



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	Trade Secret
Hydrotreated Light Paraffinic Oil	64742-55-8	50-70	*
Hydrotreated Heavy Paraffinic Oil	64742-54-7	10-20	*
Alkyl Borate	PROPRIETARY	1-3	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### First aid measures

<b>Skin contact</b>	Immediately flush skin with plenty of water for at least 15 (30 or 60) minutes. Remove contaminated clothing and shoes. Thoroughly clean shoes before reuse. Wash contaminated clothing before reuse.
<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention.
<b>Eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Flush eyes with water for 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Call a physician. If swallowed, call a poison control center or physician immediately. Do NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

#### Most important symptoms and effects, both acute and delayed

**Symptoms** Drowsiness, Dizziness, Coughing and/ or wheezing; Skin irritation, Eye irritation.

#### Indication of any immediate medical attention and special treatment needed

**Self-protection of the first aider** Low hazard for usual industrial or commercial handling.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media:

Use water spray (fog), foam, dry chemical or CO2.

**Small Fire** Dry chemical or CO2.

**Large Fire** Water spray or fog; Foam.

**Explosive properties:** Risk of explosion if heated under confinement: Fire or intense heat may cause violent rupture of packages.

#### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous combustion products** Aldehydes, Carbon monoxide, Carbon dioxide (CO2), Hydrocarbons, Nitrogen oxides (NOx), Oxides of boron, Inorganic fumes.

#### Specific methods:

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** May be ignited by heat, sparks or flames.

**Special firefighting procedures:**

No action shall be taken involving any personal risk without suitable training. Evacuate surrounding areas. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Dike to collect large liquid spills. Do not allow run-off from fire-fighting to enter drains or water courses. Do not use a solid water stream as it may scatter and spread fire. The product is insoluble and floats on water. Water may cause frothing of heated materials. Avoid spreading burning liquid with water used for cooling purposes. Water mist may be used to cool closed containers. Move containers from fire area if you can do it without risk.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions:** Use personal protective equipment. See Section 8 for information on appropriate personal protective equipment. Evacuate personnel to safe areas. Avoid contact with skin, eyes and clothing.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions:** Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system. Water runoff can cause environmental damage.

**Methods and material for containment and cleaning up**

**Methods for Containment** Dike far ahead of spill; use dry sand to contain the flow of material. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

**Methods for clean-up:** Clean-up methods - small spillage: Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to state, local, federal regulations. Clean-up methods - large spillage: Keep unnecessary personnel away. Dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways:

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Handling:** Protect from physical damage. Do not store at temperatures above 120°F (50°C). Empty containers retain product residue and can be hazardous.

**Conditions for safe storage, including any incompatibilities**

**Technical measures/precautions:** Mechanical ventilation required if used indoors on a continuous basis.

**Materials to avoid:** Oxidizing agents, Reducing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA Exposure Limits:	NIOSH IDLH
Hydrotreated Light Paraffinic Oil 64742-55-8	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	-
Hydrotreated Heavy Paraffinic Oil 64742-54-7	5 mg/m <sup>3</sup> TWA (mist) 10 mg/m <sup>3</sup> STEL (mist)	5 mg/m <sup>3</sup>	-
Alkyl Borate PROPRIETARY	-	Not established	-

**Other information** When mists/aerosols can occur, the following are recommended: 5mg/m<sup>3</sup> - OSHA PEL.

**Appropriate engineering controls**

**Engineering measures:** Mechanical ventilation required if used indoors on a continuous basis.

**Individual protection measures, such as personal protective equipment**

- Eye/face protection** Wear safety glasses with side shields (or goggles).
- Skin and body protection** Wear normal work clothing, Chemical resistant gloves: (consult with the specific manufacturer to confirm performance).
- Respiratory protection** Ensure adequate ventilation. No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Wash face, hands and any exposed skin thoroughly after handling. Avoid contact with eyes, skin and clothing. Take off contaminated clothing and wash it before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Sulphurous
<b>Appearance</b>	Oil	<b>Odor threshold</b>	No information available
<b>Color</b>	Clear Amber, Brown		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	N/A	Not applicable	
<b>Melting point/freezing point</b>	No information available		
<b>Boiling point / boiling range</b>	>= 315 °C / 599 °F	(based on components)	
<b>Flash point</b>	>= 130 °C / 266 °F	(Lowest liquid component)	
<b>Evaporation rate</b>	Slower than ether		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limits in Air</b>			
<b>Upper flammability limit</b>	No Data Available		
<b>Lower flammability limit</b>	No Data Available		
<b>Vapor pressure</b>	No Data Available		
<b>Vapor density</b>	Heavier than air		
<b>Specific Gravity</b>	0.85		
<b>Water solubility</b>	Insoluble in water		
<b>Solubility in other solvents</b>	No Data Available		
<b>Partition coefficient</b>	No Data Available		
<b>Autoignition temperature</b>	No Data Available		
<b>Decomposition temperature</b>	No Data Available		
<b>Kinematic viscosity</b>	32-33 mm <sup>2</sup> /s	@ 40 °C	
<b>Dynamic viscosity</b>	No Data Available		
<b>Explosive properties</b>	No Data Available		
<b>Oxidizing properties</b>	No Data Available		

Other information

<b>Softening point</b>	No Data Available
<b>Molecular weight</b>	No Data Available
<b>VOC Content (%)</b>	
<b>VOC Content (%)</b>	None
<b>Density</b>	0.85 g/cc
<b>Bulk density</b>	No Data Available

**10. STABILITY AND REACTIVITY**

Reactivity

Reactivity Stable.

Chemical stability

**Possibility of Hazardous Reactions** None under normal processing.  
**Hazardous polymerization** Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

**Materials to avoid:** Oxidizing agents, Reducing agents.

Hazardous Decomposition Products

**Hazardous Decomposition Products** Aldehydes, Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Hydrocarbons, Nitrogen oxides

(NOx), Oxides of boron, Inorganic fumes.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<b>Product Information</b>	Harmful by inhalation. May cause respiratory tract irritation. May cause eye irritation. May cause skin irritation.
<b>Inhalation</b>	Harmful by inhalation. May cause irritation.
<b>Eye contact</b>	Contact with eyes may cause irritation.
<b>Skin Contact</b>	May cause irritation. Repeated exposure may cause skin dryness or cracking.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Potential for aspiration if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrotreated Light Paraffinic Oil 64742-55-8	>5000 mg/kg	>2000 mg/kg	= 3900 mg/m <sup>3</sup> ( Rat ) 4 h
Hydrotreated Heavy Paraffinic Oil 64742-54-7	>5000mg/kg (Rat)	>5000 mg/kg (Rabbit)	-
Alkyl Borate PROPRIETARY	-	-	-

**Information on toxicological effects**

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	Skin Sensitization, Respiratory Sensitization: Not expected.
<b>Mutagenic effects:</b>	No data available to indicate product or any components present at or greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC, NTP, or OSHA.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Not classified.
<b>Chronic toxicity</b>	No information available.
<b>Subchronic toxicity</b>	No information available.
<b>Target Organ Effects</b>	Skin, Eyes, Respiratory system.
<b>Neurological effects</b>	No information available.
<b>Other adverse effects</b>	No information available.
<b>Aspiration hazard</b>	Risk of serious damage to the lungs (by aspiration).

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 21.21 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

<b>ATEmix (oral)</b>	51921 mg/kg
<b>ATEmix (dermal)</b>	155763 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	260.1 mg/l
<b>ATEmix (inhalation-vapor)</b>	6300 mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

21.21 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrotreated Light Paraffinic Oil 64742-55-8		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50
Hydrotreated Heavy Paraffinic Oil 64742-54-7		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

Bioaccumulative potential.

**Mobility**

The product is insoluble and floats on water.

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes**

Dispose of in accordance with federal, state and local regulations.

**Contaminated packaging**

Do not reuse container. Dispose of in accordance with federal, state and local regulations.

**14. TRANSPORT INFORMATION**

**DOT**

Not regulated

**IATA**

Not regulated

**IMDG**

Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

**Federal Regulations**

**SARA 313**

No SARA 313 chemicals are present above the reporting threshold.

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**State Regulations (RTK)**

**California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm:

Chemical Name	CAS Number	California Proposition 65
Methyl alcohol	67-56-1	Developmental
Sulfur dioxide	7446-09-5	Developmental
Trimethyl phosphate	512-56-2	Carcinogen
Naphthalene	91-20-3	Carcinogen
Ethyl benzene	100-41-4	Carcinogen
Benzene	71-43-2	Carcinogen Developmental Male Reproductive
Toluene	108-88-3	Developmental

**U.S. State Right-to-Know Regulations**

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION**

**NFPA Rating**

Health hazards 1  
Flammability 1  
Instability 0



**Physical and Chemical Properties -**

**HMS Rating**

Health hazards 1

Flammability 1

Physical hazards 0

Personal protection B

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**Revision Note**

This data sheet contains changes from the previous version in section(s): 4 ,5, 6, 7, 8, 11, 15.

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**