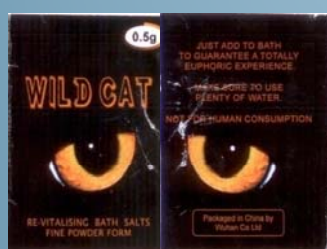
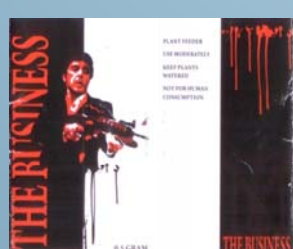


Head Shop 'Legal Highs' Active Constituents Identification Chart (May 2010, pre-'511')



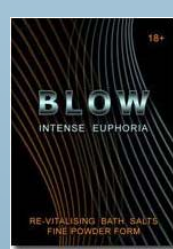
•Mephedrone (66.1% as HCl salt, 54.8% as free base)
•Caffeine
•Benzocaine



•Mephedrone (82.2% as HCl salt, 68.1% as free base)



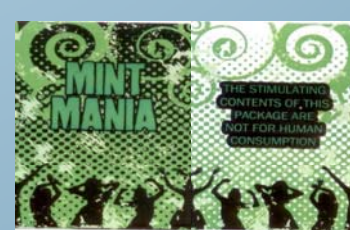
•Mephedrone (14.6% as HCl salt, 12.1% as free base)



•Mephedrone (39.9% as HCl salt, 33.1% as free base)
•Benzocaine



•Methylone



•Methylone



•Methylone



•Methylone
•MDPV



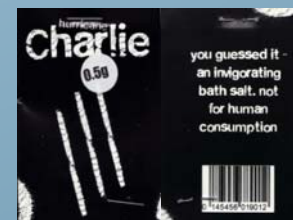
•Mephedrone



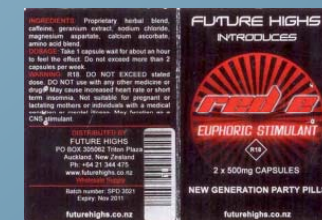
•Flephedrone
•Lignocaine
•Caffeine



•Flephedrone
•Lignocaine
•Caffeine



•MDPV



•Caffeine
•Dimethylamylamine (DMAA)



•Flephedrone
•Lignocaine
•Caffeine



•MDPV



•MDPV
•Lignocaine



•MDPV
•Lignocaine



Pack 1

•Butylone
•A significant amount of what is believed to be an isomer of butylone was also found.



Pack 2

•Butylone
•MDPV



•p-Fluorophenylpiperazine (pPFP)
•Caffeine



•Butylone
•Caffeine



•m-Trifluoromethylphenylpiperazine (mTFMPP)
•Caffeine



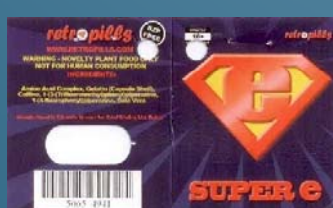
•Caffeine



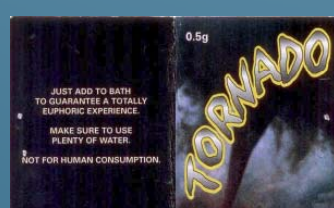
•Butylone



•Dimethylamylamine (DMAA)
•2-Phenylethylamine (2-PEA)
•Hordenine
•Caffeine



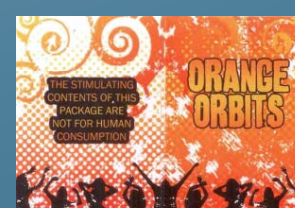
•m-Trifluoromethylphenylpiperazine (mTFMPP)
•1-Methyl-4-benzylpiperazine (Methyl BZP)
•Caffeine



•Mephedrone



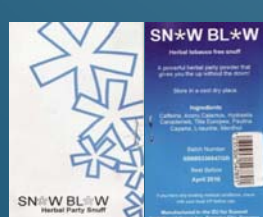
•2-Aminoindane (2-AI, 2-indanamine)
•Caffeine



•MDPV



•Methylone



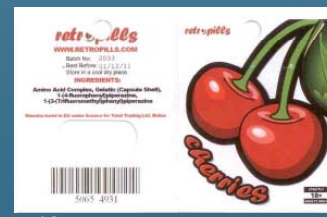
•Caffeine



•Butylone



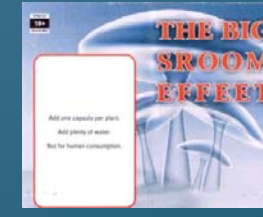
•Butylone



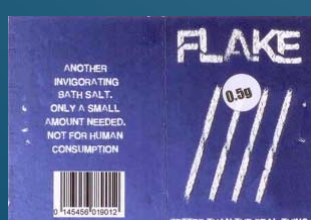
•m-Trifluoromethylphenylpiperazine (mTFMPP)
•p-Fluorophenylpiperazine (pPFP)



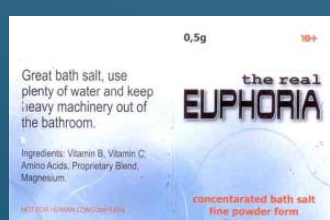
•MDPV



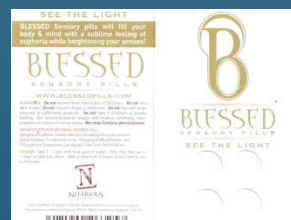
•Mephedrone



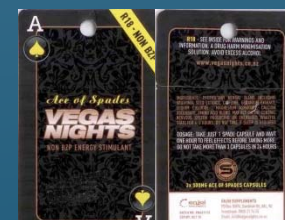
•Butylone
•Lignocaine



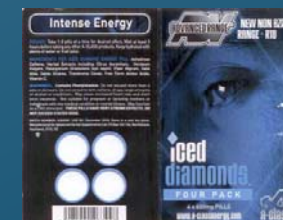
•Mephedrone



•2-Phenylethylamine (2-PEA)
•Dimethylamylamine (DMAA)
•Caffeine



•Caffeine
•Dimethylamylamine (DMAA)



•Caffeine
•Dimethylamylamine (DMAA)

These are the active constituents that we have found to date in the above products. It may be expected that Next Generation Compounds (NGC's) (i.e. new pharmacologically active compounds) will be used as active constituents in the above products following the banning of a number cathinone and piperazine derivatives on May 11, 2010 (www.dohc.ie/press/releases/2010/20100511.html). Recently NAPHYRONE has emerged as a replacement for mephedrone.

If you have any questions please contact us - id.lab.team@gmail.com

Pierce Kavanagh¹, Sinead McNamara², Daniel Angelov¹, Sean McDermott¹, Daniel Mullan¹ and Sheila Ryder³

¹ Department of Pharmacology and Therapeutics, School of Medicine, Trinity Centre for Health Sciences, St. James's Hospital, Dublin 8. ² Drug Treatment Centre Board, Pearse Street, Dublin 2. ³ School of Pharmacy and Pharmaceutical Sciences, Trinity College, Dublin 2.