PT. Perokimia gresik is a fertilizer company where in its activities production has a relation with various kind of dangerous chemical. One of its product is sulfuric acid that used as raw material to make fertilizer. Various kind of chemical material that used can cause a high potential of disaster at PT. Petrokimia Gresik. Disaster is an occurrence that industry or public can get moral and material losing when it happen. Disaster will occur if there are danger and susceptible in a system. The possibility of disaster risk in sulfuric acid storage tank is the explosion of storage tank or its pipe, so it is need a mitigation in order to reduce effect that caused.

To identify and analyze the risk that can be happen, it can be used risk management. The risk identification by FTA and FMEA, then readiness assessment by CAR checklist to show the readiness of company with disaster. The result of risk identification and readiness assessment be guideline to consider the mitigation structural or non structural.

By using risk identification of FTA and FMEA can be known that the highest risk level are explosion of tank, piping and leak of pipe. The result of the CAR checklist get answer presentation for fully capable is 53%, very capable is 42%, generally capable is 5%, and for marginally capable, not capable and not applicable is 0%.

Key word : disaster, mitigation, risk management, readiness assessment