



## Material Safety Data Sheet

Issuing Date: January 6th, 2014

Updated Date: June 16th, 2014

### Section 1: Identification of the Substance/Company

<b>Commodity</b>	JE-50/JE-100/ JE-150 (Portable Nano Particles disposable Fire Extinguisher)
<b>Manufacturer/</b>	Xi'an J&R Safety Emergency Equipment Co., Ltd.
<b>Address</b>	B903, YiHe International Plaza, No. 1 Hanguang Road, Yanta District, Xi'an, Shaanxi, China 710065
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<b>Website/E-mail</b>	<a href="http://www.jr-fire.com">www.jr-fire.com</a>

### Section 2: Composition/Information on Ingredients

Component	Chemical Entity	CAS No.
Potassium Nitrate	KNO <sub>3</sub>	7757-79-1
Melamine	C <sub>3</sub> H <sub>6</sub> N <sub>6</sub>	108-78-1
Phenolic resin	(C <sub>6</sub> H <sub>6</sub> O) <sub>n</sub> (CH <sub>2</sub> O)	9003-35-4

### Section 3: Hazard Identification

JE	AEROSOL-GENERATING COMPOUND	AEROSOL
static electricity or heating above 300°C may cause activation	flammable	May cause temporary, mild irritation if inhaled or eye contact.
It would cause burn if touch the metal of front cover within 10 min after discharge	When combusted produces aerosol	

### Section 4: First Aid Measure

First-Aid measure are referred to acute exposure and/or chronic over exposure

Contact Method	AEROSOL-GENERATING COMPOUND	AEROSOL
Inhalation	N/A	Remove to fresh air, lie down, and rest. If not breathing –apply artificial respiration. Oxygen maybe given but only under supervision of trained person.
Eye Contact	hold eyes open and wash with water.	Remove to fresh air and wash with water.
Skin contact	Change clothing and shoes, Wash skin with soap.	Wash affected areas with water.

**Seek medical attention for further treatment, observation, and support if necessary.**

**Section 5: Fire Fighting Measure**

JE	AEROSOL-GENERATING COMPOUND	AEROSOL
If burning, use water fog or spray, carbon dioxide, dry powder or foam.	If burning out of control, put out the fire with water fog or spray, carbon dioxide, dry powder or foam. Wear personal protecting equipment and clothing.	N/A

**Section 6: Accidental Release Measures**

AEROSOL-GENERATING COMPOUND	AEROSOL
No smoking or naked flame. Clear the area of all personnel. Do not walk on material. Keep combustibles such as wood, paper, oil and etc away from spilled material. Collect for further dealing with of spilled material. Then, if practicable, hose the area with water.	Keep ventilate till aerosol drop away, clean up the discharge residue.

**Section 7: Handling and Storage**

Handling Precautions	Keep away from combustion source, high temperature and keep ventilate and dry.
Storage Precautions	Keep away from combustion source, high temperature and keep ventilate and dry.
Storage Class	4.1

**Section 8: Exposure Controls and Personal Protection**

<b>Exposure</b>	Keep ventilate during manufacture and operation.
<b>Personal Protection</b>	Protective gloves, goggles and anti-static clothing should be worn during a production and spilled material clean up procedure. Fireproof and heat insulation clothing, helmeted and shoe cover shall be worn during fire extinguishing procedure.

Parameters	Aerosol-Generating Compound	Aerosol
<b>Appearance</b>	solid	Smog
<b>color</b>	Earthy yellow	White
<b>odor</b>	N/A	short pungent smell
<b>Relative density</b>	1.66 g/cm <sup>3</sup>	1.29Kg/m <sup>3</sup>
<b>PH (if in water % Conc.)</b>	9 (saturated solution)	11 (saturated solution)
<b>Auto Flammability</b>	Above 300°C, or open flame	Non-combustible
<b>Explosive Properties</b>	Loose form, possible to explode	Unexplosive

**Section 10: Stability and Reactivity**

<b>Stability</b>	Stable under normal temperature conditions
<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition, avoid contact with water or organic solves
<b>Hazardous Reaction products</b>	Combustion produces potentially hazardous carbon monoxide CO and nitrogen oxides NOx.

**The agent is extremely stable below 125°C. It should be protected from fire, sources of electrical power, shock,**

and high temperatures.

### Section 11: Toxicological Information

The TLV's (Threshold Limit Values) of the chemicals released in the aerosol phase are applicable only in case of long, as long as a complete professional life, exposure. This is not the case of a real life situation.

#### Product

The potential damage is not caused by the product mixture composition, but by the fact that it is respirable. The TLV's apply in case of long exposure, sometimes exposure during a complete professional life, whilst in this case is once only and short (in case of accidental discharge when evacuation does not take place on time).

#### Components

Potassium Nitrate	Toxicity	Acute oral toxicity( LD50): 1901mg/kg [rabbit] 3750mg/kg[rat]
Melamine	Toxicity	Toxic Dose LD 50: 3248mg/kg(oral, rat)
Phenolic resin	Toxicity	Not available

### Section 12: Ecological Information

Present no ecological hazards,  
ODP(Ozone depletion potential)=0  
GWP(Global warming potential)=0  
ALT(Atmospheric life time)=Low

### Section 13: Disposal Considerations

Should be disposed separately from other materials,  
Comply with local, state, federal and international regulations for flammable materials

### Section 14: Transportation Information

Proper shipping name	Flammable Solid, Inorganic
Hazard Class or Division	4.1
UN No.	3178
Packing Group	III

**Division 4.1 articles present no significant hazard as packaged for transport.**

### Section 15: Regulatory Information

For the Following Components:

The EU classification and R&S phrases, referred to the components of the Solid bound compound related only to the single components considered as separate chemical entities. Once mixed in the production of the solid bound compound, the risk sentences of the single components are not applicable being the solid bound compound a separate chemical entity.

Potassium Nitrate	EU Classification	Oxidizer	Contact with combustible material may cause fire Keep away from sources of ignition - No smoking In case of fire and/or explosion, do not breathe fumes.
	R Phrase	8	
	S Phrase	16	
		41	

Melamine	EU Classification R Phrase S Phrase	Oxidizer 22 36 37	Harmful if swallowed Wear suitable protective clothing Wear suitable gloves
Phenolic resin	EU Classification  R Phrase	Not available 24/25 34	Toxic in contact with skin and if swallowed. Causes burns
Limit Value for Exposure EINECS Status Restrictions on Marking and Use	None listed All components are included in EINECS inventories None		

### Section 16: Other Information

#### Labelling



Flammable Solid, Class 4.1

Comply with manufacturer's installation and maintenance procedures.

#### Disclaimer:

The information contained herein is accurate to the best knowledge and belief of J&R, and is intended to describe the product for health, safety, and environmental requirements only. It is not intended and should not be construed as a warranty. Consult J&R Group for further information.