

SECTION 1 – PRODUCT & COMPANY IDENTIFICATION

Product Identification	ETI RISE OF PRESSURE FIRE SENSORS	
Application & Use	ETI Rise of Pressure Fire Sensors is fitted to detect fires. When exposed to fire, the internal core auto ignites to release pressure to activate a fire system.	
Manufacturer Address	PT ETI FIRE SYSTEMS Jl. Magelang – Kopeng Km 11 Tegalrejo Magelang – Central Java 56192 Indonesia Phone : +62 293 314 8990 FAX : +62 293 314 8991 Email : info@etifiresystems.com Website : www.etifiresystems.com	
Product Description	ETI Rise of Pressure Fire Sensors is used as ROP automatic actuation system. When the detector/sensor is exposed to elevated heat and achieves a sustained 175-200 degrees Celsius. The ETI ROP Fire Sensors are very versatile and very robust with an extremely low false alarm performance.	
Applicable Part Numbers	SENS0.4	Sensor 0.4 Metre Assembly ROP
	SENS1.0	Sensor 1.0 Metre Assembly ROP
	SENS1.5	Sensor 1.5 Metre Assembly ROP
	SENS2.0	Sensor 2.0 Metre Assembly ROP
	SENS0.4	Sensor Tube 0.4 Metre
	SENS1.0	Sensor Tube 1.0 Metre
	SENS1.5	Sensor Tube 1.5 Metre
	SENS2.0	Sensor Tube 2.0 Metre

SECTION 2 – COMPOSITION

INGREDIENT	Other REC Limits
Potassium Chlorate	None Recommended
Potassium Dichromate	None Recommended
Stabiliser	None Recommended

SECTION 3 – HAZARD IDENTIFICTION

Hazard Classification	--
Safety Phrases	--
Risk Phrases	--

SECTION 4 – FIRST AID MEASURES

Skin	Wash with soap and water.
Eye	Flush with large amounts of water.
Ingestion	Give large amounts of water and induce vomiting.
Inhalation	Not considered a likely route of entry.
Advice to doctor	Consult a doctor if any residual complaints are not adequately relieved by above measures. May aggravate pre-existing liver or kidney conditions.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media	Water, foam or dry chemical powder media may be used as required for residual fires involving this material.
Hazards from Combustion	Product of combustion should be considered toxic and avoided. Firemen should use breathing apparatus if dealing with fires in proximity to this material.
Precautions	--

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spillage	Not considered a likely outcome.
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SECTION 7 – HANDLING AND STORAGE

Handling	Use of approved safe work practices are necessary to avoid accidents that may cause injury or container danger causing spills handle with care.
Storage	Recommended storage environment is less than 65 ⁰ C in a clean dry environment.

SECTION 8 – EXPOSURE CONTROL & PERSONAL PROTECTION

Respiratory Protection	Not Required
Ventilation	Not Required

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE	Brown powder content – potassium Odor
pH	N/A
Boiling Point	N/A
Specific Gravity	N/A
Vapour Density	--
Solubility in Water	Nil
Auto Ignition	195 ⁰ C
Flash Point	N/A
Vapour pressure	Not Determined

SECTION 10 – REACTIVITY & STABILITY

Stability	Stable under recommended conditions of storage.
Incompatible Materials	--
Condition to avoid	Avoid shock, friction, heavy impact, heat, sparks, open flames and other heat sources.

SECTION 11 – TOXICOLOGICAL INFORMATION & HEALTH EFFECT

Inhalation	Not an expected route of entry.
Ingestion	Not an expected route of entry.
Eye	May cause mild to moderate transient irritation.
Skin	May cause mild transient irritation and/or dermatitis.

SECTION 12 – ECOLOGICAL INFORMATION

Biodegradability	No available information
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SECTION 13 – DISPOSAL CONSIDERATION

Disposal --

SECTION 14 – TRANSPORT INFORMATION

Hazard Class	UN 5.1		
UN Number	1479 Packaging Group III		
Special note	Limited and expected quantity under this class classification = 5 Kg.		
N.B.	Normal shipments of these sensors will not exceed the 1 Kg expected quantity and are therefore Normally Expected from Declaration. Refer to data below.		
Quantity of ingredient mixture in each sensor		Min (Gram)	Max (Gram)
SENS0.4	Sensor 0.4 Metre Assembly ROP	5	7
SENS0.4	Sensor Tube 0.4 Metre (Replacement)	5	7
SENS1.0	Sensor 1.0 Metre Assembly ROP	11	13
SENS1.0	Sensor Tube 1.0 Metre (Replacement)	11	13
SENS1.5	Sensor 1.5 Metre Assembly ROP	17	19
SENS1.5	Sensor Tube 1.5 Metre (Replacement)	17	19
SENS2.0	Sensor 2.0 Metre Assembly ROP	25	27
SENS2.0	Sensor Tube 2.0 Metre (Replacement)	25	27

SECTION 15 – REGULATORY INFORMATION

None Known

SECTION 16 – OTHER INFORMATION

Information	First issue 2 nd Feb 2006
Revision & Re-Issued	Mar 2006 Rev. A
	Dec 2007 Rev. B
	Mar 2008 Rev. C
	May 2010 Rev. D
	Mar 2015 Re-issued E
	Sept 2017 Rev. F

Disclaimer

This document has been compiled by ETI Fire Systems to serve as the manufacturer’s material Safety Data Sheet (MSDS). It is based on information concerning the product which has been provided to ETI by other manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. While ETI has taken all due care to include accurate and up-to-date information in this MSDS, ETI in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.