## Table 17

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# Table 17 Repeated dose toxicity studies for PFSAs - PFBS

\*Derived by contractor; \*\* calculated according to EFSA. (2012); NR – not reported; NA – not applicable; # - no. of animals studied per endpoint differs to the no. of animals treated.

			Observed
			effects at
Substance Strain & / CAS no. / species /	•	PFAS concentration	LOAEL ( controls vs treated groups).
-	Guideline (GL) study /	' (μg/mL / μg/g `	g. 04.p3/.
reference animals	Good Laboratory Practice (GLP) status	)	Recovery ( controls vs treated groups).

**Publishe** 

NOAEL /

LOAEL

(mg/kg

bw/day)

### Males:

↓ plasma TG (data only reported in figures).

PFBS		0 or 0.03% in diet
(potassium		equivalent to 30.
salt)	APOE*3- Leiden.CETP	Diet (vehicle).
CAS no.	mice.	Diet,
Not given		Dict,
98.2%.	Male,	4-6 weeks,
30.2 /0.	6-8/dose.	OECD 407,
Bijland et		0200 107,
al. (2011)		GLP not stated.

Altered gene At 30 mg/kg bw/day at 4-6 expression related to weeks (mean lipolysis, fatty Males: ± SD) acid uptake Serum: 32.7and transport, NA / 30  $37.8 \pm 6.6$ fatty acid 10.2. binding and activation, fatty acid oxidation and

VLDL

assembly.

assessed.

Recovery not

PFBS (potassium	١	0, 10 or 500 μg/l in drinking water equivalent to 2 or 104.	At 2 mg/kg bw/day (mean ± SE)	↑ apoptosis (data only reported in figures).  ↓ CAT activity (data only	,	
	salt)	C57BL/6	Drinking water	Liver: 0.017 ±	reported in	
	CAS No.	mice.	(vehicle).	0.008.	figures).	Males:
	29420-49-3	Male	Drinking water.	At 104 mg/kg	Changes in	2 / 104
	98%.	6/dose.	28 days.	bw/day	hepatic lipidome	
Chen et al. (2022)		OECD 407.	Liver: 0.027 ± 0.004.	(data only reported in		
			GLP not stated.		figures; 238 lipids	
					changed).	
					Recovery not	

Males:

assessed.

Males: **PFBS** 0, 60, 200 or 600.

Male and

(potassium CRI:CD (SD) No effects on **IGS BR** salt)

liver reported. Males: Gavage, VAF/PlusTM

Carboxymethylcellulose 600 / NA CAS no. rats. Females:

NR Not given 90 days. Females:

98.2%. female liver reported. 600 / NA **OECD 408** 

No effects on

10/sex/dose. GLP study. Lieder et Recovery not

al. (2009a) assessed. **PFBS** 

(potassium CRI:CD (SD)

0, 30, 100, 300 or 1000

salt)

IGS BR.

Gavage.

VAF/PlusTM

CAS no. rats. Carboxymethylcellulose

NR

Not given

10 weeks.

97.9%.

female

Male and

OECD 416.

Lieder et

al. (2009b)

30/sex/dose. GLP not stated.

Males (mean

± SD):

↑ absolute

liver weight

(g):  $19.2 \pm$ 

2.4 vs 21.5 ±

2.9.

↑ relative

liver weight Males:

(%): 3.4 ± 0.3

 $vs 3.8 \pm 0.3$ .

100 / 300

Females: 1

hepatocellular 1000 /

hypertrophy: NA\*.

0 vs 3.

Females:

No effects on

liver reported.

Recovery not

assessed.

				Males (mean ± SE):	
		0, 100, 300 or 900.		↑ absolute liver weight: 25% increase	
		Gavage,		(quantitative data not	
PFBS	2	Carboxymethylcellulose,	,	reported).	
CAS No.	Sprague- Dawley rats.	28 days,		1 relative liver weight:	Males:
29420-49-3	<sup>3</sup> Male and	OECD 407,	NR		300 / 900
>97%.	female.	GLP study.	NK	(quantitative data not	Females:
NICNAS. (2005)	10/ sex/dose.	Recovery,			900 / NA
	Jen, doje.	0 and 900,		Females:	

No effects on liver reported.

Recovery

Liver weight comparable to controls.

14 days.

Males (mean ± SEM):

No effects on liver reported.

Crl:CDv(SD) 0, 60, 200 or 600

**PFBS** IGS BR Gavage.

VAF/Plusv 29420-49-3 Carboxymethylcellulose rats.

NR >98%.

Male and 90 days,

female, NICNAS. OECD 408, (2005)

10/ GLP study. sex/dose.

↑ TP: 7% Males:

decrease (quantitative

Females:

data not

reported).

Females: 200 / 600\*.

600 / NA

1 albumin: 10% decrease (quantitative data not

Recovery not assessed.

reported).

				Males (mean ± SE):	
				↑ relative liver weight (mg/g body weight): 35.2 ± 0.79 vs 39.90 ± 0.48.	
				↓ TP (g/dL): $6.6 \pm 0.0 \text{ vs}$ $6.4 \pm 0.1.$	
				↓ globulin (g/dL): 2.3 ± 0.00 2.3 ± 0.1.	
				↓ cholesterol (mg/dL): 133 ± 6 vs 110 ± 4.	
			At 62.6 mg/kg bw/day in males (mean ± SE),	± 0.17 vs	
		0, 62.6, 125, 250, 500 or 1000.	Plasma: 2.2 ± 4.8,	2.83 ± 0.49.  † gene expression of Cyp2b1:1.59 ± 0.41 vs	
PFBS			Liver: 1.3 ± 0.2.		Males:
CAS no. 375-73-5	Sprague- Dawley rats.	Gavage, 2% Tween® 80	At 62.6 mg/kg bw/day in	11.66 ± 2.78.	NA / 62.6
>97%.	Male and female.	28 days,	females.	† gene expression of	
NTP.		NTP protocol,	Plasma: 0.2 ± 0.05	Cyp2b2: 1.27 ± 0.25 vs 7.72 ± 1.42.	Females: 62.6 / 12
(2022a)		GLP study (FDA GLP Regs).	Liver: NR.	Females:	
		-	At 125 mg/kg bw/day in females,	1 relative	
			1C111a1C3,		