3,4-Methylenedioxymethcathinone (Methylone)  
[“Bath salt,” bk-MDMA, MDMC, MDMCAT, “Explosion,” “Ease,” “Molly”]

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Chemistry

The core chemical structure of methylone identifies it as a phenethylamine, and it is related in chemical structure to MDMA differing only by an oxygen atom on the phenethylamine side chain. Methylone is a solid at room temperature. The Chemical Abstract Service (CAS) number is 186028-79-5 and the Chemical Abstract index name is 1-(1,3-benzodioxol-5-yl)-2-(methylamino)-1-propanone.

Licit Uses
Methylone is not approved for medical use in the United States.

Illicit Distribution
Law enforcement has encountered methylone in the United States as well as in several countries including the Netherlands, United Kingdom, Japan, and Sweden. The National Forensic Laboratory Information System (NFLIS) is a DEA database that collects scientifically verified data on drug items and cases submitted to and analyzed by federal, state and local forensic laboratories in the United States. The System to Retrieve Information from Drug Evidence (STRIDE)/STARLiMS provides information on drug seizures reported to and analyzed by DEA laboratories. Methylone was first identified by forensic laboratories in 2009, with five drug reports. In 2011, there were 1,770 methylone reports. The methylone reports more than doubled to 4,087 in 2012 and 10,368 in 2013. Although since permanent scheduling became effective in 2013, laboratories have identified 4,141 methylone reports in 2014 with a sharp decrease of 369, 186, and 65 reports in 2015, 2016, and 2017, respectively. Methylone has been found in products falsely marketed as research chemicals, plant food, or bath salts. These products are often sold at smoke shops, head shops, convenience stores, adult book stores, and gas stations and can also be purchased on the Internet. Recently, methylone has been identified in law enforcement seizures that were initially suspected to be MDMA and marketed as “Molly”.

Control Status
Methylone (including its salts, isomers, and salts of isomers) is controlled in Schedule I of the Controlled Substances Act.

Comments and additional information are welcomed by the Drug and Chemical Evaluation Section, Fax 202-353-1263, Telephone 202-307-7183, or E-mail ODE@usdoj.gov.