

Diethylene Glycol Butyl Ether/Acetate

Results of Testing

Chemical Name	CAS No.	Study Code/Type	Protocol/Guideline	Species	Exposure	Dose/Concentration	No. per Group	Results	Reference
Diethylene Glycol Butyl Ether	112-34-5	HEGTOX Mammalian bone marrow micronucleus assay (voluntary test)	40 CFR 798.5395 (modified)	mouse	oral (gavage), single dose	0, 330, 1100, 3300 mg/kg	Not specified	DGBE did not induce a significant increase in the frequency of micronucleated bone marrow polychromatic erythrocytes compared to the control.	52 FR 39560; 11/22/87, OTS0521723
Diethylene Glycol Butyl Ether	112-34-5	HENEUR Functional observational battery	40 CFR 798.6050 (modified)	rat	dermal (occluded), 6 hr (single application)	2 mL/kg body wt.	4/sex	No treatment-related effects were noted on fore- or hind-limb grip strength, hindlimb splay values, or locomotor activity.	54 FR 42034; 10/13/89, OTS0521738
Diethylene Glycol Butyl Ether	112-34-5	HENEUR Neuropathology	40 CFR 798.6400 (modified)	rat	dermal (occluded), 6 hr/d; 5 d/wk; 13 wks	0, 10, 30, 100% (v/v) (a dose volume of 2 mL/kg/day)	12/sex	No mortalities occurred due to treatment. Five females in the 100% DGBE dose group showed scab formation at the treatment site. Body weights and food intake were unaffected. Histopathological evaluation revealed mild degeneration of the renal tubular-epithelium in 2 males in the 100% group. There were no gross or neuro-pathological changes related to treatment.	54 FR 42034; 10/13/89, OTS0521736/0521738
Diethylene Glycol Butyl Ether	112-34-5	HENEUR Motor activity	40 CFR 798.6200 (modified)	rat	dermal, 6 hr/d; 5 d/wk; 13 wks	0, 10, 30, 100% (v/v) (a dose volume of 2 mL/kg/day)	12/sex	There were no differences in motor activity between control and treated test animals.	54 FR 42034; 10/13/89, OTS0521736/0521738
Diethylene Glycol Butyl Ether	112-34-5	HESTOX Subchronic dermal toxicity	40 CFR 798.2250 (modified)	rats	dermal, 5 d/wk; 13 wks	10, 30, 100% (a dose volume of 2 mL/kg/day)	10/sex	The high concentration produced dermal irritation in all animals, and in the low- and mid-dose groups, mild, sporadic irritation was seen after 3 to 8 weeks of treatment. Signs included mild erythema with occasional desquamation. Hematuria (red urinary staining) was noted in one each mid- and high-dose female from week 7 through 13. No effects of treatment on estrous cycling or reproductive performance were evident.	54 FR 32117; 8/4/89, OTS0521735
Diethylene Glycol Butyl Ether Acetate	124-17-4	HEADME Pharmacokinetic study	40 CFR 795.225	rat	dermal, 24 hr	200, 2000 mg/kg (neat)	4/sex	Low-dose applications were more completely absorbed than high-dose applications. Absorption rates in high-dose rats were 1.58 mg/cm ² /hour (males) and 1.28 mg/cm ² /hour (females). Urinary elimination was the primary route.	OTS0533107
Diethylene Glycol Butyl Ether Acetate	124-17-4	HEADME Pharmacokinetic study	40 CFR 795.225	rat	dermal, 24 hr	200, 2000 mg/kg (neat); 200 mg/kg as a 10% (by weight) aqueous solution	4/sex	Low-dose applications of neat or 10% aqueous solutions were more completely absorbed than high-dose applications. Absorption rates in high-dose rats were 0.73 mg/cm ² /hour (in males) and 1.46 mg/cm ² /hour (in females). The primary route of elimination was via urine. Urinary metabolites included 2-(2-butoxyethoxy) acetic acid (accounting for more than 1/2 of radioactivity) and 8 to 11 additional radioactive components.	OTS0533107