Appendix B – Fireformer MSDS Sheet

MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet contains environmental, health and toxicology information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information incorporated in your MSDS. Discard any previous edition of this MSDS.

This revision updates Sections 1 (Product Identification) and 11 (Regulatory Information).

PRODUCT IDENTIFICATION

A HAZARD WARNING IS NOT REQUIRED FOR THIS PRODUCT UNDER OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

MATERIAL IDENTIFICATION

Name: INDRAWAX 5658-SC

CAS Registry Number 64742-51-4

Synonyms Paraffin Waxes

Transportation Emergency Phone (212) 688-8080

Chemical Family Petroleum Hydrocarbon

OSHA HAZARD DETERMINATION

The material is not hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Refer to Section XI of this MSDS for federal and state regulatory information.

Hazardous Ingredients: None

Hazardous Physical Properties: None

EXPOSURE LIMIT FOR TOTAL PRODUCT 2 mg/m^3 for wax fumes in air for an 8-hour workday.

BASIS: OSHA Regulation 29 CFR 1910.1000 and by the American Industrial Hygienists (ACGIH)

PHYSICAL DATA

Appearance and Odor No odor

Boiling Point/Range N/A

Vapor Pressure Nil

Vapor Density (Air = 1.0) Not determined

Melting Point D-87 130-140 Degrees F Specific Gravity $(H_2O = 1)$ Less than 1

% Volatile (by volume) Nil

> Solubility in Water Insoluble

Evaporation Rate Nil

> Volatile Organic Content N/A

REACTIVITY DATA

Hazardous Decomposition Materials: Hazardous gases/vapors produced are carbon dioxide, incomplete combustion may produce carbon monoxide.

Conditions to Avoid: Strong oxidizing materials, heat, flame.

Hazardous Polymerization: Will not occur.

FIRE PROTECTION

FLASH POINT: 380°F D-92
AUTOIGNITION: NDA
FLAMMABILITY LIMITS (% by volume in air): Lower: NDA Upper: NDA
EXTINGUISHING MEDIA: CO2, dry chemical, foam and water fog.
NFPA Ratings: Health 0; Flammability 1; Reactivity 0; Special NDA;
HMIS RATINGS: Health 0; Flammability 1; Reactivity 0; other NDA; (Least-0, Slight-1, Moderate-2, High-3, Extreme-4).

These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association or, if applicable, the National Paint and Coating Association, and do not necessarily reflect the hazard document **read label** before using this product.

FIRE FIGHT PROCEDURES:

In case of fire, smother flames and turn off heat source. **DO NOT** use water to extinguish wax fires as the water may boil violently causing an explosion of hot wax.

COMBUSTION PRODUCTS:

Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

STORAGE, HANDLING AND REACTIVITY

Hazardous Decomposition Products: NDA

Stability: Stable

Hazardous Polymerization: Polymerization will not occur

Incompatibility: May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Special Precautions: **READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.**

IMMEDIATE HEALTH EFFECTS

EYE CONTACT

The cool material is not expected to cause eye irritation. However, thermal burns may result from contact with the hot material. The degree of the injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment. Signs and symptoms may include pain, tears, swelling, redness and blurred vision.

SKIN IRRITATION

If this material is used at elevated temperatures, skin contact can be minimized by wearing protective clothing.

RESPIRATORY PROTECTION

No special respiratory protector is normally required. However, if operating conditions create high airborne concentrations, the use of an approved respirator is recommended.

VENTILATION

No special ventilation is usually necessary. However, if operating conditions create high airborne concentrations of this material, special ventilation may be needed.

EMERGENCY AND FIRST AID INFORMATION

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Skin: If skin is exposed in hot wax, immediately cool by applying cold water. Do not attempt to remove material. Consult a physician.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

9. SPILL, LEAK AND DISPOSAL INFORMATION

In case of Spill or Leak: Protect from ignition sources. Contain spill immediately in smallest possible areas. Material will solidify as it cools from a molten state. Recover as much of the product as possible by shovel or mechanical means. Non-recoverable product, contaminated soil, debris and other materials should be placed in proper containers for ultimate disposal. Avoid washing, draining or directing material to storm or sanity sewers.

<u>NOTE:</u> Review **FIRE AND EXPLOSION HAZARDS** before proceeding with clean up. Use appropriate **PERSONAL PROTECTIVE EQUIPMENT** during clean up.

Waste Disposal Method: Recycle as much of the recoverable product as possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local Regulations.

10. PRECAUTIONARY MEASURES

Respiratory Protection: None normally required except under unusual circumstances such as described in Section V.

Ventilation: Normal shop ventilation.

Protective Gloves: Impervious, insulated while handling hot product.

Eye Protection: Goggles if handling hot product.

Other Protective Equipment: As needed to protect against hot product.

Safety Precautions: Normal precautions for handling hot, molten liquid or solutions.

REGULATORY INFORMATION

Federal Regulation

CERCLA, 40 CFR 302 – Not applicable

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986, TITLE III SECTIONS 302, 304, 312, 313

SECTION 302/304 – Extreme Hazardous Substances (40 CFR 355) The material does not contain extremely hazardous substances at greater than 1.0% concentration; however, it is possible that this material may contain extremely hazardous substances at a lower concentration so that a large enough spill could warrant an Emergency Release Report under Section 304.

SECTION 311/312 – MSDS and Chemical Inventory Reporting Requirements (40 CFR 370) The material should be reported under the following EPA hazard categories:

Immediate (Acute)	Sudden Release of Pressure
Health Hazard	
Delayed (Chronic) Health Hazard	Reactive
Fire	Not Applicable

<u>NOTE</u>: See Section II for the concentration of any ingredients classified as hazardous by OSHA.

Section 313 – List of Toxic Chemicals (40 CFR 372)

The material does not contain chemical (s) at a level of 1.0% or greater (0.1% for carcinogens) on the list of toxic chemicals and subject to toxic chemical release reporting requirements.

TOXIC SUBSTANCES CONTROL ACT (TSCA), 40 CFR 710

This material is in the TSCA inventory of Chemical Substances and/or is otherwise in compliance with TSCA.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261, SUBPART C AND D

The material, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations; however, it could be considered hazardous if it meets criteria for being toxic, corrosive, ignitable or reactive according to U. S. EPA definitions (40 CFR 261). Additionally, it could be designated as hazardous according to state regulations. This material could also become a hazardous waste if it is mixed with or comes in contact with a listed hazardous waste.

If such contact or mixing occurs, check 40 CFR 261 to determine whether it is a hazardous waste. If it is a hazardous waste, Regulations 40 CFR 262, 263, 264 and 268 may apply.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 116 SECTION 311

The material contains the following ingredient (s) which is considered hazardous in navigable waters.

Ingredient

Reportable Quantity

Petroleum Hydrocarbon

Film or sheen upon or discoloration of the water surface or adjoining shoreline.

HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS, 49 CFR 171 – 178

Not Applicable.

STATE REGULATIONS CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 ("PROPOSITION 65")

The material does not contain ingredient(s) subject to the Act.

PENNSYLVANIA WORKER AND COMMUNITY RIGHT TO KNOW ACT.

The material contains the following hazardous substances:

Categories:	Н	=	Hazardous Substance ($> 1.0\%$)
	S	=	Special Hazardous Substance (> 0.01%)
	Е	=	Environmental Hazard (> 1.0%)

Non-hazardous ingredient (s) information is withheld as trade secret in accordance with Section 11 (eleven) of Pennsylvania Worker and Community Right to Know Act.

SARA TITLE III

Title III Section 302/304 Extremely Hazardous Substance:ComponentCAS No.PercentRQ (Lbs) TPQ (Lbs)None

CERCLA Section 102 (a) Hazardous SubstanceComponentCAS No.Percent RQ (Lbs)None

Title III Section 311 Hazard CategorizationAcute ChronicFirePressureReactiveNot ApplicableX

Title III Section 313Toxic ChemicalsComponentCAS No.PercentNone

WHMIS CLASSIFICATION NA

MICHIGAN CRITICAL MATERIALS No critical materials present.

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