



UTILISATION OF FIRE PROOFING COATINGS FOR THE PROTECTION OF PRESSURIED TANK CONTAINING LIQUEFIED FLAMMABLE GAS

RAPPORT N°93/06

SOMMARY

GLOSSARY

1 SUMMARY OF THE STUDY AND CONCLUSION

- 1.1 Presentation of the study
- 1.2 Methodology of utilisation
- 1.3 Fireproofing versus the BLEVE phenomenon
- 1.4 Synthesis of the gasafe program
- 1.5 Specification of a fireproofing coating for liquefied combustible gas tank (LCG)
- 1.6 Conclusion

2 UTILISATION METHODOLOGY

3 FIREPROOFING VERSUS THE BLEVE PHENOMENON

- 3.1 Causes and consequences of the BLEVE
- 3.2 Protective means to avoid a BLEVE

4 GASAFE PROGRAM SYNTHESIS

- 4.1 Sample plates tests
- 4.2 Additional tests: fireproofing materials behaviour under thermal chocks
- 4.3 In situ tests prediction
- 4.4 In situ tests
- 4.5 Validation – comparison: in situ tests/sample plates tests
- 4.6 Extrapolation of the methodology to industrial tanks
- 4.7 Gasafe program conclusions

5 PROTECTIVE COATING SPECIFICATIONS

- 5.1 Documents of reference

- 5.2 Protection acceptance criteria
- 5.3 Quality assurance requirements
- 5.4 Qualification of the fire protection system and of the complex
- 5.5 Choice and implementation of the protection
- 5.6 Follow up of the tanks

6 BIBLIOGRAPHICAL REFERENCES

APPENDIX

- 1-6 Tests results
- 7-12 Graphs
- 13-15 Simulated curves