Rhenium project tier 2 testing programme

OECD guideline	Study	Test material	EC number	CAS number	Quantity required (g)	Concentration of material*	Cost of study** (€)	Estimated start date	Estimated end date	Estimated reporting date	Comment
tbc	Flammability	Rhenium	231-124-5	7440-15-5	tbc	tbc	1.700,00 €	tbc	tbc	tbc	
tbc	Self-ignition temperature	Perrhenic acid	237-380-4	13768-11-1	tbc	tbc	1.700,00 €	tbc	tbc	tbc	Depend on outcome of melting point test. Already in highest oxidation state (no reason for it to burn as it is completely associated with oxygen): is test really needed?
		Ammonium perrhenate	237-075-6	13598-65-7	tbc	tbc	1.700,00 €	tbc	tbc	tbc	Already in highest oxidation state (no reason for it to burn as it is completely associated with oxygen): is test really needed?
tbc	Oxidising properties	Perrhenic acid	237-380-4	13768-11-1	tbc	tbc	4.900,00 €	tbc	tbc	tbc	Oxidising properties mean that the substance itself is reduced and being already in the highest oxidation state means that it can be reduced. If it is needed, confirm protocol that is applicable to solutions UN O.2 (or change to powder form; dirhenium heptaoxide now out and too hygroscopic anyway). If powder, check particle size (influences results - part of Ag project experience). Since according to Phase II draft report dated 2 Dec 2009, "*proprietary data, with a Klimisch score of 1 determined that Ammonium Perrhenate does not have oxidising properties*" and the NH4+ ion is just replaced by a H+ should it not be possible to read across from APR to Perrhenic acid? Workers handling perrhenic acid say that they have never been aware of any oxidising properties.
429	Skin sensitisation - LLNA	Ammonium perrhenate	237-075-6	13598-65-7	tbc	tbc	3.950,00 €	tbc	tbc	tbc	LLNA test was performed on silver and some difficulties were encountered due to the irritating nature of the test item (not the case of APR): need to make sure test is performed according to OECD guideline (variants exist).
	Eye irritation (*in vitro*)	Rhenium	231-124-5	7440-15-5	tbc	tbc		tbc	tbc	tbc	Depends upon evaluation of study on dirhenium heptaoxide. If not valid or of read-across not possible: two options - perform Bovine Corneal Opacity and Permeability or Isolated Chicken Eye *in vitro* tests or read-across from *in vivo* eye irritation on APR. Before test is actioned, wait for *in vivo* test result on APR. If *in vitro* test confirmed, need to clarify on which test item these will be performed.
405	Eye irritation (*in vivo*)	Ammonium perrhenate	237-075-6	13598-65-7	tbc	tbc	900,00 €	tbc	tbc	tbc	Need to clarify whether Annex VIII *in vivo* tests can be performed or whether these require a testing proposal/ECHA's approval in advance - cf. Articles 12(1)e, 22(1)h, and 40(1) of the REACH regulation + UK HSE already confirmed ok to test.
487	Cytogenicity in mammalian cells (*in vitro*) - Micronucleus	Ammonium perrhenate	237-075-6	13598-65-7	tbc	tbc		tbc	tbc	tbc	Also covering cytogenicity in bacteria (AMES test - not applicable to metals as per HERAG). Part of silver project experience - no major issue to consider.
476	Gene mutation in mammalian cells (*in vitro*) - MLA	Ammonium perrhenate	237-075-6	13598-65-7	tbc	tbc	15.200,00 €	tbc	tbc	tbc	Part of silver project experience - no major issue to consider.
403	Acute toxicity (hour-basis), inhalation route (to derive LD50)	Ammonium perrhenate	237-075-6	13598-65-7	tbc	tbc		tbc	tbc	tbc	Inhalation decided to be the most representative route considering exposure pathways (also for test below). Experience with the Ag project showed that a test derogation had to be considered because it was not possible to have a stable test atmosphere for the disilver oxide - could this be the case for APR too?
412 + 422	Short-term (28 days) repeated dose toxicity test, inhalation route (to derive NO(A)EL) combined with reprotox screening test (on rats)	Ammonium perrhenate	237-075-6	13598-65-7	tbc	tbc	75.000,00 €	tbc	tbc	tbc	Two tests in one to reduce number of animals used. Would it be useful to wait for the OECD 403 to be finalised before launching the 412+422? Need to clarify with MS CA whether Annex VIII *in vivo* tests can be performed or whether these require a testing proposal/ECHA's approval in advance - cf. Articles 12(1)e, 22(1)h, and 40(1) of the REACH regulation + UK HSE already confirmed ok to test.
N/A								**GENERAL COMMENTS:** (1) could lab send all testing protocols to PMC secretariat? (2) applicable to any test proposed for APR: For read-across purposes, need to evaluate need of running test with sodium rhenate as well; in parallel or after results from test with APR have been received (to be decided). (3) Are both AQura and Evonik confirmed to work according to GLP principles for all these tests?			
				Total	0		105.050,00 €				

* As recommended in OECD guideline (to compare with available LD50)