Appendix 4

Point 29 – Mutagens: category 2

Substances	Index number	EC number	CAS number	Notes
Hexamethylphosphoric triamide; hexamethylphosphoramide	015-106-00-2	211-653-8	680-31-9	
Diethyl sulphate	016-027-00-6	200-589-6	64-67-5	
Chromium (VI) trioxide	024-001-00-0	215-607-8	1333-82-0	E
Potassium dichromate	024-002-00-6	231-906-6	7778-50-9	E
Ammonium dichromate	024-003-00-1	232-143-1	7789-09-5	E
Sodium dichromate anhydrate	024-004-00-7	234-190-3	10588-01-9	E
Sodium dichromate, dihydrate	024-004-01-4	234-190-3	7789-12-0	E
Chromyl dichloride; chromic oxychloride	024-005-00-2	239-056-8	14977-61-8	
Potassium chromate	024-006-00-8	232-140-5	7789-00-6	
Sodium chromate	024-018-00-3	231-889-5	7775-11-3	E
Cadmium fluoride	048-006-00-2	232-222-0	7790-79-6	E

Substances	Index number	EC number	CAS number	Notes
Cadmium chloride	048-008-00-3	233-296-7	10108-64-2	E
Cadmium sulphate	048-009-00-9	233-331-6	10124-36-4	E
Butane [containing ≥ 0,1 % Butadiene (203-450-8)] [1] Isobutane [containing ≥ 0,1 % Butadiene (203-450-8)] [2]	601-004-01-8	203-448-7 [1] 20-857-2 [2]	106-97-8 [1] 75-28-5 [2]	C, S
1,3-Butadiene buta-1,3-diene	601-013-00-X	203-450-8	106-99-0	D
Benzene	601-020-00-8	200-753-7	71-43-2	E
Benzo[a]pyrene; benzo[d,e,f]chrysene	601-032-00-3	200-028-5	50-32-8	
1,2-Dibromo-3-chloropropane	602-021-00-6	202-479-3	96-12-8	
Ethylene oxide; oxirane	603-023-00-X	200-849-9	75-21-8	
Propylene oxide; 1,2-epoxypropane; Methyloxirane	603-055-00-4	200-879-2	75-56-9	E
2,2'-Bioxirane; 1,2:3,4-diepoxybutane	603-060-00-1	215-979-1	1464-53-5	

Substances	Index number	EC number	CAS number	Notes
Methyl acrylamidomethoxyacetate (containing ≥ 0,1 % acrylamide)	607-190-00-X	401-890-7	77402-03-0	
Methyl acrylamidoglycolate (containing ≥ 0,1 % acrylamide)	607-210-00-7	403-230-3	77402-05-2	
2-Nitrotoluene	609-065-00-5	201-853-3	88-72-2	E
4,4'-oxydianiline [1] and its salts p-aminophenyl ether [1]	612-199-00-7	202-977-0 [1]	101-80-4 [1]	E
Ethyleneimine; aziridine	613-001-00-1	205-793-9	151-56-4	
Carbendazim (ISO) methyl benzimidazol-2-ylcarbamate	613-048-00-8	234-232-0	10605-21-7	
Benomyl (ISO) methyl 1-(butylcarbamoyl)benzimidazol-2-ylcarbamate	613-049-00-3	241-775-7	17804-35-2	

Substances	Index number	EC number	CAS number	Notes
1,3,5,-Tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione; TGIC	615-021-00-6	219-514-3	2451-62-9	
Acrylamide	616-003-00-0	201-173-7	79-06-1	
1,3,5-tris-[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione	616-091-00-0	423-400-0	59653-74-6	E
Gases (petroleum), catalytic cracked naphtha depropaniser overhead, C_3-rich acid-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked hydrocarbons and treated to remove acidic impurities. It consists of hydrocarbons having carbon numbers in the range of C_2 through C_4, predominantly C_3.)	649-062-00-6	270-755-0	68477-73-6	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), catalytic cracker; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of the products from a catalytic cracking process. It consists predominantly of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-063-00-1	270-756-6	68477-74-7	H, K
Gases (petroleum), catalytic cracker, C_1-$_5$-rich; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a catalytic cracking process. It consists of aliphatic hydrocarbons having carbon numbers in the range of C_1 through C_6, predominantly C_1 through C_5.)	649-064-00-7	270-757-1	68477-75-8	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), catalytic polymd. naphtha stabiliser overhead, C_{2-4}-rich; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of catalytic polymerised naphtha. It consists of aliphatic hydrocarbons having carbon numbers in the range of C_2 through C_6, predominantly C_2 through C_4.)	649-065-00-2	270-758-7	68477-76-9	H, K
Gases (petroleum), catalytic reformer, C_{1-4}-rich; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from a catalytic reforming process. It consists of hydrocarbons having carbon numbers in the range of C_1 through C_6, predominantly C_1 through C_4.)	649-066-00-8	270-760-8	68477-79-2	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), C_{3-5} olefinic-paraffinic alkylation feed; Petroleum gas (A complex combination of olefinic and paraffinic hydrocarbons having carbon numbers in the range of C_3 through C_5 which are used as alkylation feed. Ambient temperatures normally exceed the critical temperature of these combinations.)	649-067-00-3	270-765-5	68477-83-8	H, K
Gases (petroleum), C_4-rich; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from a catalytic fractionation process. It consists of aliphatic hydrocarbons having carbon numbers in the range of C_3 through C_5, predominantly C_4.)	649-068-00-9	270-767-6	68477-85-0	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), deethaniser overheads; Petroleum gas (A complex combination of hydrocarbons produced from distillation of the gas and gasoline fractions from the catalytic cracking process. It contains predominantly ethane and ethylene.)	649-069-00-4	270-768-1	68477-86-1	H, K
Gases (petroleum), deisobutaniser tower overheads; Petroleum gas (A complex combination of hydrocarbons produced by the atmospheric distillation of a butane-butylene stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_3 through C_4.)	649-070-00-X	270-769-7	68477-87-2	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), depropaniser dry, propene-rich; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from the gas and gasoline fractions of a catalytic cracking process. It consists predominantly of propylene with some ethane and propane.)	649-071-00-5	270-772-3	68477-90-7	H, K
Gases (petroleum), depropaniser overheads; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from the gas and gasoline fractions of a catalytic cracking process. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-072-00-0	270-773-9	68477-91-8	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), gas recovery plant depropaniser overheads; Petroleum gas (A complex combination of hydrocarbons obtained by fractionation of miscellaneous hydrocarbon streams. It consists predominantly of hydrocarbons having carbon numbers in the range of C_1 through C_4, predominantly propane.)	649-073-00-6	270-777-0	68477-94-1	H, K
Gases (petroleum), Girbatol unit feed; Petroleum gas (A complex combination of hydrocarbons that is used as the feed into the Girbatol unit to remove hydrogen sulfide. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-074-00-1	270-778-6	68477-95-2	H, K
Gases (petroleum), isomerised naphtha fractionator, C_4-rich, hydrogen sulfide-free; Petroleum gas	649-075-00-7	270-782-8	68477-99-6	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), catalytic cracked clarified oil and thermal cracked vacuum residue fractionation reflux drum; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked clarified oil and thermal cracked vacuum residue. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-076-00-2	270-802-5	68478-21-7	H, K
Tail gas (petroleum), catalytic cracked naphtha stabilisation absorber; Petroleum gas (A complex combination of hydrocarbons obtained from the stabilisation of catalytic cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-077-00-8	270-803-0	68478-22-8	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), catalytic cracker, catalytic reformer and hydrodesulphuriser combined fractionater; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation of products from catalytic cracking, catalytic reforming and hydrodesulphurising processes treated to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-078-00-3	270-804-6	68478-24-0	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), catalytic reformed naphtha fractionation stabiliser; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of catalytic reformed naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-079-00-9	270-806-7	68478-26-2	H, K
Tail gas (petroleum), saturate gas plant mixed stream, C_4-rich; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of straight-run naphtha, distillation tail gas and catalytic reformed naphtha stabiliser tail gas. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_6, predominantly butane and isobutane.)	649-080-00-4	270-813-5	68478-32-0	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), saturate gas recovery plant, C_{1-2}-rich; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of distillate tail gas, straight-run naphtha, catalytic reformed naphtha stabiliser tail gas. It consists predominantly of hydrocarbons having carbon numbers in the range of C_1 through C_5, predominantly methane and ethane.)	649-081-00-X	270-814-0	68478-33-1	H, K
Tail gas (petroleum), vacuum residues thermal cracker; Petroleum gas (A complex combination of hydrocarbons obtained from the thermal cracking of vacuum residues. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-082-00-5	270-815-6	68478-34-2	H, K

Substances	Index number	EC number	CAS number	Notes
Hydrocarbons, C_{3-4}-rich, petroleum distillate; Petroleum gas (A complex combination of hydrocarbons produced by distillation and condensation of crude oil. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_5, predominantly C_3 through C_4.)	649-083-00-0	270-990-9	68512-91-4	H, K
Gases (petroleum), full-range straight-run naphtha dehexaniser off; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of the full-range straight-run naphtha. It consists of hydrocarbons having carbon numbers predominantly in the range of C_2 through C_6.)	649-084-00-6	271-000-8	68513-15-5	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), hydrocracking depropaniser off, hydrocarbon-rich; Petroleum gas (A complex combination of hydrocarbon produced by the distillation of products from a hydrocracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4. It may also contain small amounts of hydrogen and hydrogen sulfide.)	649-085-00-1	271-001-3	68513-16-6	H, K
Gases (petroleum), light straight-run naphtha stabiliser off; Petroleum gas (A complex combination of hydrocarbons obtained by the stabilisation of light straight-run naphtha. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_6.)	649-086-00-7	271-002-9	68513-17-7	H, K

Substances	Index number	EC number	CAS number	Notes
Residues (petroleum), alkylation splitter, C_4-rich; Petroleum gas (A complex residuum from the distillation of streams from various refinery operations. It consists of hydrocarbons having carbon numbers in the range of C_4 through C_5, predominantly butane, and boiling in the range of approximately −11,7 °C to 27,8 °C.)	649-087-00-2	271-010-2	68513-66-6	H, K
Hydrocarbons, C_{1-4}; Petroleum gas (A complex combination of hydrocarbons provided by thermal cracking and absorber operations and by distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4 and boiling in the range of approximately minus 164 °C to minus 0.5 °C.)	649-088-00-8	271-032-2	68514-31-8	H, K

Substances	Index number	EC number	CAS number	Notes
Hydrocarbons, C_{1-4}, sweetened; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting hydrocarbon gases to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4 and boiling in the range of approximately − 164 °C to − 0,5 °C.)	649-089-00-3	271-038-5	68514-36-3	H, K
Hydrocarbons, C_{1-3}; Petroleum gas (A complex combination of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3 and boiling in the range of approximately − 164 °C to − 42 °C.)	649-090-00-9	271-259-7	68527-16-2	H, K

Substances	Index number	EC number	CAS number	Notes
Hydrocarbons, C_{1-4}, debutaniser fraction; Petroleum gas	649-091-00-4	271-261-8	68527-19-5	H, K
Gases (petroleum), C_{1-5}, wet; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of crude oil and/or the cracking of tower gas oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-092-00-X	271-624-0	68602-83-5	H, K
Hydrocarbons, C_{2-4}; Petroleum gas	649-093-00-5	271-734-9	68606-25-7	H, K
Hydrocarbons, C_3; Petroleum gas	649-094-00-0	271-735-4	68606-26-8	H, K
Gases (petroleum), alkylation feed; Petroleum gas (A complex combination of hydrocarbons produced by the catalytic cracking of gas oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_4.)	649-095-00-6	271-737-5	68606-27-9	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), depropaniser bottoms fractionation off; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation of depropaniser bottoms. It consists predominantly of butane, isobutane and butadiene.)	649-096-00-1	271-742-2	68606-34-8	H, K
Gases (petroleum), refinery blend; Petroleum gas (A complex combination obtained from various processes. It consists of hydrogen, hydrogen sulfide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-097-00-7	272-183-7	68783-07-3	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), catalytic cracking; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of the products from a catalytic cracking process. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_5.)	649-098-00-2	272-203-4	68783-64-2	H, K
Gases (petroleum), C_{2-4}, sweetened; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting a petroleum distillate to a sweetening process to convert mercaptans or to remove acidic impurities. It consists predominantly of saturated and unsaturated hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4 and boiling in the range of approximately − 51 °C to − 34 °C.)	649-099-00-8	272-205-5	68783-65-3	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), crude oil fractionation off; Petroleum gas (A complex combination of hydrocarbons produced by the fractionation of crude oil. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-100-00-1	272-871-7	68918-99-0	H, K
Gases (petroleum), dehexaniser off; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of combined naphtha streams. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-101-00-7	272-872-2	68919-00-6	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), light straight run gasoline fractionation stabiliser off; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of light straight-run gasoline. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-102-00-2	272-878-5	68919-05-1	H, K
Gases (petroleum), naphtha unifiner desulphurisation stripper off; Petroleum gas (A complex combination of hydrocarbons produced by a naphtha unifiner desulphurisation process and stripped from the naphtha product. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-103-00-8	272-879-0	68919-06-2	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), straight-run naphtha catalytic reforming off; Petroleum gas (A complex combination of hydrocarbons obtained by the catalytic reforming of straight-run naphtha and fractionation of the total effluent. It consists of methane, ethane, and propane.)	649-104-00-3	272-882-7	68919-09-5	H, K
Gases (petroleum), fluidised catalytic cracker splitter overheads; Petroleum gas (A complex combination of hydrocarbons produced by the fractionation of the charge to the C_3-C_4 splitter. It consists predominantly of C_3 hydrocarbons.)	649-105-00-9	272-893-7	68919-20-0	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), straight-run stabiliser off; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation of the liquid from the first tower used in the distillation of crude oil. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-106-00-4	272-883-2	68919-10-8	H, K
Gases (petroleum), catalytic cracked naphtha debutaniser; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked naphtha. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-107-00-X	273-169-3	68952-76-1	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), catalytic cracked distillate and naphtha stabiliser; Petroleum gas (A complex combination of hydrocarbons obtained by the fractionation of catalytic cracked naphtha and distillate. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-108-00-5	273-170-9	68952-77-2	H, K
Tail gas (petroleum), thermal-cracked distillate, gas oil and naphtha absorber; Petroleum gas (A complex combination of hydrocarbons obtained from the separation of thermal-cracked distillates, naphtha and gas oil. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-109-00-0	273-175-6	68952-81-8	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), thermal cracked hydrocarbon fractionation stabiliser, petroleum coking; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation of thermal cracked hydrocarbons from a petroleum coking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-110-00-6	273-176-1	68952-82-9	H, K
Gases (petroleum, light steam-cracked, butadiene conc.; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a thermal cracking process. It consists of hydrocarbons having a carbon number predominantly of C_4.)	649-111-00-1	273-265-5	68955-28-2	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), straight-run naphtha catalytic reformer stabiliser overhead; Petroleum gas (A complex combination of hydrocarbons obtained by the catalytic reforming of straight-run naphtha and the fractionation of the total effluent. It consists of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-112-00-7	273-270-2	68955-34-0	H, K
Hydrocarbons, C_4; Petroleum gas	649-113-00-2	289-339-5	87741-01-3	H, K
Alkanes, C_{1-4}, C_3-rich; Petroleum gas	649-114-00-8	292-456-4	90622-55-2	H, K
Gases (petroleum), steam-cracker C_3-rich; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a steam cracking process. It consists predominantly of propylene with some propane and boils in the range of approximately − 70 °C to 0 °C.)	649-115-00-3	295-404-9	92045-22-2	H, K

Substances	Index number	EC number	CAS number	Notes
Hydrocarbons, C_4, steam-cracker distillate; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of the products of a steam cracking process. It consists predominantly of hydrocarbons having a carbon number of C_4, predominantly 1-butene and 2-butene, containing also butane and isobutene and boiling in the range of approximately − 12 °C to 5 °C.)	649-116-00-9	295-405-4	92045-23-3	H, K
Petroleum gases, liquefied, sweetened, C_4 fraction; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting a liquified petroleum gas mix to a sweetening process to oxidise mercaptans or to remove acidic impurities. It consists predominantly of C_4 saturated and unsaturated hydrocarbons.)	649-117-00-4	295-463-0	92045-80-2	H, K, S

Substances	Index number	EC number	CAS number	Notes
Raffinates (petroleum), steam-cracked C_4 fraction cuprous ammonium acetate extn., C_{3-5} and C_{3-5} unsaturated., butadiene-free; Petroleum gas	649-119 -00-5	307-769-4	97722-19-5	H, K
Gases (petroleum), amine system feed; Refinery gas (The feed gas to the amine system for removal of hydrogen sulphide. It consists primarily of hydrogen. Carbon monoxide, carbon dioxide, hydrogen sulfide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5 may also be present.)	649-120-00-0	270-746-1	68477-65-6	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), benzene unit hydrodesulphuriser off; Refinery gas (Off gases produced by the benzene unit. It consists primarily of hydrogen. Carbon monoxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6, including benzene, may also be present.)	649-121-00-6	270-747-7	68477-66-7	H, K
Gases (petroleum), benzene unit recycle, hydrogen-rich; Refinery gas (A complex combination of hydrocarbons obtained by recycling the gases of the benzene unit. It consists primarily of hydrogen with various small amounts of carbon monoxide and hydrocarbons having carbon numbers in the range of C_1 through C_6.)	649-122-00-1	270-748-2	68477-67-8	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), blend oil, hydrogen-nitrogen-rich; Refinery gas (A complex combination of hydrocarbons obtained by distillation of a blend oil. It consists primarily of hydrogen and nitrogen with various small amounts of carbon monoxide, carbon dioxide, and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-123-00-7	270-749-8	68477-68-9	H, K
Gases (petroleum), catalytic reformed naphtha stripper overheads; Refinery gas (A complex combination of hydrocarbons obtained from stabilisation of catalytic reformed naphtha. It consists of hydrogen and saturated hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-124-00-2	270-759-2	68477-77-0	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), C_{6-8} catalytic reformer recycle; Refinery gas (A complex combination of hydrocarbons produced by distillation of products from catalytic reforming of C_6-C_8 feed and recycled to conserve hydrogen. It consists primarily of hydrogen. It may also contain various small amounts of carbon monoxide, carbon dioxide, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-125-00-8	270-761-3	68477-80-5	H, K
Gases (petroleum), C_{6-8} catalytic reformer; Refinery gas (A complex combination of hydrocarbons produced by distillation of products from catalytic reforming of C_6-C_8 feed. It consists of hydrocarbons having carbon numbers in the range of C_1 through C_5 and hydrogen.)	649-126-00-3	270-762-9	68477-81-6	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), C_{6-8} catalytic reformer recycle, hydrogen-rich; Refinery gas	649-127-00-9	270-763-4	68477-82-7	H, K
Gases (petroleum), C_2-return stream; Refinery gas (A complex combination of hydrocarbons obtained by the extraction of hydrogen from a gas stream which consists primarily of hydrogen with small amounts of nitrogen, carbon monoxide, methane, ethane, and ethylene. It contains predominantly hydrocarbons such as methane, ethane, and ethylene with small amounts of hydrogen, nitrogen and carbon monoxide.)	649-128-00-4	270-766-0	68477-84-9	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), dry sour, gas-concentration-unit-off; Refinery gas (The complex combination of dry gases from a gas concentration unit. It consists of hydrogen, hydrogen sulphide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-129-00-X	270-774-4	68477-92-9	H, K
Gases (petroleum), gas concentration reabsorber distillation; Refinery gas (A complex combination of hydrocarbons produced by distillation of products from combined gas streams in a gas concentration reabsorber. It consists predominantly of hydrogen, carbon monoxide, carbon dioxide, nitrogen, hydrogen sulphide and hydrocarbons having carbon numbers in the range of C_1 through C_3.)	649-130-00-5	270-776-5	68477-93-0	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), hydrogen absorber off; Refinery gas (A complex combination obtained by absorbing hydrogen from a hydrogen rich stream. It consists of hydrogen, carbon monoxide, nitrogen, and methane with small amounts of C_2 hydrocarbons.)	649-131-00-0	270-779-1	68477-96-3	H, K
Gases (petroleum), hydrogen-rich; Refinery gas (A complex combination separated as a gas from hydrocarbon gases by chilling. It consists primarily of hydrogen with various small amounts of carbon monoxide, nitrogen, methane, and C_2 hydrocarbons.)	649-132-00-6	270-780-7	68477-97-4	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), hydrotreater blend oil recycle, hydrogen-nitrogen-rich; Refinery gas (A complex combination obtained from recycled hydrotreated blend oil. It consists primarily of hydrogen and nitrogen with various small amounts of carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-133-00-1	270-781-2	68477-98-5	H, K
Gases (petroleum), recycle, hydrogen-rich; Refinery gas (A complex combination obtained from recycled reactor gases. It consists primarily of hydrogen with various small amounts of carbon monoxide, carbon dioxide, nitrogen, hydrogen sulphide, and saturated aliphatic hydrocarbons having carbon numbers in the range of C_1 through C_5.)	649-134-00-7	270-783-3	68478-00-2	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), reformer make-up, hydrogen-rich; Refinery gas (A complex combination obtained from the reformers. It consists primarily of hydrogen with various small amounts of carbon monoxide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-135-00-2	270-784-9	68478-01-3	H, K
Gases (petroleum), reforming hydrotreater; Refinery gas (A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen, methane, and ethane with various small amounts of hydrogen sulphide and aliphatic hydrocarbons having carbon numbers predominantly in the range C_3 through C_5.)	649-136-00-8	270-785-4	68478-02-4	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), reforming hydrotreater, hydrogen-methane-rich; Refinery gas (A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen and methane with various small amounts of carbon monoxide, carbon dioxide, nitrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_5.)	649-137-00-3	270-787-5	68478-03-5	H, K
Gases (petroleum), reforming hydrotreater make-up, hydrogen-rich; Refinery gas (A complex combination obtained from the reforming hydrotreating process. It consists primarily of hydrogen with various small amounts of carbon monoxide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-138-00-9	270-788-0	68478-04-6	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), thermal cracking distillation; Refinery gas (A complex combination produced by distillation of products from a thermal cracking process. It consists of hydrogen, hydrogen sulphide, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-139-00-4	270-789-6	68478-05-7	H, K
Tail gas (petroleum), catalytic cracker refractionation absorber; Refinery gas (A complex combination of hydrocarbons obtained from refractionation of products from a catalytic cracking process. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-140-00-X	270-805-1	68478-25-1	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), catalytic reformed naphtha separator; Refinery gas (A complex combination of hydrocarbons obtained from the catalytic reforming of straight-run naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-141-00-5	270-807-2	68478-27-3	H, K
Tail gas (petroleum), catalytic reformed naphtha stabiliser; Refinery gas (A complex combination of hydrocarbons obtained from the stabilisation of catalytic reformed naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-142-00-0	270-808-8	68478-28-4	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), cracked distillate hydrotreater separator; Refinery gas (A complex combination of hydrocarbons obtained by treating cracked distillates with hydrogen in the presence of a catalyst. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-143-00-6	270-809-3	68478-29-5	H, K
Tail gas (petroleum), hydrodesulphurised straight-run naphtha separator; Refinery gas (A complex combination of hydrocarbons obtained from hydrodesulphurisation of straight-run naphtha. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-144-00-1	270-810-9	68478-30-8	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), catalytic reformed straight-run naphtha stabiliser overheads; Refinery gas (A complex combination of hydrocarbons obtained from the catalytic reforming of straight-run naphtha followed by fractionation of the total effluent. It consists of hydrogen, methane, ethane and propane.)	649-145-00-7	270-999-8	68513-14-4	H, K
Gases (petroleum), reformer effluent high-pressure flash drum off; Refinery gas (A complex combination produced by the high-pressure flashing of the effluent from the reforming reactor. It consists primarily of hydrogen with various small amounts of methane, ethane, and propane.)	649-146-00-2	271-003-4	68513-18-8	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), reformer effluent low-pressure flash drum off; Refinery gas (A complex combination produced by low-pressure flashing of the effluent from the reforming reactor. It consists primarily of hydrogen with various small amounts of methane, ethane, and propane.)	649-147-00-8	271-005-5	68513-19-9	H, K
Gases (petroleum), oil refinery gas distillation off; Refinery gas (A complex combination separated by distillation of a gas stream containing hydrogen, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers in the range of C_1 through C_6 or obtained by cracking ethane and propane. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_2, hydrogen, nitrogen, and carbon monoxide.)	649-148-00-3	271-258-1	68527-15-1	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), benzene unit hydrotreater dependaniser overheads; Refinery gas (A complex combination produced by treating the feed from the benzene unit with hydrogen in the presence of a catalyst followed by dependanising. It consists primarily of hydrogen, ethane and propane with various small amounts of nitrogen, carbon monoxide, carbon dioxide and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6. It may contain trace amounts of benzene.)	649-149-00-9	271-623-5	68602-82-4	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), secondary absorber off, fluidised catalytic cracker overheads fractionator; Refinery gas (A complex combination produced by the fractionation of the overhead products from the catalytic cracking process in the fluidised catalytic cracker. It consists of hydrogen, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-150-00-4	271-625-6	68602-84-6	H, K
Petroleum products, refinery gases; Refinery gas (A complex combination which consists primarily of hydrogen with various small amounts of methane, ethane and propane.)	649-151-00 -X	271-750-6	68607-11-4	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), hydrocracking low-pressure separator; Refinery gas (A complex combination obtained by the liquid-vapour separation of the hydrocracking process reactor effluent. It consists predominantly of hydrogen and saturated hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-152-00-5	272-182-1	68783-06-2	H, K
Gases (petroleum), refinery; Refinery gas (A complex combination obtained from various petroleum refining operations. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-153-00-0	272-338-9	68814-67-5	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), platformer products separator off; Refinery gas (A complex combination obtained from the chemical reforming of naphthenes to aromatics. It consists of hydrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_2 through C_4.)	649-154-00-6	272-343-6	68814-90-4	H, K
Gases (petroleum), hydrotreated sour kerosine depentaniser stabiliser off; Refinery gas (The complex combination obtained from the depentaniser stabilisation of hydrotreated kerosine. It consists primarily of hydrogen, methane, ethane, and propane with various small amounts of nitrogen, hydrogen sulphide, carbon monoxide and hydrocarbons having carbon numbers predominantly in the range of C_4 through C_5.)	649-155-00-1	272-775-5	68911-58-0	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), hydrotreated sour kerosine flash drum; Refinery gas (A complex combination obtained from the flash drum of the unit treating sour kerosine with hydrogen in the presence of a catalyst. It consists primarily of hydrogen and methane with various small amounts of nitrogen, carbon monoxide, and hydro-carbons having carbon numbers predominantly in the range of C_2 through C_5.)	649-156-00-7	272-776-0	68911-59-1	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), distillate unifiner desulphurisation stripper off; Refinery gas (A complex combination stripped from the liquid product of the unifiner desulphurisation process. It consists of hydrogen sulphide, methane, ethane, and propane.)	649-157-00-2	272-873-8	68919-01-7	H, K
Gases (petroleum), fluidised catalytic cracker fractionation off; Refinery gas (A complex combination produced by the fractionation of the overhead product of the fluidised catalytic cracking process. It consists of hydrogen, hydrogen sulphide, nitrogen, and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-158-00-8	272-874-3	68919-02-8	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), fluidised catalytic cracker scrubbing secondary absorber off; Refinery gas (A complex combination produced by scrubbing the overhead gas from the fluidised catalytic cracker. It consists of hydrogen, nitrogen, methane, ethane and propane.)	649-159-00-3	272-875-9	68919-03-9	H, K
Gases (petroleum), heavy distillate hydrotreater desulphurisation stripper off; Refinery gas (A complex combination stripped from the liquid product of the heavy distillate hydrotreater desulphurisation process. It consists of hydrogen, hydrogen sulphide, and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-160-00-9	272-876-4	68919-04-0	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), platformer stabiliser off, light ends fractionation; Refinery gas (A complex combination obtained by the fractionation of the light ends of the platinum reactors of the platformer unit. It consists of hydrogen, methane, ethane and propane.)	649-161-00-4	272-880-6	68919-07-3	H, K
Gases (petroleum), preflash tower off, crude distillation; Refinery gas (A complex combination produced from the first tower used in the distillation of crude oil. It consists of nitrogen and saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-162-00-X	272-881-1	68919-08-4	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), tar stripper off; Refinery gas (A complex combination obtained by the fractionation of reduced crude oil. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-163-00-5	272-884-8	68919-11-9	H, K
Gases (petroleum), unifiner stripper off; Refinery gas (A combination of hydrogen and methane obtained by fractionation of the products from the unifiner unit.)	649-164-00-0	272-885-3	68919-12-0	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), catalytic hydrodesulphurised naphtha separator; Refinery gas (A complex combination of hydrocarbons obtained from the hydrodesulphurisation of naphtha. It consists of hydrogen, methane, ethane, and propane.)	649-165-00-6	273-173-5	68952-79-4	H, K
Tail gas (petroleum), straight-run naphtha hydrodesulphuriser; Refinery gas (A complex combination obtained from the hydrodesulphurisation of straight-run naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-166-00-1	273-174-0	68952-80-7	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), sponge absorber off, fluidised catalytic cracker and gas oil desulphuriser overhead fractionation; Refinery gas (A complex combination obtained by the fractionation of products from the fluidised catalytic cracker and gas oil desulphuriser. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-167-00-7	273-269-7	68955-33-9	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), crude distillation and catalytic cracking; Refinery gas (A complex combination produced by crude distillation and catalytic cracking processes. It consists of hydrogen, hydrogen sulphide, nitrogen, carbon monoxide and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-168-00-2	273-563-5	68989-88-8	H, K
Gases (petroleum), gas oil diethanolamine scrubber off; Refinery gas (A complex combination produced by desulphurisation of gas oils with diethanolamine. It consists predominantly of hydrogen sulphide, hydrogen and aliphatic hydrocarbons having carbon numbers in the range of C_1 through C_5.)	649-169-00-8	295-397-2	92045-15-3	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), gas oil hydrodesulphurisation effluent; Refinery gas (A complex combination obtained by separation of the liquid phase from the effluent from the hydrogenation reaction. It consists predominantly of hydrogen, hydrogen sulphide and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_3.)	649-170-00-3	295-398-8	92045-16-4	H, K
Gases (petroleum), gas oil hydrodesulphurisation purge; Refinery gas (A complex combination of gases obtained from the reformer and from the purges from the hydrogenation reactor. It consists predominantly of hydrogen and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-171-00-9	295-399-3	92045-17-5	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), hydrogenator effluent flash drum off; Refinery gas (A complex combination of gases obtained from flash of the effluents after the hydrogenation reaction. It consists predominantly of hydrogen and aliphatic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-172-00-4	295-400-7	92045-18-6	H, K
Gases (petroleum), naphtha steam cracking high-pressure residual; Refinery gas (A complex combination obtained as a mixture of the non-condensable portions from the product of a naphtha steam cracking process as well as residual gases obtained during the preparation of subsequent products. It consists predominantly of hydrogen and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5 with which natural gas may also be mixed.)	649-173-00-X	295-401-2	92045-19-7	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), residue visbaking off; Refinery gas (A complex combination obtained from viscosity reduction of residues in a furnace. It consists predominantly of hydrogen sulphide and paraffinic and olefinic hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-174-00-5	295-402-8	92045-20-0	H, K
Gases (petroleum), C_{3-4}; Petroleum gas (A complex combination of hydrocarbons produced by distillation of products from the cracking of crude oil. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_4, predominantly of propane and propylene, and boiling in the range of approximately −51 °C to −1 °C.)	649-177-00-1	268-629-5	68131-75-9	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), catalytic cracked distillate and catalytic cracked naphtha fractionation absorber; Petroleum gas (The complex combination of hydrocarbons from the distillation of the products from catalytic cracked distillates and catalytic cracked naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C_1 through C_4.)	649-178-00-7	269-617-2	68307-98-2	H, K
Tail gas (petroleum), catalytic polymerisation naphtha fractionation stabiliser; Petroleum gas (A complex combination of hydrocarbons from the fractionation stabilisation products from polymerisation of naphtha. It consists predominantly of hydrocarbons having carbon numbers in the range of C_1 through C_4.)	649-179-00-2	269-618-8	68307-99-3	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), catalytic reformed naphtha fractionation stabiliser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation stabilisation of catalytic reformed naphtha and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-180-00-8	269-619-3	68308-00-9	H, K
Tail gas (petroleum), cracked distillate hydrotreater stripper; Petroleum gas (A complex combination of hydrocarbons obtained by treating thermal cracked distillates with hydrogen in the presence of a catalyst. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-181-00-3	269-620-9	68308-01-0	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), straight-run distillate hydrodesulphuriser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from catalytic hydrodesulphurisation of straight run distillates and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-182-00-9	269-630-3	68308-10-1	H, K
Tail gas (petroleum), gas oil catalytic cracking absorber; Petroleum gas (A complex combination of hydrocarbons obtained from the distillation of products from the catalytic cracking of gas oil. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-183-00-4	269-623-5	68308-03-2	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), gas recovery plant; Petroleum gas (A complex combination of hydrocarbons from the distillation of products from miscellaneous hydrocarbon streams. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-184-00-X	269-624-0	68308-04-3	H, K
Tail gas (petroleum), gas recovery plant deethaniser; Petroleum gas (A complex combination of hydrocarbons from the distillation of products from miscellaneous hydrocarbon streams. It consists of hydrocarbon having carbon numbers predominantly in the range of C_1 through C_4.)	649-185-00-5	269-625-6	68308-05-4	H, K
Tail gas (petroleum), hydrodesulphurised distillate and hydrodesulphurised naphtha fractionator, acid-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of hydrodesulphurised naphtha and distillate hydrocarbon streams and treated to remove acidic impurities. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-186-00-0	269-626-1	68308-06-5	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), hydrodesulphurised vacuum gas oil stripper, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from stripping stabilisation of catalytic hydrodesulphurised vacuum gas oil and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-187-00-6	269-627-7	68308-07-6	H, K
Tail gas (petroleum), light straight-run naphtha stabiliser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation stabilisation of light straight-run naphtha and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_5.)	649-188-00-1	269-629-8	68308-09-8	H, K

Substances	Index number	EC number	CAS number	Notes
Tail gas (petroleum), propane-propylene alkylation feed prep deethaniser; Petroleum gas (A complex combination of hydrocarbons obtained from the distillation of the reaction products of propane with propylene. It consists of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-189-00-7	269-631-9	68308-11-2	H, K
Tail gas (petroleum), vacuum gas oil hydrodesulphuriser, hydrogen sulphide-free; Petroleum gas (A complex combination of hydrocarbons obtained from catalytic hydrodesulphurisation of vacuum gas oil and from which hydrogen sulphide has been removed by amine treatment. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_6.)	649-190-00-2	269-632-4	68308-12-3	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), catalytic cracked overheads; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from the catalytic cracking process. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_5 and boiling in the range of approximately −48 °C to 32 °C.)	649-191-00-8	270-071-2	68409-99-4	H, K
Alkanes, C_{1-2}; Petroleum gas	649-193-00-9	270-651-5	68475-57-0	H, K
Alkanes, C_{2-3}; Petroleum gas	649-194-00-4	270-652-0	68475-58-1	H, K
Alkanes, C_{3-4}; Petroleum gas	649-195-00-X	270-653-6	68475-59-2	H, K
Alkanes, C_{4-5}; Petroleum gas	649-196-00-5	270-654-1	68475-60-5	H, K
Fuel gases; Petroleum gas (A combination of light gases. It consists predominantly of hydrogen and/or low molecular weight hydrocarbons.)	649-197-00-0	270-667-2	68476-26-6	H, K

Substances	Index number	EC number	CAS number	Notes
Fuel gases, crude oil of distillates; Petroleum gas (A complex combination of light gases produced by distillation of crude oil and by catalytic reforming of naphtha. It consists of hydrogen and hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4 and boiling in the range of approximately − 217 °C to − 12 °C.)	649-198-00-6	270-670-9	68476-29-9	H, K
Hydrocarbons, C_{3-4}; Petroleum gas	649-199-00-1	270-681-9	68476-40-4	H, K
Hydrocarbons, C_{4-5}; Petroleum gas	649-200-00-5	270-682-4	68476-42-6	H, K
Hydrocarbons, C_{2-4}, C_3-rich; Petroleum gas	649-201-00-0	270-689-2	68476-49-3	H, K

Substances	Index number	EC number	CAS number	Notes
Petroleum gases, liquefied; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_7 and boiling in the range of approximately −40 °C to 80°C.)	649-202-00-6	270-704-2	68476-85-7	H, K, S
Petroleum gases, liquefied, sweetened; Petroleum gas (A complex combination of hydrocarbons obtained by subjecting liquefied petroleum gas mix to a sweetening process to convert mercaptans or to remove acidic impurities. It consists of hydrocarbons having carbon numbers predominantly in the range of C_3 through C_7 and boiling in the range of approximately −40 °C to 80 °C.)	649-203-00-1	270-705-8	68476-86-8	H, K, S

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), C_{3-4}, isobutane-rich; Petroleum gas (A complex combination of hydrocarbons from the distillation of saturated and unsaturated hydrocarbons usually ranging in carbon numbers from C_3 through C_6, predominantly butane and isobutane. It consists of saturated and unsaturated hydrocarbons having carbon numbers in the range of C_3 through C_4, predominantly isobutane.)	649-204-00-7	270-724-1	68477-33-8	H, K
Distillates (petroleum), C_{3-6}, piperylene-rich; Petroleum gas (A complex combination of hydrocarbons from the distillation of saturated and unsaturated aliphatic hydrocarbons usually ranging in the carbon numbers C_3 through C_6. It consists of saturated and unsaturated hydrocarbons having carbon numbers in the range of C_3 through C_6, predominantly piperylenes.)	649-205-00-2	270-726-2	68477-35-0	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), butane splitter overheads; Petroleum gas (A complex combination of hydrocarbons obtained from the distillation of the butane stream. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_3 through C_4.)	649-206-00-8	270-750-3	68477-69-0	H, K
Gases (petroleum), C_{2-3}; Petroleum gas (A complex combination of hydrocarbons produced by the distillation of products from a catalytic fractionation process. It contains predominantly ethane, ethylene, propane, and propylene.)	649-207-00-3	270-751-9	68477-70-3	H, K
Gases (petroleum), catalytic-cracked gas oil depropaniser bottoms, C_4-rich acid-free; Petroleum gas (A complex combination of hydrocarbons obtained from fractionation of catalytic cracked gas oil hydrocarbon stream and treated to remove hydrogen sulphide and other acidic components. It consists of hydrocarbons having carbon numbers in the range of C_3 through C_5, predominantly C_4.)	649-208-00-9	270-752-4	68477-71-4	H, K

Substances	Index number	EC number	CAS number	Notes
Gases (petroleum), catalytic-cracked naphtha debutaniser bottoms, C_{3-5}-rich; Petroleum gas (A complex combination of hydrocarbons obtained from the stabilisation of catalytic cracked naphtha. It consists of aliphatic hydrocarbons having carbon numbers predominantly in the range of C_3 through C_5.)	649-209-00-4	270-754-5	68477-72-5	H, K
Tail gas (petroleum), isomerised naphtha fractionation stabiliser; Petroleum gas (A complex combination of hydrocarbons obtained from the fractionation stabilisation products from isomerised naphtha. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C_1 through C_4.)	649-210-00-X	269-628-2	68308-08-7	H, K"

Substances	Index number	EC number	CAS number	Notes
C.I. Pigment Red 104; (This substance is identified in the Colour Index by Colour Index Constitution Number, C.I. 77605.)	082-010-00-5	235-759-9	12656-85-8	
Lead hydrogen arsenate	082-011-00-0	232-064-2	7784-40-9	
1,2-Dibromo-3-chloropropane	602-021-00-6	202-479-3	96-12-8	
2-bromopropane	602-085-00-5	200-855-1	75-26-3	E
Warfarin; 4-hydroxy-3-(3-oxo-1-phenylbutyl)coumarin	607-056-00-0	201-377-6	81-81-2	
Lead 2,4,6-trinitroresorcinoxide, lead styphnate	609-019-00-4	239-290-0	15245-44-0	