (SU22)				
		Consumer (SU21)	n/a			
16	Other Consumer Uses	Consumer (SU21)	YES	YES	YES	YES
17	<i>Use in laboratories</i>	Industrial (SU3)	YES	YES	YES	YES
		Professional (SU22)	YES	YES	YES	YES
		Consumer (SU21)				
CONCAWE Titles (additional to ESVOC)						
18	Explosives manufacture & use	Industrial (SU3)	n/a			
		Professional (SU22)				
		Consumer (SU21)	n/a			
21	Rubber production and processing	Industrial (SU3, SU10)				
		Professional (SU22)	n/a			
		Consumer (SU21)	n/a			
Other Tentative Titles (ATIEL, polymers, etc.)						
23	Polymer processing	Industrial (SU10)				
		Professional (SU22)				
		Consumer (SU21)	n/a			
Other Possible Titles						
21	Water treatment chemicals	Industrial (SU3)				
		Professional (SU22)				
		Consumer (SU21)				
22	Mining chemicals	Industrial (SU3)				
		Professional (SU22)	n/a			
		Consumer (SU21)	n/a			

C6 Aliphatics

GES Reference	GES Title - refer to GES Titles & Use Mapping worksheet for Use Descriptor details.	TONNES PER ANNUM (Estimate)						
		Normal-Hexane	Iso-Hexane	Hydrocarbons, C6, n-alkanes, isoalkanes, cyclics, n-hexane rich	Hydrocarbons, C5-C7, n-alkanes, isoalkanes, < 5% n-hexane	Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane	Hydrocarbons, C5-C7, n-alkanes, isoalkanes, n-hexane rich	
General Titles								
1	Manufacture of substance or use as process chemical or extraction agent <i>Use as intermediate (not subject to strictly controlled conditions)</i>	Industrial (SU3, SU8, SU9)	YES	YES	YES	YES	YES	YES
1A	Distribution of substance	Industrial (SU3, SU8, SU9)	YES	YES	YES	YES	YES	YES
		Professional (SU22)	n/a					
		Consumer (SU21)						
2	Formulation & (re)packing of substances and mixtures	Industrial (SU10)	YES	YES	YES	YES	YES	YES
		Professional (SU22)	n/a					
		Consumer (SU21)	n/a					
Identified Solvent Titles (ESVOC)								
3	Uses in Coatings	Industrial (SU3)	YES	YES	YES		YES	
		Professional (SU22)	YES	YES	YES		YES	
		Consumer (SU21)	YES	YES			YES	
4	Use in Cleaning Agents	Industrial (SU3)	YES	YES	YES	YES	YES	
		Professional (SU22)	YES	YES	YES	YES	YES	YES
		Consumer (SU21)		YES	YES	YES	YES	YES
5	Use in Oil field drilling and production operations	Industrial (SU3)						
		Professional (SU22)						
		Consumer (SU21)	n/a					
6	Lubricants	Industrial (SU3)		YES	YES		YES	
		Professional (SU22)		YES			YES	
		Consumer (SU21)		YES				
7	Metal working fluids / rolling oils	Industrial (SU3)		YES				
		Professional (SU22)		YES				
		Consumer (SU21)	n/a					
9	Blowing agents	Industrial (SU3)	YES	YES	YES			
		Professional (SU22)	n/a					
		Consumer (SU21)	n/a					
10	Use as binders and release agents	Industrial (SU3)		YES				
		Professional (SU22)		YES				
		Consumer (SU21)	n/a					
11	Agrochemical uses	Industrial (SU3)	n/a					
		Professional (SU22)			YES			
		Consumer (SU21)						
12	Use as a fuel	Industrial (SU3)		YES				YES
		Professional (SU22)		YES				YES
		Consumer (SU21)		YES				YES
13	Functional Fluids	Industrial (SU3)	YES					
		Professional (SU22)	YES					
		Consumer (SU21)						
14	De-icing and anti-icing applications	Industrial (SU3)	n/a					
		Professional (SU22)						
		Consumer (SU21)						
15	Road and construction applications	Industrial (SU3)	n/a					
		Professional (SU22)						
		Consumer (SU21)	n/a					
16	Other Consumer Uses	Consumer (SU21)	YES	YES				
17	Use in laboratories	Industrial (SU3)	YES	YES	YES	YES		YES
		Professional (SU22)	YES	YES	YES	YES		YES
		Consumer (SU21)	n/a					
CONCAWE Titles (additional to ESVOC)								
18	Explosives manufacture & use	Industrial (SU3)	n/a					
		Professional (SU22)		YES				
		Consumer (SU21)	n/a					
21	Rubber production and processing	Industrial (SU3, SU10)		YES				
		Professional (SU22)	n/a					
		Consumer (SU21)	n/a					
Other Tentative Titles (ATIEL, polymers, etc.)								
23	Polymer processing	Industrial (SU10)	YES	YES	YES			
		Professional (SU22)	YES					
		Consumer (SU21)	n/a					
Other Possible Titles								
21	Water treatment chemicals	Industrial (SU3)		YES				
		Professional (SU22)						
		Consumer (SU21)						
22	Mining chemicals	Industrial (SU3)	YES	YES	YES			
		Professional (SU22)	n/a					
		Consumer (SU21)	n/a					

