The Registry of Toxic Effects of Chemical Substances

Glycyrrhiza extract

RTECS #: MD2007000

CAS #: 68916-91-6

UPDATE: July 2002	MW: N/R	MF: N/R

NOTE:

- **TOXICITY DATA HAVE NOT BEEN EVALUATED. OMISSION OF A SUBSTANCE OR NOTATION DOES NOT IMPLY ANY RELIEF FROM REGULATORY RESPONSIBILITY.**

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SYNONYMS:

1. Glycyrrhiza
2. Glycyrrhizae (Latin)
3. Kanzo (Japanese)
4. Kanzou (Chinese)
5. Licorice
6. Licorice extract
7. Licorice root
8. Licorice root extract
9. Licorice, roots

SKIN AND EYE IRRITATION DATA AND REFERENCES:

ROUTE/ ORGANISM	DOSE	EFFECT	REFERENCE
N/R	N/R	N/R	N/R

MUTATION DATA AND REFERENCES:

SYSTEM TEST	ROUTE/ ORGANISM/ TISSUE	DOSE	REFERENCE
DNA repair	Bacillus subtilis	100 gm/L	MUREAV 97,81,1982

REPRODUCTIVE EFFECTS DATA AND REFERENCES:

ROUTE/ ORGANISM	DOSE	EFFECT	REFERENCE
N/R	N/R	N/R	N/R

TUMORIGENIC DATA AND REFERENCES:

ROUTE/ ORGANISM	DOSE	EFFECT	REFERENCE
N/R	N/R	N/R	N/R

ACUTE TOXICITY DATA AND REFERENCES:

ROUTE/ ORGANISM	DOSE	EFFECT	REFERENCE
intraperitoneal mouse	lethal dose (50 percent kill): 1,500 mg/kg	Behavioral: Convulsions or effect on seizure threshold Blood: Changes in spleen	OYYAA2 14,535,1977
intraperitoneal rat	lethal dose (50 percent kill): 1,420 mg/kg	Gastrointestinal: Hypermotility, diarrhea Kidney, Ureter, and Bladder: Other	OYYAA2 14,535,1977

		changes	
oral man	lowest published toxic dose: 209 gm/kg/2 year-intermittent	Peripheral Nerve and Sensation: Spastic paralysis with/without sensory change Behavioral: Muscle weakness Cardiac: EKG changes not diagnostic of above	IJNSD3 4,493,1983
oral mouse	lethal dose (50 percent kill): >7,500 mg/kg	N/R	OYYAA2 14,535,1977
oral rat	lethal dose (50 percent kill): 14,200 mg/kg	Gastrointestinal: Hypermotility, diarrhea Kidney, Ureter, and Bladder: Other changes	OYYAA2 14,535,1977
subcutaneous mouse	lethal dose (50 percent kill): 4 gm/kg	Behavioral: Convulsions or effect on seizure threshold Blood: Changes in spleen	OYYAA2 14,535,1977
subcutaneous rat	lethal dose (50 percent kill): 4,200 mg/kg	Gastrointestinal: Hypermotility, diarrhea Kidney, Ureter, and Bladder: Other changes	OYYAA2 14,535,1977

OTHER MULTIPLE DOSE DATA AND REFERENCES:

ROUTE/ ORGANISM	DOSE	EFFECT	REFERENCE
oral human	lowest published toxic dose: 79.9 mg/kg/8 week-intermittent	Kidney, Ureter, and Bladder: Proteinuria	TCPHP* - ,226,2000
oral mouse	lowest published toxic dose: 2,700 gm/kg/90 day-continuous	Liver: Changes in liver weight Nutritional and Gross Metabolic: Weight loss or decreased weight gain Related to Chronic Data: Death in the "MULTIPLE DOSE" data type field	FCTOD7 31,343,1993

oral rat	lowest published toxic dose: 37,500 µg/kg/30 day-continuous	Liver: Changes in liver weight Kidney, Ureter, and Bladder: Changes in bladder weight Blood: Changes in serum composition (e.g. TP, bilirubin, cholesterol)	OYYAA2 14,535,1977
oral rat	lowest published toxic dose: 114 mg/kg/13 week-continuous	Liver: Changes in liver weight Kidney, Ureter, and Bladder: Changes in bladder weight Endocrine: Changes in thymus weight	OYYAA2 14,535,1977

REVIEWS:

ORGANIZATION	STANDARD	REFERENCE
N/R	N/R	N/R

STANDARDS AND REGULATIONS:

ORGANIZATION	STANDARD	REFERENCE
N/R	N/R	N/R

NIOSH DOCUMENTATION AND SURVEILLANCE:

ORGANIZATION	STANDARD or SURVEY	REFERENCE
National Occupational Exposure Survey 1983	National Occupational Exposure Survey 1983: Hazard Code: X8576; Number of Industries 1; Total Number of Facilities 29; Number of Occupations 2; Total Number of Employees Exposed 316	

STATUS IN FEDERAL AGENCIES:	
ORGANIZATION	**REFERENCE**
N/R	

REFERENCES:	
CODEN	**REFERENCE**
FCTOD7	Food and Chemical Toxicology. (Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523) V.20- 1982-
IJNSD3	Italian Journal of Neurological Sciences. (Masson Italia Periodici, Via Statuto 2/4, I-20121 Milan, Italy) V.1 n1- 1979-
MUREAV	Mutation Research. (Elsevier Science Pub. B.V., POB 211, 1000 AE Amsterdam, Netherlands) V.1- 1964-
OYYAA2	Oyo Yakuri. Pharmacometrics. (Oyo Yakuri Kenkyukai, CPO Box 180, Sendai 980-91, Japan) V.1- 1967-
TCPHP*	Toxicology and Clinical Pharmacology of Herbal Products Melanie Johns Cupp ed., Humana press, 2000.

RTECS Compound Description:
Drug
Mutagen
Human Data
Natural Product

ALT CAS #: 8008-94-4
ALT CAS #: 8057-63-4