

A 
Cautionary
alphabet

A 
Autoignition
Temperature
Lowest temp. for
Spontaneous Ignition
- Material Property

B 
BLEVE
Boiling Liquid Expanding Vapour Explosion

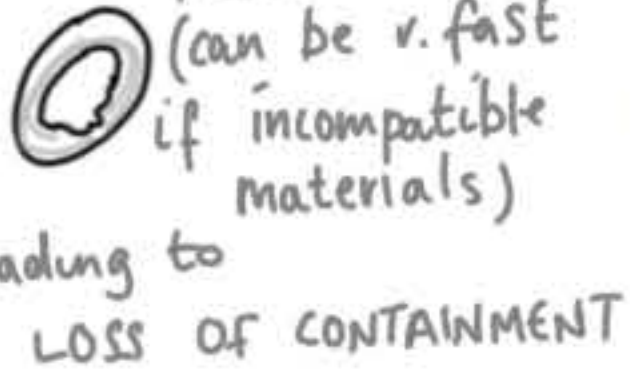
Rapid phase change, doesn't
have to be flammable

C 
Corrosion
Chemical attack on
metal, leading to
loss of integrity

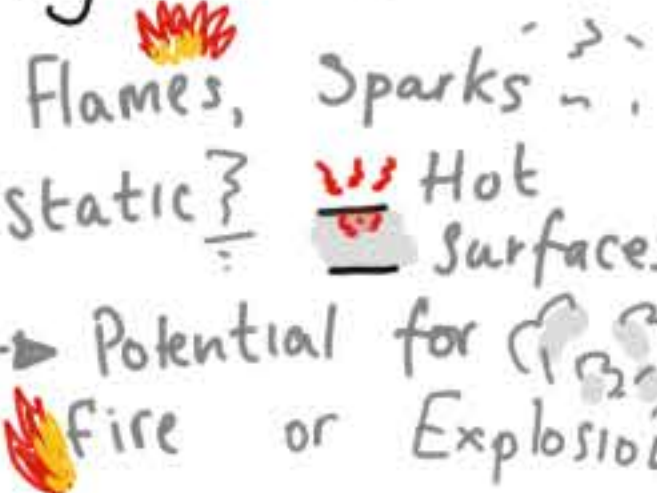

D 
Deflagration & Detonation
Subsonic surface travel of flame
Supersonic pressure wave


E 
Exothermic
Reactions
Heat
temp rise if
not removed
can lead to **THERMAL RUNAWAY**

F 
Flanges
Potential
Source
of
LOSS of
CONTAINMENT


G 
Gasket Failure
Deterioration
(can be v. fast
if incompatible
materials)
Leading to
LOSS OF CONTAINMENT


H 
Hot Work
Source
of
IGNITION


I 
Ignition Sources
Flames, Sparks, Static, Hot Surfaces
Potential for Fire or Explosion


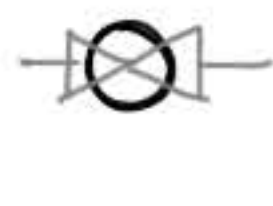
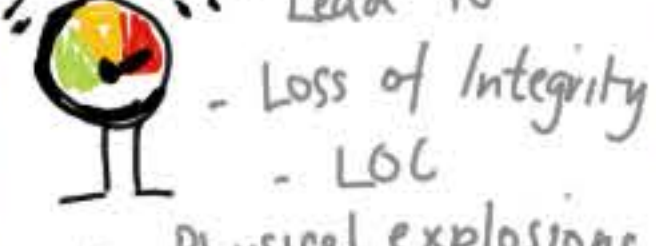
J 
Jet Fire
Momentum
Induces atmosphere
to mix.


K 
Knowledge-Based
Failure
Insufficient
Understanding
Solution incorrectly
expected to work


L 
Lightning
Fires
Electrical &
Computer
Malfunctions


M 
Modification
Change
can introduce
NEW
HAZARDS!


N 
Noise
Occ health issue
but also
Performance
Influencing
Factor


O 
Overpressure
Lead to
- Loss of Integrity
- LOC
- Physical explosions
- Pressure wave


P 
Phase Change
change in
volume
can be
RAPID & VIOLENT


Q 
Quality Defect
eg Contamination manufacturing
unwanted effects eg
- reaction, LOC


R 
Runaway Reaction
can lead to
overpressure &
overwhelm of
treatment system

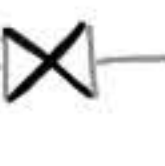

S 
Stress Corrosion
Cracking
eg SSteel & Cl
rapid deterioration


T 
Toxicity
Acute & Chronic
Major Hazard


U 
Underpressure
e.g. Vacuum
Damage
Loss of Integrity


V 
Vehicles
Source of Ignition
Physical Impact


W 
Wear
Deterioration
Mechanism
Ultimate loss of
Integrity


X 
X-rays
Potential for Longterm
effects


Y 
Young People
Less experience
Less aware of
Potential risk


Z 
Zone 0 Under
DSEAR
Explosive gas
atmosphere
continuously
or for
LONG PERIODS


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