

平成30年有害物ばく露作業報告検討案件の情報

No.	グループ		発がん性 評価区分等 (※1)	製造・輸入量等	備考
1	IARCでGroup1の評価となっている案件	Aluminium production アルミニウム生産	IARC 100F group 1 (ヒトに対して発 がん性がある)	国内生産なし	国内では2014年(平成26年)から国内精錬がなくなり、輸入100%になっている(16615の化学商品)。
2	IARCでGroup1の評価となっている案件	Acheson process, occupational exposure associated with アチソン法による 炭化ケイ素製造工 程におけるばく露	IARC 111 group 1 (ヒトに対して発 がん性がある)	製造・輸入数量 47,246t (平成26年度) (優先評価化学物 質)	炭化ケイ素(IARC 111)は、平成29年有害物ばく露作業報告物質に選定されている。
3	IARCでGroup1の評価となっている案件	Coal gasification 石炭気化	IARC 100F group 1 (ヒトに対して発 がん性がある)	—	以下の総括からは、多環芳香族炭化水素の影響が考えられる。 (Monograph抜粋)(Evaluation) There is sufficient evidence in humans for the carcinogenicity of coal gasification. Coal gasification causes cancer of the lung. There is sufficient evidence in experimental animals for the carcinogenicity of coal-tars from gas-works and manufactured gas plant residues. There is strong evidence for a genotoxic mechanism for coal gasification samples based on experimental studies. Although there are no human studies, it is highly likely that genotoxicity is the mechanism for the carcinogenic effects of coal-gasification emissions, predominantly due to the presence of mutagenic PAHs. Coal gasification is carcinogenic to humans (Group 1).

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4	IARCでGroup1の評価となっている案件	Coal, indoor emissions from household combustion of 屋内での石炭の燃焼	IARC 100E group 1 (ヒトに対して発がん性がある)	—	以下の総括からは、多環芳香族炭化水素の影響が考えられる。 (Monograph抜粋) (Evaluation) There is sufficient evidence in humans for the carcinogenicity of indoor emissions from household combustion of coal. Indoor emissions from household combustion of coal cause cancer of the lung. There is sufficient evidence in experimental animals for the carcinogenicity of coal-derived soot extract. There is sufficient evidence in experimental animals for the carcinogenicity of emissions from combustion of coal. Indoor emissions from household combustion of coal are carcinogenic to humans (Group 1).
5	IARCでGroup1の評価となっている案件	Rubber manufacturing industry ゴム製造業	IARC 100F group 1 (ヒトに対して発がん性がある)	—	以下のばく露の可能性のある物を踏まえると、多環芳香族炭化水素等の影響が考えられる。 (Monograph抜粋) (1.3 Human exposure) 1.3.1 Dust from rubber processing 1.3.2 Fumes from rubber curing 1.3.3 N-nitrosamines 1.3.4 PAHs 1.3.5 Solvents (paraffins (hexane, heptane and octane); aromatic compounds (toluene, xylene, trimethylbenzene, naphthalene and isopropylbenzene); chlorinated hydrocarbons (trichloroethylene and 1,1,1-trichloroethane); ketones, alcohols and esters (methylisobutylketone, 2-ethoxyethanol and isobutylacetate)) 1.3.6 Phthalates

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6	IARCでGroup1の評価となっている案件	Soot (as found in occupational exposure of chimney sweeps) すす (煙突のすす清掃など)	IARC 100F group 1 (ヒトに対して発がん性がある)	—	以下の分析からは、多環芳香族炭化水素の影響が考えられる。 (Monograph抜粋) 4.2 Synthesis Extracts of soots contain carcinogenic polycyclic aromatic hydrocarbons and are genotoxic. Based on a small number of genotoxicity studies in exposed humans, there is moderate evidence of a genotoxic mode of action for the carcinogenic hazards associated with occupational exposures as a chimney sweep. The detection of anti-benzo[a]pyrene-7,8-diol-9,10-epoxide-DNA adducts in the peripheral blood lymphocytes of chimney sweeps suggests involvement of benzo[a]pyrene in the genotoxic effect of this exposure in humans.
7	IARCでGroup1の評価となっている案件	Leather dust 皮革のちり	IARC 100C group 1 (ヒトに対して発がん性がある)	—	以下の内容(抜粋)からは、クロム化合物(6価)の影響が考えられる。 (Monograph抜粋) The composition of leather used in the leather-product industries varies. For example, leather used in shoe manufacture may come from the corium part of hide skin processed during tanning. The composition of crust leather varies depending on the tanning processes (Buljan et al.,2000). The reported chromium (III) levels in dust from chrome-tanned leathers have varied from 0.1% to 4.5% by weight (IARC, 1981). Leather may also contain trace amounts of chromium (VI) formed by oxidation of trivalent chromium during the tanning process. For example, in a Danish study of 43 leather products, 35% (n = 15) contained chromium (VI) at levels above the detection limit of 3 mg/kg (Hansen et al., 2002).

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8	IARCでGroup1の評価となっている案件	Wood dust 木材のちり	IARC 100C group 1 (ヒトに対して発 がん性がある)	—	以下の内容（抜粋）からは、有害化学物質の影響が考えられる。 （Monograph抜粋） The manufacture of plywood and particle board may result in exposure to formaldehyde, solvents, phenol, wood preservatives, and engine exhausts. Sawmill workers may also be exposed to wood preservatives and fungal spores. Wood preservatives used include chlorophenol salts in sawmills, and organochlorine pesticides in plywood mills. When coniferous trees are sawn, monoterpenes evaporate into workroom air. In some sawmills, wood is also impregnated with copper–chromium–arsenic salts or creosote. Construction woodworkers may be exposed to asbestos and silica in their work environment. Many of them also varnish wooden floors with solvent- or water-based varnishes, some of which may release formaldehyde. Exposures to chemicals in industries where other wood products are manufactured vary, but are in many cases similar to those in the furniture-manufacturing industry (IARC, 1995).