



TURA Program Update

Spring TURA Continuing Education Conference
April 25, 2018



TURA Program Update

- Halogenated C1-C4 NOL
- New reporting obligations
- SAB PFAS update
- TURA fee billing process

C1-C4

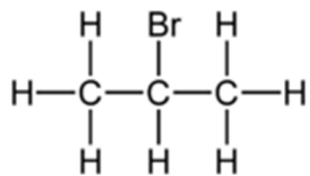
Halogenated Hydrocarbons/Halocarbons Not Otherwise Listed Chemical Category [C1-C4 NOL]

- TURA Administrative Council voted to add to TURA list on Feb 28, 2018
- Chemical category – *broad definition, few chemicals known to be in commerce and likely to be used above thresholds in MA*

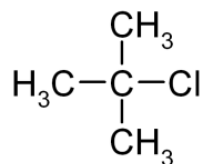
C1-C4 Halogenated Hydrocarbons/Halocarbons

Not Otherwise Listed [C1-C4 NOL]

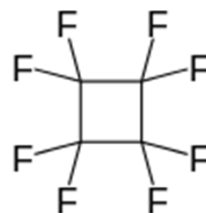
- Defined by chemical structure
 - Only Carbon, one or more halogens (Cl, Br, F, I), and optionally Hydrogen
 - Only those **Not Otherwise Listed**
- Example substances:



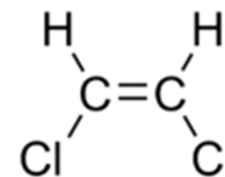
2-bromopropane
(2-propyl bromide)



2-chloro-2-methyl propane
(tert butyl chloride)



Octafluorocyclobutane
(Freon C318)



cis-1,2-dichloroethylene
(cis-DCE)

C1-C4 NOL Hazards

- Evidence seen frequently across C1-C4 halogenated hydrocarbon/halocarbon class
 - Human health effects: neurotoxicity, reproductive and developmental, other target organ toxicity (liver, cardiovascular, kidney, gastrointestinal, blood)
 - Environmental effects: persistence in air and/or sediment and groundwater, aquatic toxicity, ozone depletion, global warming potential



Solvent



Credit: Wikimedia Commons

Refrigerant



Credit: Wikimedia Commons

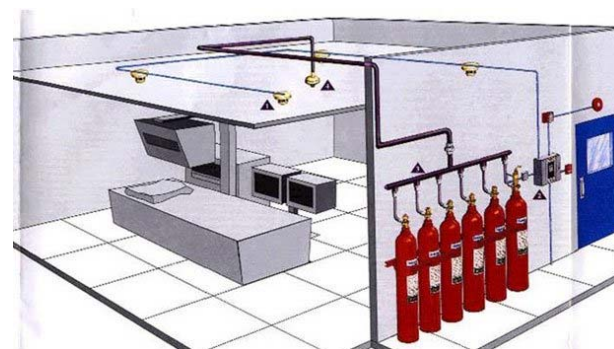
propellant



Credit: Spray Polyurethane Foam Alliance

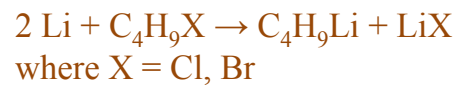
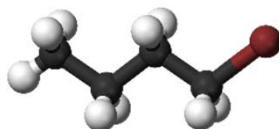
Blowing agent

Uses



Credit: Fire Safety Nation

Fire suppressant



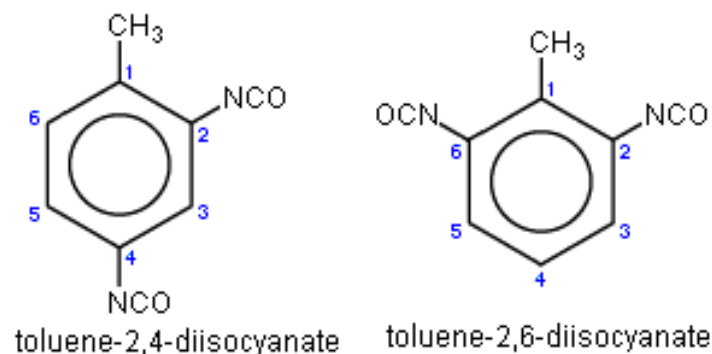
Feedstock/intermediate

Halogenated C1-C4 NOL Process

1. Science Advisory Board deliberated, made recommendation to TURI
2. TURI Policy Analysis, recommendation to Council
3. Administrative Council has voted to add C1-C4 NOL chemical category to TURA list of Toxic or Hazardous Substances
4. Upcoming regulatory process
 - EEA Draft regulations
 - Public comment period, public meeting
 - Consideration of comments and final regulations

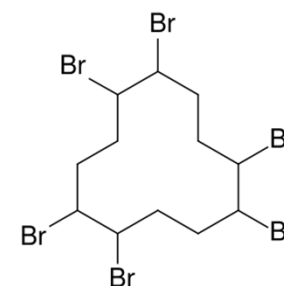
New TURA Reporting Obligations

- TURA Higher Hazard Substances (HHS)
 - TDI isomers for RY 2017, due July 1, 2018 at 1000 lb HHS threshold
 - See NEW guidance in TURA Reporting Appendices
 - 2,4-Toluene Diisocyanate - CAS 584-84-9
 - 2,6-Toluene Diisocyanate - CAS 91-08-7
 - Toluene Diisocyanate Mixed Isomers - CAS 26471-62-5



New TURA Reporting Obligations


- Hexabromocyclododecane (HBCD) category
 - EPCRA TRI PBT with 100 lb threshold
 - Reportable under EPCRA beginning in RY2016, under TURA beginning in RY2018
 - Includes two primary CASRNs:
 - 3194-55-6 (1,2,5,6,9,10-hexabromocyclododecane)
 - 25637-99-4 (hexabromocyclododecane)
 - Reasonably anticipated to cause developmental and reproductive effects in humans
 - Persistent, highly bioaccumulative and highly toxic (PBT)



Science Advisory Board PFAS Update

- SAB considering per- and poly-fluoroalkyl substances
- To date, have recommended adding the following chemicals and their salts to the TURA list of toxic and hazardous substances:
 - PFOS, PFOA (C8)
 - PFHxS, PFHxA (C6)
 - PFBS, PFBA (C4)

TURA fee billing process is **CHANGING**

- The Fee Worksheet  the Invoice
 - Invoices will be sent starting in August and **DUE** 30 days after invoice date
 - Will go to the current recipient of annual compliance fee bill
- Pay **AFTER** you receive the invoice (not before)
 - The \$1000 Administrative Late Fee is triggered 30 days **AFTER** the invoice due date
- Ensures all fees for a given reporting year are received in the same state fiscal year