

CORINAIR 90 - TOP 30 ACTIVITIES (28 COUNTRIES)**SULPHUR DIOXIDE**

The following overviews provide by pollutant the 30 highest emitting activities for Europe from the CORINAIR90 database (Sept. 1995). Activities are classified by SNAP90. The chapter numbers have been updated where possible to be in line with SNAP97.

ACTIVITY	EMISSIONS, TONNES	CHAPTER
Public power and cogeneration - combustion plants \geq 300 MW	13,691,291	B111
Commercial, institutional and residential - combustion plants $<$ 50MW	2,864,830	B111/2
Industrial combustion - plants $<$ 50 MW	2,309,207	B111/2
Industrial combustion - plants = 300 MW	1,781,768	B111/2
Industrial combustion - plants \geq 50 MW and $>$ 300 MW	1,236,293	B111
Nature - volcanoes	569,584	B1108
Public power and cogeneration - combustion - plants \geq 50 and $<$ 300 MW	385,432	B111/2
Industrial combustion - refinery processes furnaces	380,253	B136
Industrial combustion - sinter plant	356,859	B331
District heating - combustion plants \geq 50 MW and $<$ 300 MW	326,419	B111/2
District heating - combustion plants $<$ 50 MW	272,089	B111/2
Other mobile sources - maritime activities: national sea traffic	249,193	B842
Industrial combustion - cement	210,915	B3311
Production processes - sulphuric acid	201,576	B441
Road transport - heavy duty vehicles and buses: rural driving	173,698	B710
Commercial, institutional and residential - combustion plants \geq 50 MW	163,245	B111/2
Industrial combustion - coke oven furnaces	130,181	B146
Production processes - petroleum products processing	130,078	B411
District heating - combustion plants \geq 300 MW	128,502	B111
Production processes - fluid catalytic cracking - co boiler	114,967	B411
Road transport - passenger cars: urban driving	114,800	B710
Other mobile sources - off road vehicles and machines: agriculture	114,531	B810
Public power and cogeneration - combustion plants $<$ 50 MW	110,368	B111/2
Road transport - heavy duty vehicles and buses: urban driving	95,908	B710
Road transport - passenger cars: rural driving	92,747	B710
Road transport - heavy duty vehicles and buses: highway driving	90,551	B710
Production processes - sulphur recovery plants	89,039	B413
Industrial combustion - bricks and tiles	81,399	B3319
Industrial combustion - reheating furnaces steel and iron	76,268	B332
Other mobile sources - maritime activities: harbours	59,443	B842

CORINAIR 90 - TOP 30 ACTIVITIES (28 COUNTRIES)**NITROGEN OXIDES**

ACTIVITY	EMISSIONS, TONNES	CHAPTER
Public power and cogeneration - combustion plants > = 300MW	3,316,424	B111
Road transport - passenger cars: rural driving	1,704,195	B710
Road transport - heavy duty vehicles and buses: rural driving	1,359,636	B710
Road transport - passenger cars: urban driving	1,197,845	B710
Road transport - passenger cars: highway driving	1,006,586	B710
Road transport - heavy duty vehicles and buses: highway driving	1,006,364	B710
Other mobile sources - off road vehicles and machines: agriculture	732,756	B810
Commercial, institutional and residential - combustion plants < 50 MW	708,312	B111/2
Road transport - heavy duty vehicles and buses: urban driving	677,639	B710
Industrial combustion - plants < 50 MW	572,610	B111/2
Other mobile sources - maritime activities: national sea traffic	467,936	B842
Industrial - plants > = 300 MW	430,562	B111
Industrial combustion - cement	413,004	B3311
Industrial combustion - plants > 50 MW and < 300MW	273,985	B111/2
Other mobile sources - off road vehicles and machines: industry	258,391	B810
Road transport - light duty vehicles < 3.5 t: urban driving	240,235	B710
Road transport - light duty vehicles < 3.5 t: rural driving	204,077	B710
Other mobile sources - railways	198,581	B810
Other mobile sources - airports (LTO cycles and ground activities)	179,314	B851
Industrial combustion - sinter plant	176,964	B331
Road transport - heavy duty vehicles > 3.5 t and buses	165,587	B710
Public power and cogeneration - combustion plants > = 50 and < 300 MW	160,575	B111/2
Road transport - passenger cars	160,502	B710
Waste treatment and disposal - open burning of agricultural wastes (except 10.3)	153,174	B970
Other mobile sources - maritime activities: national fishing	143,096	B842
Production processes - nitric acid	111,264	B442
Other mobile sources - off road vehicles and machines	99,538	B810
Road transport - light duty vehicles < 3.5 t: highway driving	92,845	B710
Industrial combustion - refinery processes furnaces	89,013	B136
Other mobile sources - maritime activities: harbours	82,145	B842

CORINAIR 90 - TOP 30 ACTIVITIES (28 COUNTRIES)**NON-METHANE VOLATILE ORGANIC COMPOUNDS**

ACTIVITY	EMISSIONS, TONNES	CHAPTER
Nature - coniferous forests	2,342,106	B1101
Road transport - passenger cars: urban driving	1,965,227	B710
Road transport - gasoline evaporation from vehicles	1,549,946	B760
Road transport - passenger cars: rural driving	1,014,220	B710
Commercial, institutional and residential - combustion plants < 50 MW	973,489	B111/2
Nature - deciduous forests: high isoprene emitters	909,742	B1101
Solvent use - paint application: other industrial application	719,192	B610
Nature - deciduous forests: non isoprene emitters	577,876	B1101
Solvent use - paint application	509,636	B610
Solvent use - domestic solvent use (other than paint application)	492,206	B610
Solvent use - other use of solvents and related activities	456,658	B641
Waste treatment and disposal - open burning of agricultural wastes (except 100300)	401,380	B970
Solvent use - metal degreasing	399,998	B621
Gasoline distribution - service stations (incl. refuelling)	396,021	B551
Solvent use - paint application: construction and buildings	364,887	B610
Road transport - passenger cars: highway driving	350,078	B710
Extraction, 1 st treatment and loading of liquid fossil fuels - off-shore	345,707	B521
Road transport - mopeds and motorcycles < 50 CM3	317,543	B710
Agriculture - animal breeding (excretions): fattening pigs	289,279	B1050
Solvent use - printing industry	278,098	B643
Road transport - heavy duty vehicles and buses: urban driving	245,212	B710
Road transport - heavy duty vehicles and buses: rural driving	229,168	B710
Road transport - light duty vehicles < 3.5 t: urban driving	227,684	B710
Other mobile sources - off road vehicles and machines: agriculture	210,494	B810
Solvent use - paint application: domestic use	199,250	B610
Nature - deciduous forests	187,552	B1101
Solvent use - application of glues and adhesives	186,469	B641
Road transport - heavy duty vehicles and buses: highway driving	169,288	B710
Road transport - motorcycles < 50 CM3: urban driving	163,621	B710
Road transport - motorcycles < 50 CM3: road driving	157,745	B710

CORINAIR 90 - TOP 30 ACTIVITIES (28 COUNTRIES)**AMMONIA**

ACTIVITY	EMISSIONS, TONNES	CHAPTER
Agriculture - animal breeding (excretions): dairy cows	1,430,200	B1050
Agriculture - animal breeding (excretions): other cattle	1,225,113	B1050
Agriculture - cultures with fertilizers: arable land crops	693,248	B1050
Agriculture - animal breeding (excretions): fattening pigs	607,266	B1050
Agriculture - animal breeding (excretions): sheep	315,755	B1050
Agriculture - cultures with fertilizers: except animal manure	226,848	B1050
Agriculture - animal breeding (excretions): sows	194,725	B1050
Agriculture - animal breeding (excretions): laying hens	140,003	B1050
Agriculture - animal breeding (excretions): broilers	100,502	B1050
Waste treatment and disposal - land filling	73,675	B940
Production processes - NPKfertilisers	64,827	B443
Agriculture - cultures with fertilizers: permanent crops	59,319	B1010
Agriculture - animal breeding (excretions): horses	56,439	B1050
Agriculture - cultures with fertilizers: grassland	55,515	B1010
Agriculture - cultures with fertilizers: market gardening	53,987	B1010
Waste treatment and disposal - latrines	37,496	B9107
Agriculture - animal breeding (excretions): other poultry	35,989	B1050
Nature - humans	29,991	
Production processes - ammonia	29,655	B443
Production processes - urea	29,082	B443
Nature - coniferous forests	27,315	B1101
Agriculture - animal breeding (excretions)	21,200	B1050
Nature - deciduous forests	19,316	B1101
Nature - animals: mammals	19,242	B1107
Nature - natural grassland	19,026	B1104
Production processes - ammonium nitrate	13,265	B443
Agriculture - animal breeding (excretions): dairy cows	11,615	B1040
Agriculture - animal breeding (enteric fermentation): other cattle	10,872	B1040
Agriculture - animal breeding (excretions): fur animals	10,118	B100408
Waste treatment and disposal - waste water treatment	9,565	B9101

CORINAIR 90 - TOP 30 ACTIVITIES (28 COUNTRIES)**NITROUS OXIDE**

ACTIVITY	EMISSIONS, TONNES	CHAPTER
Agriculture - cultures with fertilizers: arable crops	321,601	B1010
Production processes - adipic acid	232,608	B4521
Nature - coniferous forests	184,477	B1101
Agriculture - cultures with fertilizers except animal manure	178,600	B1010
Nature - open sea (>6m)	166,995	
Production processes - nitric acid	100,890	B442
Public power and cogeneration - combustion plants > = 300 MW	83,986	B111
Agriculture - cultures with fertilizers: grassland	83,716	B1010
Nature - natural grassland	53,902	B1104
Commercial, institutional and residential - combustion plants < 50 MW	43,093	B111/2
Agriculture -cultures with fertilizers: permanent crops	41,893	B1010
Nature - deciduous forests: high isoprene emitters	39,400	B1101
Agriculture - cultures without fertilizers: grassland	33,385	B1020
Nature - deciduous forests: non isoprene emitters	24,355	B1101
Nature - deciduous forests	18,508	B1101
Industrial combustion - plants < 50 MW	17,963	B111/2
Production processes - ammonia	17,784	B443
Agriculture - cultures without fertilizers: arable land crops	17,119	B1020
Nature - humid zones: undrained and brackish marshes	16,259	B1105
Nature - lakes	14,534	
Nature - shallow saltwaters	13,153	
Agriculture - cultures without fertilizers: fallows	12,997	B1020
Industrial combustion - plants > = 300 MW	11,153	B111
Agriculture - cultures without fertilizers: permanent crops	9,234	B1020
Agriculture - cultures with fertilizers: market gardening	8,405	B1010
Waste treatment and disposal - waste water treatment	7,989	B9101
Nature - waters	7,432	B1106
Road transport - passenger cars: rural driving	6,800	B710
Agriculture - animal breeding (excretions): other cattle	6,790	B1050
Road transport - passenger cars: urban driving	6,419	B710

CORINAIR 90 - TOP 30 ACTIVITIES (28 COUNTRIES)**CARBON DIOXIDE**

ACTIVITY	EMISSIONS, KILOTONNES	CHAPTER
Public power and cogeneration - combustion plants > = 300MW	1,160,276	B111
Commercial, institutional and residential - combustion plants < 50 MW	829,163	B111/2
Industrial combustion - plants < 50 MW	358,119	B111/2
Road transport - passenger cars: urban driving	180,267	B710
Industrial combustion - plants > = 50 MW and < 300 MW	179,725	B111/2
Industrial combustion - plants > = 300 MW	178,940	B111
Nature - animals: mammals	170,594	B1107
Road transport - passenger cars: rural driving	135,402	B710
Industrial combustion - cement	100,336	B3311
Road transport - heavy duty vehicles and buses: rural driving	86,923	B710
Production processes - cement	82,297	B3311
Road transport - passenger cars: highway driving	71,408	B710
Nature - humans	67,709	
Road transport - heavy duty vehicles and buses: highway driving	62,145	B710
Industrial combustion - blast furnaces cowpers	61,991	B323
Public power and cogeneration - combustion plants > = 50 and < 300 MW	57,906	B111/2
Nature - forest fires	56,468	B1103
Industrial combustion - coke oven furnaces	49,661	B146
Road transport - heavy duty vehicles and buses: urban driving	49,011	B710
Industrial combustion - refinery processes furnaces	46,967	B136
Other mobile sources - off road vehicles and machines: agriculture	46,620	B810
Road transport - light duty vehicles < 3.5 t: urban driving	42,145	B710
District heating - combustion plants < 50 MW	36,365	B111/2
Industrial combustion - reheating furnaces steel and iron	30,368	B332
District heating - combustion plants > = 50 MW and < 300 MW	27,424	B111/2
Industrial combustion - bricks and tiles	26,920	B3319
Waste treatment and disposal - compost production from waste	26,790	B9105
Road transport light duty vehicles < 3.5 t: rural driving	22,433	B710
Industrial combustion - sinter plant	20,220	B331
Public power and cogeneration - combustion plants < 50 MW	19,310	B111/2

CORINAIR 90 - TOP 30 ACTIVITIES (28 COUNTRIES)**CARBON MONOXIDE**

ACTIVITY	EMISSIONS, TONNES	CHAPTER
Road transport - passenger cars: urban driving	18,520,778	B710
Commercial, institutional and residential - combustion plants < 50 MW	9,916,245	B111/2
Road transport - passenger cars: rural driving	8,187,460	B710
W.T.D. - open burning of agricultural wastes (except 100300)	4,013,882	B970
Road transport -passenger cars: highway driving	3,535,644	B710
Industrial combustion - sinter plant	3,382,958	B331
Road transport - light duty vehicles < 3.5 t: urban driving	2,110,908	B710
Nature - forest fires	1,332,324	B1103
Road transport - passenger cars	1,181,522	B710
Industrial combustion - blast furnaces cowpers	1,135,531	B323
Road transport - heavy duty vehicles and buses: rural driving	1,085,091	B710
Road transport - heavy duty vehicles and buses: urban driving	1,027,815	B710
Production processes - basic oxygen furnace steel plant	1,019,295	B426
Other mobile sources - off road vehicles and machines: agriculture	1,000,351	B810
Industrial combustion grey iron foundries	987,210	B333
Road transport - light duty vehicles < 3.5 t: rural driving	914,069	B710
Industrial combustion - plants < 50 MW	654,004	B111/2
Public power and cogeneration - combustion plants > = 300 MW	649,705	B111
Industrial combustion - plants > = 50 MW and < 300 MW	586,384	B111/2
Agriculture - stubble burning	571,397	B1030
Road transport - motorcycles > 50 CM3: urban driving	493,857	B710
Road transport - mopeds and motorcycles < 50 CM3	492,280	B710
Road transport - heavy duty vehicles and buses: highway driving	480,072	B710
Production processes - blast furnace charging	474,744	B422
Production processes - electric furnace steel plant	434,884	B427
Road transport - motorcycles > 50 CM3: road driving	377,154	B710
Other mobile sources - household / gardening	351,126	B810
Production processes - coke oven	332,718	B146
Production processes - aluminium production (electrolysis)	275,668	B431
Waste treatment and disposal - land filling	267,235	B940

CORINAIR 90 - TOP 30 ACTIVITIES (28 COUNTRIES)**METHANE**

ACTIVITY	EMISSIONS, TONNES	CHAPTER
Waste treatment and disposal - land filling	7,932,129	B940
Nature - lakes	4,715,539	
Extraction and 1 st treatment of solid fossil fuels -underground mining	4,545,789	B511
Agriculture - animal breeding (enteric fermentation): other cattle	4,148,720	B1040
Agriculture - animal breeding (enteric fermentation): dairy cows	3,895,439	B1040
Nature - humid zones: undrained and brackish marshes	2,444,432	B1105
Extraction and 1 st treatment of solid fossil fuels - open cast mining	2,396,352	B511
Gas distribution networks - distribution networks	2,083,998	B561
Agriculture - animal breeding (excretions): fattening pigs	1,353,113	B1050
Nature - coniferous forests	1,259,173	B1101
Agriculture - animal breeding (excretions): other cattle	1,092,047	B1050
Agriculture - animal breeding (enteric fermentation): ovines	975,100	B1040
Agriculture - animal breeding (excretions): dairy cows	850,195	B1050
Commercial, institutional and residential - combustion plants < 50 MW	614,872	B111/2
Extraction and 1 st treatment of solid fossil fuels - storage	563,349	B511
Agriculture - cultures with fertilizers except animal manure	468,000	B1010
Nature - shallow saltwaters	362,631	
Gas distribution networks	360,693	B561
W.T.D - open burning of agricultural wastes (except 100300)	358,234	B970
Nature - deciduous forests: high isoprene emitters	353,525	B1101
Agriculture - animal breeding (excretions): sows	259,424	B1050
Nature - deciduous forests: non isoprene emitters	256,742	B1101
Agriculture - cultures with fertilizers: arable land crops	244,320	B1010
Nature - humid zones: raised bogs	237,733	B1105
Agriculture - animal breeding (excretions): sheep	215,746	B1050
Agriculture - animal breeding (enteric fermentation): pigs	214,996	B1040
Waste treatment and disposal - waste water treatment	211,916	B9101
Agriculture - cultures with fertilizers: grassland	195,492	B1010
Nature - natural grassland	192,093	B1104
Waste treatment and disposal - sludge spreading	155,484	B9103