

**MATERIAL SAFETY DATA SHEET K<sup>100</sup>®-ASH****SECTION I PRODUCT IDENTIFICATION**

K<sup>100</sup>®-ASH is a liquid version of KALMATRON® KF-ASH as an additive to the concrete mixes containing up to 70% of IIW (Incinerated Industrial Waste) from the weight of the cement. IIW are fly ash, slag ash, volcanic deposits or crumbled slag, etc. being integrated by K<sup>100</sup>®-ASH provide stable insulating performance of conventional concrete structure up to the lightweight concretes.

**Trademark:** K<sup>100</sup>® patents N<sub>o</sub>. EU 006915839; N<sub>o</sub> USA 3,680,881  
**Manufacturer:** KALMATRON Corporation, 236 West Portal Ave., PMB 153, California, USA.  
**Consistency:** Dense Liquid  
**Color:** Milky White  
**Odor:** Light specific odor; disappears after application

**SECTION II COMPOSITION INFORMATION**

<b>Chemical name:</b>	<b>CAS number:</b>	<b>EC number:</b>	<b>%:</b>	<b>Classification:</b>
K <sup>100</sup> ® :	NSF Reg.# 143075	N/A	<15%	R2 and RX-2
				See section XV for full text of R-phrases.
<b>Distilled water:</b>	CAS # 7789 20 0	N/A	> 85%	N/A

**SECTION III HAZARD IDENTIFICATION**

**Classification:** Xi; irritant; R36/37/38, R43.  
**Human health hazards:** Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact.  
**Environmental hazards:** This product is not classed as dangerous for the environment.  
**Other hazards:** None.

**SECTION IV FIRST AID MEASURES**

In case of contact with skin, immediately wash skin, hair and eyes with water. If inhaled or swallowed remove subject to fresh air. Call a physician. If subject is not breathing, give artificial respiration and proceed with oxygen until medical support arrives.

**SECTION V FIRE FIGHTING MEASURES**

Substance is a non-combustible liquid, which requires no special fire fighting procedures. No fire or explosion hazards are associated with this product.

**SECTION VI HANDLING AND STORAGE**

Handling without packaging is not recommended. After loading and unloading, clean the storage facility by sweeping. Store in an area with a temperature no lower than -22°C. Storage should have natural or forced ventilation.

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**SECTION VII EXPOSURE CONTROLS/PERSONAL PROTECTION**


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<b>Occupational exposure controls:</b>	Do not eat, drink or smoke when working with product. Avoid contact with eyes and skin and do not breathe dust. Immediately after working wash hands thoroughly with soap and water.
<b>Respiratory protection:</b>	In case of exposure to concentrations above WEL's, use appropriate respiratory protection (type FFP2).
<b>Eye protection:</b>	Wear safety glasses/goggles to EN166.
<b>Skin protection:</b>	Wear impervious, abrasion and alkali resistant gloves, suitable boots and closed long-sleeved protective clothing.
<b>Environmental exposure controls:</b>	Prevent direct discharge in to drains or watercourses.

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**SECTION VIII PHYSICAL AND CHEMICAL PROPERTY**


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<b>Appearance and Odor:</b>	Milky white liquid with light specific odor that disappears after application.
<b>Flash point:</b>	N/A
<b>Density:</b>	1000 kg/m <sup>3</sup> ÷ 1100 kg/m <sup>3</sup> .
<b>Specific Gravity:</b>	1.12
<b>Solubility:</b>	At 99%÷99.5% is soluble by water during of mixing with concrete batch.
<b>Point of fusion:</b>	None
<b>Sublimation point:</b>	250°C

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**SECTION IX STABILITY AND REACTIVITY**


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<b>Stability:</b>	Stable with any solid and finished matter in their accomplished phase, under normal conditions. Unstable with hardening reaction like cementitious product when mixed with water. See handling and storage conditions (see section 7).
<b>Conditions to avoid:</b>	Avoid high ambient temperatures when packages opened.
<b>Materials to avoid:</b>	Accidental contact of unpacked product with liquids. Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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**SECTION X TOXICOLOGICAL INFORMATION**


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<b>Eye contact:</b>	Irritating without chemical burns.
<b>Skin contact:</b>	Irritating, may cause sensitization.
<b>Ingestion:</b>	Swallowing large quantities may cause irritation to the gastrointestinal tract.
<b>Inhalation:</b>	May irritate the throat and respiratory tract leading to coughing

**SECTION XI ECOLOGICAL INFORMATION**

**Ecotoxicity:** This product is not classified as being hazardous to the environment (LC50 aquatic toxicity not determined).

**Persistence and degradability:** Below – 22°C and above +250°C of ambient temperatures.

**Bioaccumulative potential:** Not expected to be bio accumulated.

**Mobility:** This product is expected to be completely soluble in water.

**Other adverse affects:** None known.

**SECTION XII TRANSPORTATION INFORMATION**

**K<sup>100</sup>® ASH** is not explosive and is not flammable. Shipping and trucking may be provided in the standard packages or in bulk containers specified for cement and cement-containing products. "NON-HAZARDOUS" labels may be used for K<sup>100</sup>® ASH containers.

**SECTION XIII DISPOSAL INFORMATION**

**Methods of disposal:** Dispose of in accordance with local legislation. Prevent entry into the sewage water system. Dispose of the product is as liquid waste European Waste Catalogue (EWC): 15 01 02 (plastic packaging)

**SECTION XIV REGULATORY INFORMATION**

**Regulation:** According to 1999/45/EC



**Classification:** Irritant

**Risk phrases:** R36/37/38 Irritating to eyes, respiratory system and skin.  
R43 May cause sensitization by skin contact.

**Safety Phrases:** S2 Keep away from children.  
S24/25 Avoid contact with skin and eyes.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S46 If swallowed, seek medical advice immediately and show this container or label.

**National legislation and requirements:**

Health and Safety at Work etc Act 1974  
Control of Substances Hazardous to Health Regulations COSHH 2002  
Control of Substances Hazardous to Health (Amendment) Regulations COSHH 2004  
Environmental Protection Act 1990  
Any authorized manual on First Aid by Manual Handling Operations Regulations (as amended)

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**SECTION XV OTHER INFORMATION**

The information on this datasheet reflects the currently available knowledge and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or technical guidance literature.

Any other use of the product is the responsibility of the user. It is implicit that the user is responsible for determining appropriate safety measures and for applying the legislation covering his/her own activities.

The information on this datasheet is accurate at the time of printing but KALMATRON Corporation reserve the right to amend details as a part of product development program.

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