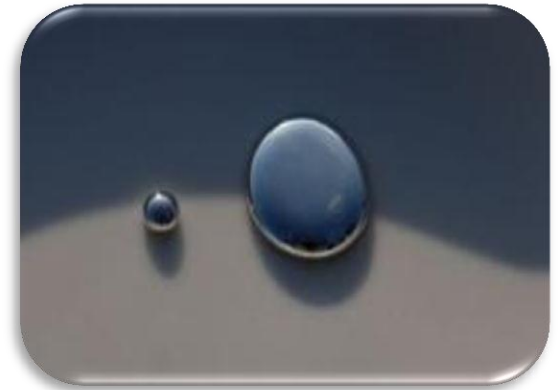




- Mercury and sulphur reacts to mercury sulphide
- Very toxic Hg is transformed into non toxic HgS

Properties of generated mercury sulphide, HgS

- The most stable mercury compound
- The natural mineral form known as cinnabar
- Crystalline structure – 100% red HgS (the most stable form of HgS)
- Good values for leaching behaviour < 0.002 mg Hg/kg (EC limit for inert landfill < 0.01 mg Hg/kg)
- Final product free of Hg emissions and no remaining sulphur – total conversion to HgS



Stabilisation plant

- Technology used for stabilisation of metallic mercury is a vacuum mixer, adapted for the stabilisation – a well proven technology for treatment of mercury containing waste
- 800 kg/batch - total capacity for stabilisation 1,000 t/a
- Additional capacity for 3,000 t/a if necessary
- Appr. 220 tons stabilised up to now - from battery recycling, chlorine alkali industry and non ferrous mining
- Patent registered by DELA GmbH
- Plant approved by the competent authority
- Up-scaling of the technology was supported by the German Ministry of Economics and Technology

DELA is the only company world wide offering a large scale solution for stabilisation of metallic mercury



From mercury holder to final retirement

Handling chain - metallic mercury for stabilisation

1. Mercury cells



Photo: and copyright BASF

2. Packaging metallic Hg

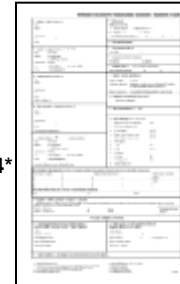


Photo: DELA GmbH

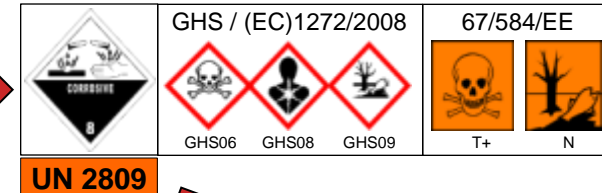
Hg purity 99,9%

EWC 060404*

3. TFS Notification



4. Transport metallic Hg According to IMDG/ADR



UN 2809



5. Reception DELA Risk and title to material transferred to DELA



Photo: DELA GmbH

UN approved & certified
flasks/containers



Hg purity < 99,9 %

Distillation of Hg

6. Hg stabilisation

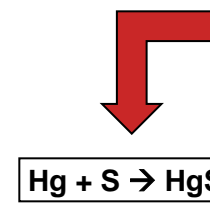


Photo: DELA GmbH

7. Packaging HgS Steel drums, Big-bags



Photo: DELA GmbH

EWC 190305

8. Transport HgS



9. Final retirement (Stowing mine)

Risk and title to material transferred to salt mine



Photo: NDH-E, Beleicherode

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