

RTECS ファイルの略語一覧

略語	内容
ACGIH	American Conference of Governmental Industrial Hygienists
C	continuous
cc	cubic centimeter
CL	ceiling concentration
CRIT DOC	NIOSH criteria document
D	day
DEF	definition
DOT	Department of Transportation
EPA	Environmental Protection Agency
fb	fiber
gm	gram
H	hour
I	intermittent
IARC	International Agency for Research on Cancer
kg	kilogram (one thousand grams)
L	liter
LC <sub>50</sub>	lethal concentration 50 percent kill
LCLo	lowest published lethal concentration
LD <sub>50</sub>	lethal dose 50 percent kill
LDLo	lowest published lethal dose
M	minute
m <sup>3</sup>	cubic meter
mg	milligram (one thousandth or a gram; 10 <sup>-3</sup> grams)
MGN	multigeneration
ml	milliliter
mmol	millimole
mol	mole
mppcf	million particles per cubic foot
mul	multiple routes
ng	nanogram (one billionth of a gram; 10 <sup>-9</sup> grams)
nmol	nanomole
nse	non-standard exposure
OBS	obsolete (trade name)

略語	内容
OEL	Occupational Exposure Limit
ORM	Other Regulated Material (DOT)
OSHA	Occupational Safety and Health Administration
pg	picogram (one trillionth of a gram; 10 <sup>-12</sup> grams)
Pk	peak concentration
pmol	picomole
post	after birth
ppb	parts per billion (v/v)
pph	parts per hundred (v/v) (percent)
ppm	parts per million (v/v)
ppt	parts per trillion (v/v)
pre	prior to copulation
preg	pregnant
REGS	standards and regulations
rns	rinsed with water
RTECS	Registry of Toxic Effects of Chemical Substances
SCP	Standards Completion Program
S	second
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TC	toxic concentration
TCLo	lowest published toxic concentration
TD	toxic dose
TDLo	lowest published toxic dose
TLV	Threshold Limit Value
TWA	time weighted average
ug	microgram (one millionth of a gram; 10 <sup>-6</sup> grams)
umol	micromole
USOS	U.S. Occupational Health Standard
W	week
Y	year
%	percent

RTECS ファイルの EFF コード

A Brain and Coverings	
Damage Codes	
01	Meningeal changes
02	Changes in cerebral spinal fluid
03	Increased intracranial pressure
04	Changes in circulation (hemorrhage, thrombosis, etc.)
05	Encephalitis
06	Demyelination
10	Changes in surface EEG
11	Recordings from specific areas of CNS
30	Other degenerative changes
60	Tumors
70	Changes in brain weight
B Spinal Cord	
Damage Codes	
01	Meningeal changes
02	Changes in circulation
03	Inflammatory changes
04	Demyelination
30	Other degenerative changes
60	Tumors
C Peripheral Nerve Sensation	
Damage Codes	
01	Associated connective tissue
02	Sensory syndrome diagnostic of central lesion
03	Sensory change involving trigeminal nerve
04	Sensory change involving peripheral nerve
05	Sensory change involving segmental distribution
06	Spastic paralysis with or without sensory change
07	Flaccid paralysis with appropriate anesthesia
08	Flaccid paralysis without anesthesia (usually neuromuscular blockage)
09	Fasciculations
10	Paresthesia
15	Recording from afferent nerve
16	Recording from peripheral motor nerve
17	Local anesthetic
18	Structural change in nerve or sheath
60	Peripheral nerve tumors

D Sense Organs and Special Senses (nose, eye, ear, and taste)	
Damage Codes	
Olfaction:	
01	Deviated nasal septum
02	Ulcerated nasal septum
03	Change in olfactory nerve
04	Change in sensation of smell
07	Other changes
09	Tumors
Eye:	
10	Optic nerve neuropathy
11	Cycloplegia
12	Changes in refraction
13	Ciliary spasm
14	Visual field changes
15	Miosis (pupillary constriction)
16	Mydriasis (pupillary dilation)
17	Lacrimation
18	Chromidacryorrhea
19	Increased intraocular pressure
20	Retinal changes (pigmentary depositions, retinitis, other)
21	Hemorrhage
22	Changes in circulation
23	Diplopia
24	Changes in extra-ocular muscles
25	Conjunctive irritation
26	Corneal damage
27	Iritis
28	Ptosis
29	Tumors
35	Other
Ear:	
40	Change in acuity
41	Tinnitus
43	Changes in vestibular functions
44	Changes in cochlear structure or function
45	Tumors
Taste:	
50	Change in function

RTECS ファイルの EFF コード

E Autonomic Nervous System	
Damage Codes	
01	Sympathomimetic
02	Alpha adrenergic blockage
03	Beta adrenergic blockage
04	Central sympatholytic
05	Ganglion blocker
06	Ganglion facilitant
08	Other (direct) parasythomimetic
09	Intensity beta adrenergic effects
15	Smooth muscle relaxant (mechanism undefined, spasmolytic)
16	Parasytholytic
F BEHAVIORAL	
Damage Codes	
01	General anesthetic
02	Anticonvulsant
03	Wakefulness
04	Sleep
05	Altered sleep time (including change in righting reflex)
06	Euphoria
07	Somnolence (general depressed activity)
08	Hallucinations, distorted perceptions
09	Changes in REM sleep (human)
10	Toxic psychosis
11	Tremor
12	Convulsions or effect on seizure threshold
13	Excitement
14	Anorexia (human)
15	Food intake (animal)
16	Fluid intake
17	Change in motor activity (specific assay)
18	Muscle weakness
19	Ataxia
20	Stiffness
21	Rigidity (includes catalepsy)
22	Tetany
23	Muscle contraction or spasticity
24	Coma
25	Antipsychotic
26	Antianxiety
27	Headache
29	Analgesia
30	Tolerance
31	Withdrawal
32	Abuse
33	Irritability
34	Straub tail
40	Alteration of classical conditioning

41	Alteration of operant conditioning
42	Change in psychophysiological tests
43	Aggression
G CARDIAC	
Damage Codes	
01	Cardiomyopathy including infarction
02	Changes in coronary arteries
03	Pericarditis
04	Arrhythmias (including changes in conduction)
05	Cardiomegaly
06	EKG changes not diagnostic of above
07	Pulse rate increased without fall in BP
08	Pulse rate
09	Change in force of contraction
10	Change in rate
11	Change in conduction velocity
12	Cardiac output
13	Change in resting or action potential
30	Other changes
60	Tumors
70	Changes in heart weight
H Vascular	
Damage Codes	
01	BP Elevation not characterized in autonomic section
02	BP lowering not characterized in autonomic section
03	Pulse pressure increase
04	Regional or general arteriolar constriction
05	Regional or general arteriolar or venous dilation
06	Measurement of regional blood flow
07	Change in plasma or blood volume
08	Shock
15	Acute arterial occlusion
16	Structural changes in vessels
17	Thrombosis distant from injection site
20	Contraction (isolated tissues)
21	Relaxation (isolated tissues)
30	Other changes
35	Effects on gills and gill function
60	Tumors

RTECS ファイルの EFF コード

J Lungs, Thorax, or Respiration	
Damage Codes	
01	Ciliary function changes
02	Structural or functional change in trachea or bronchi
03	Bronchiolar dilation
04	Bronchiolar constriction
05	Bronchiectasis
06	Emphysema
07	Changes in pulmonary vascular resistance
08	Consolidation
12	Fibrosis, focal (pneumoconiosis)
13	Fibrosis, interstitial
14	Fibrosing alveolitis
15	Acute pulmonary edema
16	Chronic pulmonary edema
17	Pleural effusion
18	Pleural thickening
20	Respiratory obstruction
21	Cough
22	Dyspnea
23	Sputum
24	Cyanosis
25	Respiratory depression
26	Respiratory stimulation
27	Pulmonary emboli
30	Other changes
60	Tumors
61	Bronchiogenic carcinoma
70	Changes in lung weight
K Gastrointestinal	
Damage Codes	
01	Changes in structure or function of salivary glands
02	Changes in structure or function of exocrine pancreas
03	Changes in structure or function of esophagus
04	Alteration in gastric secretion
05	Gastritis
06	Ulceration or bleeding from stomach
07	Ulceration or bleeding from duodenum
08	Ulceration or bleeding from small intestine
09	Ulceration or bleeding from large intestine
12	Hypermotility, diarrhea
13	Nausea or vomiting
14	Decreased motility or constipation
15	Malabsorption
17	Peritonitis
20	Necrotic changes
30	Other changes

31	Contraction (isolated tissue)
32	Relaxation (isolated tissue)
60	Tumors
61	Colon tumors
70	Changes in pancreatic weight
L Liver	
Damage Codes	
01	Hepatitis (hepatocellular necrosis), diffuse
02	Hepatitis (hepatocellular necrosis), zonal
03	Fatty liver degeneration
04	Hepatitis, fibrous (cirrhosis, post-necrotic scarring)
11	Jaundice, cholestatic
12	Jaundice, other or unclassified
14	Liver function tests impaired
15	Change in gall bladder structure or function
19	Jaundice (or hyperbilirubinemia) hepatocellular
30	Other changes
50	Multiple effects
60	Tumors
61	Angiosarcoma
70	Changes in liver weight
M Kidney, Ureter, and Bladder	
Damage Codes	
01	Changes in blood vessels or in circulation of kidney
02	Changes primarily in glomeruli
03	Changes in tubules (including acute renal failure, acute tubular necrosis)
04	Changes in both tubules and glomeruli
05	Interstitial nephritis
10	Urine volume increased
11	Urine volume decreased
12	Renal function tests depressed
13	Proteinuria
14	Hematuria
16	Other changes in urine composition
20	Inflammation, necrosis, or scarring of bladder
21	Structural or functional changes in ureter
29	Incontinence
30	Other changes
60	Tumors
61	Kidney tumors
70	Changes in bladder weight
71	Changes in kidney weight

RTECS ファイルの EFF コード

N Endocrine	
Damage Codes	
01	Antidiuresis
02	Change in LH
03	Change in GH
04	Change in gonadotropins
05	Thyroid weight (goiter)
06	Toxic goiter-hypofunction
07	Evidence of thyroid hyperfunction
08	Evidence of thyroid hypofunction
10	Hyperparathyroidism
12	Adrenal cortex hyperplasia
13	Adrenal cortex hypoplasia
15	Aldosternism
16	Androgenic
17	Estrogenic
18	Differential effect of sex or castration on observed toxicity
19	Effect on menstrual cycle
20	Gynecomastia
21	Diabetes mellitus
22	Hypoglycemia
23	Ketosis
24	Hyperglycemia
25	Diabetes Insipidus (nephrogenic or CNS)
30	Other changes
60	Tumors
61	Adrenal cortex tumors
62	Thyroid tumors
70	Changes in endocrine weight
71	Changes in pituitary weight
72	Changes in adrenal weight
73	Changes in spleen weight
74	Changes in thymus weight
75	Changes in thyroid weight
P Blood	
Damage Codes	
01	Hemorrhage
02	Change in clotting factors
05	Normocytic anemia
06	Microcytosis with or without anemia
07	Macrocytosis
08	Pigmented or nucleated red blood cells
13	Granulocytopenia
14	Leukopenia
15	Agranulocytosis
16	Eosinophilia
17	Thrombocytopenia
20	Changes in cell count (unspecified)
22	Oxidant related (GPD deficient) anemia
23	Other hemolysis with or without anemia

24	Methemoglobinemia-Carboxyhemo globin
25	Aplastic anemia
26	Changes in bone marrow not included above
27	Changes in spleen
28	Changes in serum composition (e.g., bilirubin)
30	Other changes
60	Tumors
61	Leukemia
62	Lymphomas including Hodgkin's disease
70	Changes in other cell count (unspecified)
71	Changes in erythrocyte (RBC) cell count
72	Changes in leucocyte (WBC) cell count
73	Changes in platelet count
Q Musculoskeletal	
* 筋肉の変化 (CNS) および metabolic な変化については、コード F (Behavioral) も参照	
Damage Codes	
01	Changes in teeth and supporting structures
02	Osteoporosis
10	Osteomalacia
15	Joints
30	Other changes
60	Tumors
R Skin and Appendages	
Damage Codes	
Skin:	
After systemic exposure:	
01	Dermatitis, allergic
02	Dermatitis, irritative
03	Dermatitis, other
04	Photosensitivity
After topical application:	
10	Primary irritation
11	Corrosive
12	Dermatitis, allergic
13	Cutaneous sensitization (experimental)
14	Photosensitivity
Other:	
20	Sweating
21	Hair
22	Nails
25	Breast
30	Other glands
60	Tumors

RTECS ファイルの EFF コード

<b>S Immunological including Allergic</b>		<b>Effects on Fertility:</b>	
<b>Damage Codes</b>		21	Mating performance (e.g., number of sperm positive females per number of females mated; number of copulations per number of estrus cycles)
01	Increase in cellular immune response	22	Female fertility index (e.g., number of females pregnant per number of sperm positive females; number of females pregnant per number of females mated)
02	Decrease in cellular immune response	23	Male fertility index (e.g., number of males impregnating females per number of males exposed to fertile nonpregnant females)
03	Increase in humoral immune response	24	Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea)
04	Decrease in humoral immune response	25	Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants)
05	Decreased immune response	26	Litter size (e.g., number of fetuses per litter; measured before birth)
06	Increased immune response	27	Abortion
<b>Allergic (Multiple organ involvement)</b>		29	Other measures of fertility
* 特定の臓器に関するアレルギーは、各臓器の EFF コードも参照		<b>Effects on Embryo or Fetus:</b>	
- Cholestatic jaundice : コード L (Liver)		31	Extra embryonic structures (e.g., placenta, umbilical cord)
- Aplastic anemia, agranulocytoses : コード P (Blood)		32	Maternal-fetal exchange
- Allergic dermatitis : コード R (Skin)		33	Cytological changes (including somatic cell genetic material)
15	Anaphylaxis	34	Fetotoxicity (expect death, e.g., stunted fetus)
16	Other immediate (humoral): urticaria, allergic rhinitis, serum sickness	35	Fetal death
18	Hypersensitivity delayed	39	Other effects to embryo or fetus
20	Autoimmune		
25	Uncharacterized		
<b>T Reproductive including Embryotoxic, Neonatal and Teratogenic</b>			
<b>Damage Codes</b>			
<b>Paternal Effects:</b>			
01	Spermatogenesis (including genetic material, sperm morphology, motility, and count)		
02	Testes, epididymis, sperm duct		
03	Prostate, seminal vessicle, Cowper's gland, accessory glands		
04	Impotence		
05	Breast development		
09	Other effects on male		
<b>Maternal Effects:</b>			
11	Oogenesis		
12	Ovaries, fallopian tubes		
13	Uterus, cervix, vagina		
14	Menstrual cycle changes or disorders		
15	Breasts, lactation (prior to or during pregnancy)		
16	Parturition		
17	Postpartum		
19	Other effects on females		

RTECS ファイルの EFF コード

Specific Developmental Abnormalities:	
41	Central nervous system
42	Eye, ear
43	Craniofacial (including nose and tongue)
44	Skin and skin appendages
45	Body Wall
46	Musculoskeletal system
47	Cardiovascular (circulatory) system
48	Blood and lymphatic systems (including spleen and marrow)
49	Respiratory system
50	Gastrointestinal system
51	Hepatobiliary system
52	Endocrine system
53	Urogenital system
54	Immune and reticuloendothelial system
55	Homeostatis
59	Other developmental abnormalities
Tumorigenic Effects:	
61	Testicular tumors
62	Prostate tumors
63	Ovarian tumors
64	Uterine tumors
65	Transplacental tumorigenesis
69	Other reproductive system tumors
Effects on Newborn:	
71	Stillbirth
72	Live birth index (similar to T26 , except measured after birth)
73	Sex ratio
74	Apgor score (human only)
75	Viability index (e.g., number alive at day 4 per number born alive)
76	Weaning or lactation index (e.g., number alive at weaning per number alive at day 4)
77	Other neonatal measures or effects
81	Growth statistics (e.g., reduced weight gain)
82	Germ cell effects (in offspring)
83	Biochemical and metabolic
84	Drug dependence
85	Behavioral
86	Physical
87	Other postnatal measures or effects
91	Delayed effects

U Nutritional And Gross Metabolic	
* コード Y (Biochemical) も参照	
Damage Codes	
01	Weight loss or decreased weight gain
02	Conditioned vitamin deficiency
03	Dehydration
Changes in:	
05	Na
06	Cl
07	Ca
08	P
09	Fe
10	K
11	Other metals
20	Metabolic acidosis
21	Metabolic alkalosis
25	Body temperature increase
28	Body temperature decrease
30	Other changes
V TUMORIGENIC	
Damage Codes	
01	Carcinogenic by RTECS criteria
02	Neoplastic by RTECS criteria
03	Equivocal tumorigenic agent by RTECS criteria
05	Cells (cultured) transformed
08	Increased incidence of tumors in susceptible strains
10	Tumors at site of application
15	Tumor types after systemic administration not seen spontaneously
16	Facilitates action of known carcinogens
25	Protects against induction of experimental tumors
30	Active as anti-cancer agent

RTECS ファイルの EFF コード

Y Biochemical			
Damage Codes		37	Lipids including transport
Enzyme inhibition, induction, or change in blood or tissue levels:		38	Amino acids (including renal excretion)
01	True cholinesterase	39	Plasma proteins not involving coagulation
02	Other esterases	40	Other proteins
03	Phosphatases	41	Glycolytic
04	Other hydrolases	42	TCS cycle
05	Carbonic anhydrase	44	Other carbohydrates
06	Xanthine oxidases	45	Histamines (including liberation not immunochemical in origin)
07	Hepatic microsomal mixed oxidase (dealkylation, hydroxylation, etc.)	50	Effect on mitochondrial function
08	Monoamine oxidase	51	Effect on active transport
09	Cytochrome oxidases (including oxidative phosphorylation)	52	Effect on Na-K pump
10	Dehydrogenases	53	Other
11	Catalases	54	Effect on cyclic nucleotides
12	Other oxidoreductases	55	Effect on inflammation or mediation of inflammation
13	Phosphokinase	Neurotransmitters or modulators (putative):	
14	Hexokinases	60	Catecholamine levels in sympathetic nerves
15	Transaminases	61	Catecholamine levels in CNS
16	Other transferases	64	Dopamine in striatum
17	Peptidases	65	Dopamine at other sites
18	Proteases	<b>Z RELATED TO CHRONIC DATA</b>	
19	Isomerases	Damage Codes	
20	Multiple enzyme effects	01	Death in the Other Multiple Dose data type field
21	Other enzymes	Changes in:	
23	Reactivates cholinesterase	71	Ovarian weight
Effect on specific coenzyme:		72	Prostate weight
25	B vitamin including folate	73	Testicular weight
26	CoA	74	Uterine weight
27	NAD, NADP		
28	Others		
29	Proportion of isoenzymes		
30	Disturbed regulation		
Metabolism (intermediary):			
35	Xanthine, purine, or nucleotides including urate		
36	Porphyrin including bile pigments		

■ EFF フィールドコードは、EXPAND して毒性の種類や程度を確認することもできる。

=> E D25/EFF 5

E1	23	D24/EFF
E2	23	D24 (CHANGE IN EXTRA-OCULAR MUSCLES)/EFF
E3	454 -->	D25/EFF
E4	454	D25 (CONJUNCTIVE IRRITATION)/EFF
E5	148	D26/EFF