



# SAFETY DATA SHEET

Conforms to the requirements of the United States Hazard Communication regulation 29 CFR 1910.1200

## SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

<b>PRODUCT NAME</b>	<b>ASFIER N100L</b>
<b>PRODUCT CASRN</b>	<b>PROPRIETARY</b>
<b>PRODUCT DESCRIPTION</b>	AMINES, N-TALLOWALKYL, SUBSTITUTED
<b>SDS DOCUMENT No.</b>	K78110
<b>RECOMMENDED USES</b>	This product is intended for use as a processing additive in asphalt formulations.

### RESPONSIBLE PARTY

Kao Specialties Americas LLC  
243 Woodbine Street  
P. O. Box 2316  
High Point, NC 27261  
Telephone: 1-800-727-2214

Refer to SECTION 16 for information regarding the  
MANUFACTURER(s) of this product

**FOR ALL TRANSPORTATION ACCIDENTS, call Chemtrec at 800-424-9300 or 703-527-3887 for international collect calls.**

## SECTION 2: HAZARD(S) IDENTIFICATION

### PRODUCT CLASSIFICATION per 29 CFR 1910.1200

<b>HAZARD CLASSIFICATION</b>	Skin Corrosion/Irritation Category 1B Serious Eye Damage/Eye Irritation Category 1 Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 1 Reproductive Toxicity Category 2 Acute Toxicity - Oral Category 4
<b>SIGNAL WORD</b>	Danger
<b>HAZARD STATEMENTS</b>	Harmful if swallowed. Causes severe skin burns and eye damage. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure.

**HAZARD PICTOGRAMS**



**RECOMMENDED SAFETY PRECAUTIONS**

<b>INJURY PREVENTION</b>	<p>Do not handle until all safety precautions have been read and understood.          Do not breathe dust/fume/gas/mist/vapours/spray.          Wash thoroughly after handling.          Do not eat, drink or smoke when using this product.          Wear chemical-resistant gloves and clothing, eye protection and face protection.          Use personal protective equipment as required.</p>
<b>EMERGENCY RESPONSE</b>	<p>IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.          IF SWALLOWED: rinse mouth. Do NOT induce vomiting.          IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.          IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.          IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.          IF exposed or concerned: Get medical advice/attention.          Wash contaminated clothing before reuse.</p>
<b>PRODUCT STORAGE</b>	<p>Store locked up.</p>
<b>PRODUCT DISPOSAL</b>	<p>Dispose of contents and container in accordance with local, national, and international regulations for hazardous wastes.</p>

**HAZARDS NOT OTHERWISE CLASSIFIED**

<b>PYROPHORIC GASES</b>	Not applicable
<b>SIMPLE ASPHYXIANTS</b>	Not applicable
<b>COMBUSTIBLE DUST</b>	Not applicable

Dust Classification	Minimum Ignition Energy (mJ)	Pmax (bar-g)	Rmax (bar/s)	Kst (bar-m/s)	Explosion Severity
Not Applicable					

Definitions for dust classifications are found in OSHA Instruction CPL 03-00-008 *Combustible Dust National Emphasis Program (reissued)* March 11, 2008, Appendix E, Section 5

<b>Other Known Hazards</b>	None
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### **SECTION 3: COMPOSITION/INFORMATION on INGREDIENTS**

<b>Chemical Name</b>	<b>Common Name</b>	<b>CAS Number</b>	<b>Concentration (%)</b>
Confidential	Amines, N-tallow alkypoly-, 2-ethylhexanoates	Confidential	70 - 80
Hexanoic acid, 2-ethyl-	2-ethylhexyl alcohol	149-57-5	20 - 30

If any items in the table above are described as CONFIDENTIAL, Kao Specialties Americas LLC considers this information to constitute a Trade Secret.

### **SECTION 4: FIRST-AID MEASURES**

<b>EYES</b>	Flush immediately with water for at least 15 minutes. Do not rub eyes. Remove contact lens immediately, if present and easy to remove. SEEK IMMEDIATE MEDICAL ATTENTION ONCE THE EXPOSED PERSON IS SAFE TO TRANSPORT.
<b>SKIN</b>	Immediately take off all contaminated clothing. For small exposure, wash affected area with 2% acetic acid solution until the slimy feeling disappears. Follow acid wash with flushing the exposed area with copious amount of water. For large exposure, use safety shower to flush the affected area with heavy flow of water. SEEK MEDICAL ATTENTION IMMEDIATELY. If medical attention is not immediately available, contact POISON CONTROL CENTER (1-800-222-1222).
<b>INGESTION</b>	If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.
<b>INHALATION</b>	If inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. If symptoms persist, get medical attention.
<b>SYMPTOMS of EXPOSURE</b>	Skin contact: exposure to this product will result in rash and irritation. Deep-tissue chemical burn will develop slowly over a period of hours if the material is not promptly removed from the affected area. Eyes: symptoms include itching, burning, redness and tearing. Respiratory: symptoms may include burning sensation in the upper respiratory system, shortness of breath, and choking/coughing.
<b>NOTES to PHYSICIAN</b>	CORROSIVE MATERIAL! Can cause extensive and deep penetrating tissue damage.

### **SECTION 5: FIRE-FIGHTING MEASURES**

**FLAMMABLE PROPERTIES**

Refer to SECTION 9: Physical and Chemical Properties

**HAZARDOUS PRODUCTS of COMBUSTION**

Irritating and toxic gases or fumes may be released during a fire.

**PROPERTIES THAT COULD INCREASE FIRE or EXPLOSION HAZARD**

No known hazards.

**EXTINGUISHING MEDIA**

Powder, alcohol-resistant foam, CO2 & sand

**FIRE-FIGHTING INSTRUCTIONS**

Firefighters should wear full protective clothing including self contained breathing apparatus.

**NFPA ratings are found in SECTION 16**

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## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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**FOR ALL TRANSPORTATION ACCIDENTS, call Chemtrec at 800-424-9300 or 703-527-3887 for international collect calls.**

**RESPONSE TO SMALL SPILLS OF PRODUCT**

**SPILL CONTAINMENT**

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

**SPILL CLEANUP PROCEDURES**

Wear appropriate protective equipment and clothing during clean-up. Ventilate the contaminated area. Absorb spill with inert material. Shovel material into appropriate container for disposal.

**REQUIRED EQUIPMENT**

Shovel the material into waste container.

**ADDITIONAL INFORMATION**

No other spill procedures necessary.

**RESPONSE TO LARGE SPILLS OF PRODUCT**

**SPILL CONTAINMENT**

Dike the spilled material, where this is possible. Stop source of leak if possible. Prevent liquid from entering sewers. Keep out of drains and water courses.

**SPILL CLEANUP PROCEDURES**

Ventilate the contaminated area. Absorb spill with inert material. Shovel material into appropriate container for disposal. Thoroughly wash the area with water after a spill or leak clean-up. For very large spills, activate company or local HAZMAT emergency response. Use of properly trained remediation company may be required to safely collect the spilled product.

**REQUIRED EQUIPMENT**

Wear appropriate protective equipment and clothing during clean-up.

**ADDITIONAL INFORMATION**

Evacuate the area promptly and keep upwind of the spilled material. Isolate the spill area to prevent people from entering.

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**SECTION 7: HANDLING AND STORAGE**

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**HANDLING REQUIREMENTS**

Use this product with adequate ventilation. Use a NIOSH-approved respirator if exposed to oil mist, and adequate ventilation is not available. Avoid getting this material into contact with your skin and eyes. Appropriate neutralizing solution should be immediately available whenever skin contact is possible (see SECTION 4: FIRST AID MEASURES). Keep away from sources of ignition.

**STORAGE REQUIREMENTS**

Storage area should be protected by appropriately designed containment to prevent release to groundwater or sewers.  
Keep the container tightly closed and in a cool, well-ventilated place.  
Do not mix storage with incompatible materials. Store containers away from acids and strong oxidizing agents.  
If product is stored in bulk, nitrogen padding is recommended.

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**ENGINEERING CONTROLS**

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYE/FACE PROTECTION**

If handling procedure does not require respiratory protection, chemical splash goggles and full-face shield are recommended when handling this product.

**HAND PROTECTION**

Use impervious gloves.

**SKIN PROTECTION**

Use of protective coveralls and long sleeves is recommended. Impervious gloves should be used at all times when handling this product.

**RESPIRATORY PROTECTION**

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever there may be potential for airborne exposure.

**OTHER**

Eye wash fountain and emergency showers are recommended.

**EXPOSURE LIMITS**

CHEMICAL	CASRN	PERCENT	LIMITS	AGENCY
2-Ethylhexanoic acid	149-57-5	20 - 30	5 mg/m <sup>3</sup> TWA (inhalable fraction and vapor)	ACGIH

**OSHA:** No exposure limits established for this product

## SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

<b>APPEARANCE @ 20°C</b>	Reddish-brown liquid	<b>ODOR</b>	Amine odor
<b>ODOR THRESHOLD</b>	No data available	<b>pH</b>	8.0 - 10.0 (1% solution in water)
<b>VAPOR DENSITY</b>	No data available	<b>VAPOR PRESSURE</b>	No data available
<b>EVAPORATION RATE</b>	No data available	<b>RELATIVE DENSITY</b>	0.85@ 25°C
<b>MELTING POINT (°C)</b>	8°C	<b>WATER SOLUBILITY</b>	Slightly soluble
<b>INITIAL BOILING POINT (°C)</b>	No data available	<b>BOILING RANGE (°C)</b>	No data available
<b>PARTITION COEFFICIENT (N-OCTANOL/WATER)</b>	No data available	<b>VISCOSITY</b>	No data available
<b>DECOMPOSITION TEMPERATURE</b>	No data available	<b>FLAMMABILITY CLASSIFICATION</b>	CLASS IIIB
<b>FLASH POINT (°C)</b>	> 250°C Cleveland Open Cup	<b>AUTO-IGNITION TEMPERATURE</b>	No data available
<b>UPPER EXPLOSIVE LIMIT</b>	No data available	<b>LOWER EXPLOSIVE LIMIT</b>	No data available

## SECTION 10: STABILITY and REACTIVITY

<b>CHEMICAL STABILITY</b>	Stable under normal conditions.
<b>CONDITIONS to AVOID</b>	None known
<b>INCOMPATIBLE MATERIALS (Reactivity)</b>	None known.
<b>INCOMPATIBLE MATERIALS (Storage &amp; Transport)</b>	Avoid contact with acids, acid anhydrides, oxidizing agents, copper and copper alloys.

**HAZARDOUS  
DECOMPOSITION  
PRODUCTS** | None known.

**HAZARDOUS  
POLYMERIZATION** | Will not occur.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### ACUTE EFFECTS

**EYE EFFECTS** | This product causes eye burns.

**SKIN EFFECTS** | Can cause chemical burn.

**ACUTE ORAL  
EFFECTS  
(INGESTION)** | This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

**ACUTE INHALATION  
EFFECTS** | Irritating to nose, throat, and respiratory tract.

**TARGET ORGANS** | Respiratory System

### CHRONIC EFFECTS

**MUTAGENICITY** | No information available

**TERATOLOGY** | No data available for this product.

**REPRODUCTIVE and  
DEVELOPMENTAL  
TOXICITY** | No information available.

### CARCINOGENICITY

CHEMICAL NAME	DATA	AGENCY	LIST
None of the components of this product are listed on the OSHA Possible or Select Carcinogens Lists.			
None of the components of this product are listed on the ACGIH Carcinogens List.			
No limits established for this product by the International Agency for Research on Cancer (IARC).			
None of the components of this product are listed on the NTP Known or Suspected Carcinogens List.			


### LETHAL DOSE (LD50 & LC50) DATA

<b>LD50 ORAL</b>	LD50 Oral Rat : 720 mg/kg	(acute toxicity estimate)
<b>LD50 DERMAL</b>	No information available	

<b>LC50 INHALATION</b>	No information available
<b>MEDICAL CONDITIONS AGGRAVATED by EXPOSURE</b>	This product may aggravate an existing dermatitis.
<b>ROUTES of ENTRY</b>	Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation.

## SECTION 12: ECOLOGICAL INFORMATION

### UN GHS AQUATIC TOXICITY CLASSIFICATION INFORMATION

<b>AQUATIC TOXICITY CLASSIFICATION</b>	Acute 1
<b>SIGNAL WORD</b>	Warning
<b>HAZARD PICTOGRAM</b>	
<b>HAZARD STATEMENT</b>	Very toxic to aquatic life.
<b>PREVENTION</b>	Avoid release to the environment.
<b>RESPONSE</b>	Collect spillage.
<b>DISPOSAL</b>	Dispose of contents and container in accordance with local, national, and international regulations for hazardous wastes.

### ADDITIONAL ENVIRONMENTAL INFORMATION

<b>AQUATIC TOXICITY (fish)</b>	96 hr LC50 Rainbow Trout : 0.28 mg/L [static] NOEC Rainbow Trout : 0.22 mg/L [static]
<b>AQUATIC TOXICITY (crustacean)</b>	No information available
<b>AQUATIC TOXICITY (algae)</b>	No information available
<b>ECOTOXICITY INFORMATION</b>	None determined

<b>ENVIRONMENTAL FATE</b>	This product is Readily Biodegradable.
<b>BIOLOGICAL OXYGEN DEMAND (BOD5), g/g</b>	No data available
<b>CHEMICAL OXYGEN DEMAND (COD), g/g</b>	No data available
<b>PERSISTENCE &amp; DEGRADABILITY</b>	OECD 301D Ready Biodegradability -Closed Bottle Test: > 60% (28 days)
<b>BIOACCUMULATION</b>	No information available

## SECTION 13: DISPOSAL CONSIDERATIONS

<b>WASTE DESCRIPTION</b>	This material, if discarded, would exhibit the characteristic of corrosivity and has the D002 EPA Hazardous Waste Number.
<b>GENERAL DISPOSAL CONSIDERATIONS</b>	Waste must be handled in accordance with all federal, state, provincial, and local regulations.
<b>DISPOSAL of EMPTY CONTAINERS</b>	Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

RCRA COMPONENT	CASRN	DATA
No limits established for this product.		

## SECTION 14: TRANSPORT INFORMATION

	US DOT	IATA	IMDG
<b>UN NUMBER</b>	UN2735	UN2735	UN2735
<b>UN PROPER SHIPPING NAME</b>	Amines, liquid, corrosive, n.o.s.	Amines, liquid, corrosive, n.o.s.	Amines, liquid, corrosive, n.o.s.
<b>TECHNICAL NAME</b>	contains alkylamine salts	contains alkylamine salts	contains alkylamine salts
<b>TRANSPORT HAZARD CLASS(ES)</b>	8	8	8
<b>PACKING GROUP</b>	III	III	III

<b>REPORTABLE QUANTITY (RQ)</b>	No reportable quantity for this product
<b>EMERGENCY RESPONSE GUIDEBOOK (ERG) REFERENCE</b>	153
<b>MARINE POLLUTANT</b>	MARINE POLLUTANT

## SECTION 15: REGULATORY INFORMATION

<b>TOXIC SUBSTANCES CONTROL ACT (TSCA)</b>	This product is listed on the U.S. EPA TSCA Inventory.
<b>EXPORT NOTIFICATIONS</b>	This product is not subject to TSCA 12B Export Notification requirements.
<b>SIGNIFICANT NEW USE RULE (SNUR)</b>	This material is not subject to a Significant New Use Rule under the US Toxic Substances Control Act.

### INTERNATIONAL CHEMICAL INVENTORIES

All of the components of this product are listed on the following inventories:

<b>DSL</b>	Canada	Yes
<b>NDSL</b>	Canada	No
<b>ENCS</b>	Japan	Yes
<b>EINECS</b>	Europe	Yes
<b>ELINCS</b>	Europe	No
<b>IECSC</b>	China	Yes
<b>PICCS</b>	Philippines	Yes
<b>ECL</b>	Korea	Yes
<b>AICS</b>	Australia	Yes
<b>TCSI</b>	Taiwan	Yes

### **EMERGENCY PLANNING and COMMUNITY RIGHT TO KNOW ACT (EPCRA) 40 CFR PART 355, APPENDIX A**

<b>EHS COMPONENTS</b>	<b>CASRN</b>	<b>PERCENT</b>	<b>TPQ POUNDS and RQ</b>
No limits established for this product.			
<b>313 COMPONENTS</b>	<b>CASRN</b>	<b>PERCENT</b>	<b>REPORTING LIMIT</b>
No limits established for this product.			
<b>CERCLA/SARA COMPONENTS</b>	<b>CASRN</b>	<b>PERCENT</b>	<b>REPORTING LIMIT</b>

No limits established for this product.

<b>EPCRA SECTION 311/312 CLASSIFICATION</b>	<b>ACUTE</b>	Yes
	<b>CHRONIC</b>	Yes
	<b>FIRE</b>	No
	<b>PRESSURE</b>	No
	<b>REACTIVE</b>	No

**OTHER FEDERAL REGULATIONS**

The following components are identified under the Clean Air Act HON-Rule for SOCMIs chemicals:

<b>COMPONENT NAME</b>	<b>CASRN</b>
No regulated components	

The following components are identified under the Clean Air Act (VOCs in SOCMIs chemicals):

<b>COMPONENT NAME</b>	<b>CASRN</b>
No regulated components	

The following components are identified under the Clean Air Act as Hazardous Air Pollutants (HAP)

<b>COMPONENT NAME</b>	<b>CASRN</b>
No regulated components	

The following components are identified under the Clean Air Act HON-Rule Hazardous Air Pollutants (HAP)

<b>COMPONENT NAME</b>	<b>CASRN</b>
No regulated components	

The following components are identified under the Clean Water Act:

<b>COMPONENT NAME</b>	<b>CASRN</b>	<b>LIST NAME</b>
No limits established for this product.		

**STATE RIGHT-TO-KNOW INFORMATION:**

<b>COMPONENT NAME</b>	<b>CASRN</b>	<b>STATE</b>	<b>List Name</b>
2-Ethylhexanoic acid	149-57-5	New Jersey	Right-to-Know List

If the STATE RIGHT-TO-KNOW INFORMATION table above is empty than none of the components of this product are included on the state right-to-know regulatory lists for Florida, Massachusetts, Michigan, Pennsylvania, or New Jersey.

**CALIFORNIA SAFE WATER and TOXIC ENFORCEMENT ACT of 1986 (Proposition 65)**

COMPONENT NAME	CASRN	CONCENTRATION <sup>‡</sup>	LIST DATA
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This product contains no components which are listed on California's Proposition 65 lists.

<sup>‡</sup> CONCENTRATIONS EXPRESSED IN % UNLESS UNITS ARE SPECIFIED

**SECTION 16: OTHER INFORMATION**

To the best of the manufacturer's knowledge, the information contained herein is accurate. However, neither the manufacturer, nor any of its affiliates, make any representations or warranties (expressed or implied), nor assumes any liability (including liability for any direct, incidental, consequential, or other damages) with respect to the accuracy or completeness of the information contained herein. Such information may be (without limitation) invalid if the specified material is used in combination with another, in a particular process, or under unusual conditions. Determination of suitability of any material for any given purpose is the sole responsibility of the user who assumes all risk and responsibility therefore. All materials may present unknown hazards and should be used with appropriate caution. The manufacturer cannot and does not guarantee that the hazards described herein are the only ones that exist.

<b>SDS GENERATED BY</b>	PSIMCOX
<b>SDS VERSION DATE</b>	3/30/2016 4:02:00 PM
<b>SDS APPROVED BY</b>	Patrick B. Simcox Manager – Health, Safety, & Environmental e-mail: psimcox@ksallc.com

<b>MANUFACTURER(S)</b>	Quimikao, S.A. de C.V. KM22.5 Carr. Guadalajara-El Salto El Salto, Jalisco Mexico 45680 52-3-6880422
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**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS**

<b>HEALTH</b>	3
<b>FLAMMABILITY</b>	1
<b>REACTIVITY</b>	0

**Hazardous Material Identification System (HMIS) Hazard Ratings**

<b>HEALTH</b>	3
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<b>FLAMMABILITY</b>	1
<b>REACTIVITY</b>	0
<b>PERSONAL PROTECTION</b>	H

The following components of this product are listed on the Canadian WHMIS Ingredient Disclosure List (IDL):

<b>COMPONENT</b>	<b>CASRN</b>	<b>PERCENT</b>	<b>MINIMUM CONCENTRATION</b>
2-Ethylhexoic acid	149-57-5	20 - 30	1 %

**END OF DOCUMENT**