

Chemical Safety Practices Recommendations

Buprenorphine (Buprenex, Temgesic, Subutex)

Exposure Hazards (1)

Category 4
Warning
Toxic



Harmful if injected, inhaled, or swallowed.
Affects Central Nervous System.
Overdose may result in respiratory depression and death. (2)

Category 2
Warning



Toxic
to
Reproduction

Use/Abuse of Buprenorphine during pregnancy may lead to symptoms of opioid withdrawal in newborn infants.(3)

Response to Exposure

Oral	Dermal	Inhalation	Injection
Rinse mouth; do not induce vomiting. Report to OHS.	Wash skin with soap and water for 15 minutes. Rinse eyes for 15 minutes. Report to OHS if irritation develops.	Leave area; go to clean air. Report to OHS if difficulty breathing occurs.	Report to OHS.
Special Precautions	Buprenorphine is a Schedule III Opioid and may be used as a drug of abuse. (4)		
Personal Protective Equipment	Gloves (Latex or Nitrile) Skin Protection (Suit, Scrubs or Lab Coat) Eye Protection (Safety-glasses or Goggles) Closed-toe shoes		
Engineering Controls	Buprenorphine powder- Chemical Fume Hood. (5)		
Animal Handling	No special precautions.		
Bedding Disposal	No special precautions.		
Work Practices	Buprenorphine is a Schedule III Opioid- Procurement and use must be documented and access restricted to the pure drug. Follow LASP SOPs for preparation, handling, dosing, and disposal of Buprenorphine.		

References:

1. Buprenorphine MSDS [Internet]. Sigma-Aldrich. 2014 [cited 12/10/2014]. Available from: <http://www.sigmaaldrich.com/united-states.html>.
2. Moody DE. Metabolic and toxicological considerations of the opioid replacement therapy and analgesic drugs: methadone and buprenorphine. Expert opinion on drug metabolism & toxicology. 2013;9(6):675-97.
3. Soyka M. Buprenorphine use in pregnant opioid users: a critical review. CNS drugs. 2013;27(8):653-62.
4. Controlled Substances-Alphabetical Order [Internet]. 2014 [cited 12/10/2014]. Available from: http://www.deadiversion.usdoj.gov/schedules/orangebook/c_cs_alpha.pdf.
5. National Research Council Committee on Prudent Practices in the L. The National Academies Collection: Reports funded by National Institutes of Health. Prudent Practices in the Laboratory: Handling and Management of Chemical Hazards: Updated Version. Washington (DC): National Academies Press (US) National Academy of Sciences.; 2011.

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Chemical Safety Practices Recommendations

Buprenorphine (Buprenex, Temgesic, Subutex)

Buprenorphine is a u-opioid receptor antagonist/ partial agonist similar in function to Methadone. It possesses strong analgesic effects for 8-12 hours but continues to block the receptor after the analgesic effects have worn off. Because of this, it is now often used as an alternative to Methadone in the maintenance treatment of opioid dependence.

While some manufacturer MSDSs may warn of reproductive hazards due to exposure, numerous studies have explored the effects of maternal consumption of Buprenorphine during pregnancy. Children born to mothers taking Buprenorphine exhibit opioid dependence but this effect is extremely unlikely to be caused by occupational exposure if the CSPR is observed.

Respiratory depression and death are unlikely to occur unless extremely large doses are taken, or it is taken in combination with other drugs of abuse.