

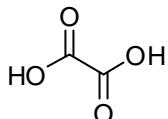
29. 17 ポリカルボン酸並びにその酸無水物、酸ハロゲン化物、酸過酸化物及び過酸並びにこれらのハロゲン化誘導体、スルホン化誘導体、ニトロ化誘導体及びニトロソ化誘導体

(**Polycarboxylic acids, their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated, nitrated or nitrosated derivatives.**)

(A) 非環式ポリカルボン酸並びにこれらのエステル、塩及びその他の誘導体
(Acyclic polycarboxylic acids and their esters, salts and derivatives)

(1) しゅう酸

(Oxalic acid)

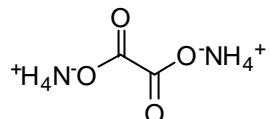


・ しゅう酸の塩

(Salts of oxalic acid)

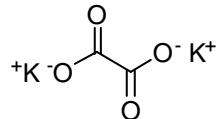
－ しゅう酸アンモニウム

(Ammonium oxalate)



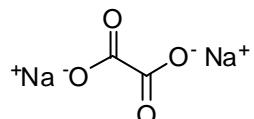
－ しゅう酸カリウム

(Potassium oxalate)



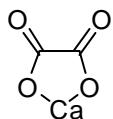
－ しゅう酸ナトリウム

(Sodium oxalate)

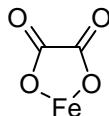


－ しゅう酸カルシウム

(Calcium oxalate)

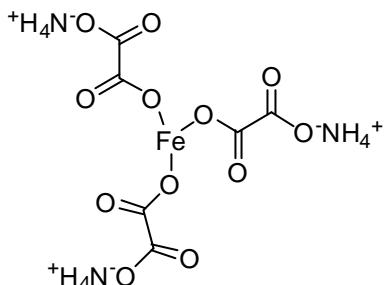


— しゅう酸鉄
(Iron oxalate)



しゅう酸鉄(II)
(Iron (II) oxalate)

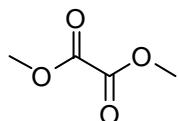
— しゅう酸鉄アンモニウム
(Ammonium-iron oxalate)



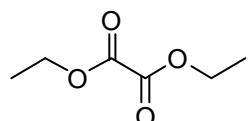
しゅう酸鉄(III) アンモニウム
(Ammonium-iron (III) oxalate)

• しゅう酸のエステル
(Esters of oxalic acid)

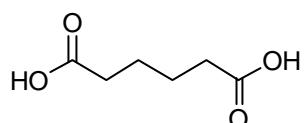
— しゅう酸ジメチル
(Dimethyl oxalate)



— しゅう酸ジエチル
(Diethyl oxalate)

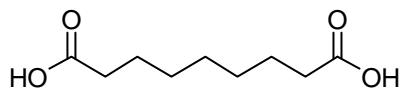


(2) アジピン酸
(Adipic acid)



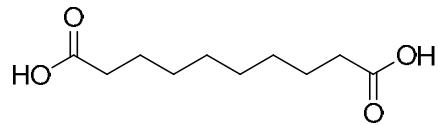
(3) アゼライン酸

(Azelaic acid)



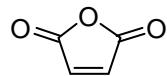
(4) セバシン酸

(Sebastic acid)



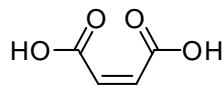
(5) 無水マレイン酸

(Maleic anhydride)



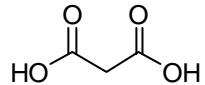
(6) マレイン酸

(Maleic acid)



(7) マロン酸

(Malonic acid)

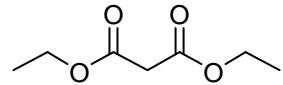


・ マロン酸のエステル

(Ester of maloic acid)

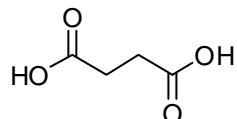
— マロン酸ジエチル

(Diethyl malonate)



(8) こはく酸

(Succinic acid)



(B) 飽和脂環式ポリカルボン酸、不飽和脂環式ポリカルボン酸及びシクロテルペンポリカルボン酸並びにこれらのエステル、塩及びその他の誘導体

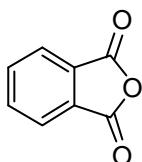
(Cyclanic cyclenic or cycloterpenic polycarboxylic acids and their esters, salts and other derivatives)

(C) 芳香族ポリカルボン酸及びそのエステル、塩及びその他の誘導体

(Aromatic polycarboxylic acids and their esters, salts and other derivatives)

(1) 無水フタル酸

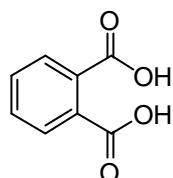
(Phthalic anhydride)



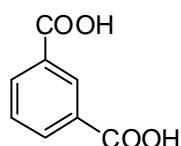
(2) ベンゼンジカルボン酸（オルト-、メタ-、パラ-）

(Benzenedicarboxylic acids (*o*, *m*, *p*))

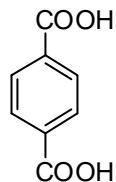
– オルト-ベンゼンジカルボン酸（フタル酸（オルト-フタル酸））
(*o*-Benzenedicarboxylic acid (phthalic acid (*o*-phthalic acid)))



– メタ-ベンゼンジカルボン酸（イソフタル酸）
(*m*-Benzenedicarboxylic acid (isophthalic acid))

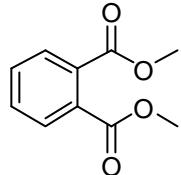


– パラ-ベンゼンジカルボン酸（テレフタル酸）
(*p*-Benzenedicarboxylic acid (terephthalic acid))

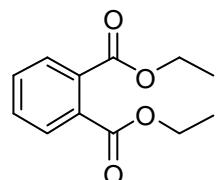


- ベンゼンジカルボン酸のエステル
(Esters of benzenedicarboxylic acids)

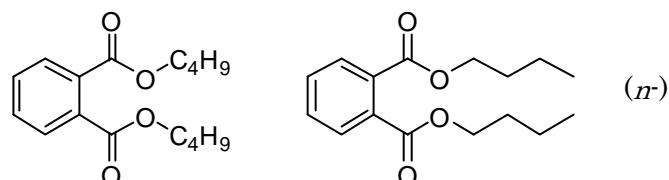
- オルト-フタル酸ジメチル
(Dimethyl σ -phthalate)



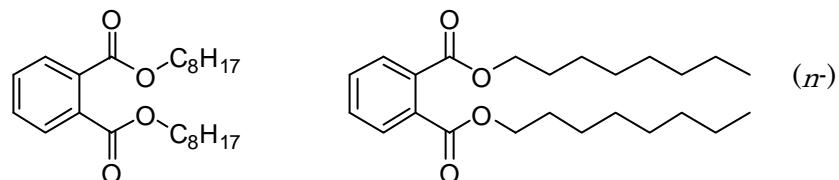
- オルト-フタル酸ジエチル
(Diethyl σ -phthalate)



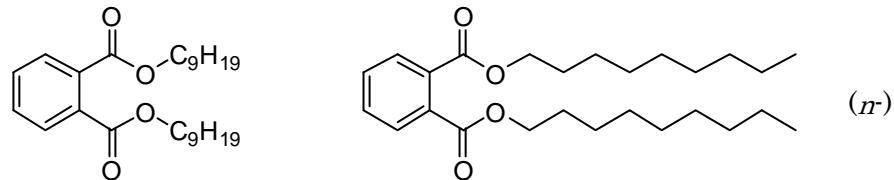
- オルト-フタル酸ジブチル
(Dibutyl σ -phthalates)



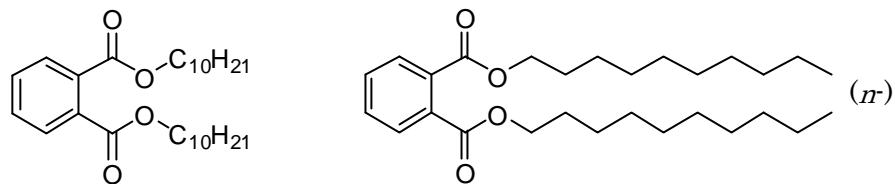
- オルト-フタル酸ジオクチル
(Diethyl σ -phthalates)



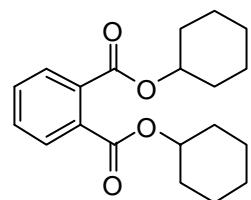
- オルト-フタル酸ジノニル
(Dinonyl σ -phthalates)



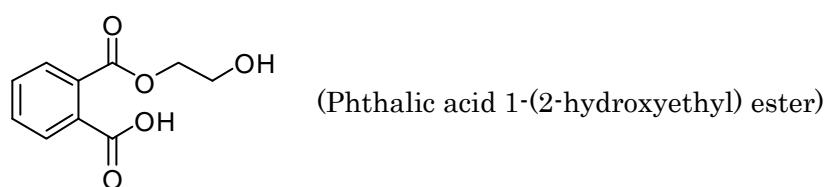
- オルト-フタル酸ジデシル
(Didecyl σ -phthalates)



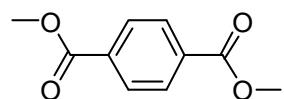
- オルト-フタル酸ジシクロヘキシル
(Dicyclohexyl σ -phthalate)



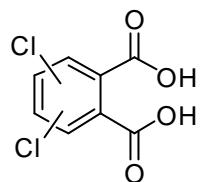
- エチレングリコールのフタル酸エステル
(Phthalates of ethylene glycol esters)



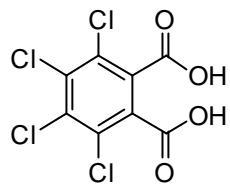
- テレフタル酸ジメチル
(Dimethyl terephthalate)



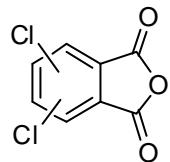
- (3) ジクロロフタル酸
(Dichlorophthalic acids)



- テトラクロロフタル酸
(Tetrachlorophthalic acid)



- 無水ジクロロフタル酸
(Dichlorophthalic anhydrides)



- 無水テトラクロロフタル酸
(Tetrachlorophthalic anhydride)

