

Material Safety Data Sheet NAPHTHA L

Section 1 - Product Identification

Synonyms : Naphtha, Light Straight Run Naphtha, Heavy Straight Run Naphtha, Isomate, Reformate, Gasoline Blend Stock, Pretreated Naphtha, EAC-100

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Recommended use of the chemical and restrictions on use:

Product is a complex mixture of petroleum hydrocarbons that contain hydrocarbons in the C4- C10 range. This product is used as a feedstock or blend stock for production of gasoline.

Section 2 – Composition/Information on Ingredients

This product is a complex blend of hydrocarbons derived from various refinery streams. It contains primarily paraffinic, olefinic, naphthenic, and aromatic hydrocarbons. This product may also contain up to 4.9% benzene.

Name	CAS NUMBER	CONCENTRATION %
PETROLEUM DISTILLATES (NAPHTHA)		100%
TOLUENE	108-88-3	0-16%
BENZENE	71-43-2	0-4.9%
CYCLOHEXANE	110-82-7	0-7%
ETHYLBENZENE	100-41-4	0-4.5%
NAPHTHALENE	91-20-3	0-1%
N-HEXANE	110-54-3	0-16%
1,2,4- TRIMETHYLBENZENE	95-63-6	0-5%
XYLENES	1330-20-7	0-21%
CUMENE	98-82-8	0-0.5%

Section 3 – Hazards Identification

3.1 Classification of the substance according to GHS

FLAMMABLE LIQUIDS - Category 2

ACUTE TOXICITY: INHALATION - Category 4




SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

BSPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3A

SPIRATION HAZARD - Category 1

3.2. GHS Label elements, including precautionary statements

 <p>Warning May be fatal if swallowed and enters airways.</p>	 <p>Warning H319: Causes serious eye irritation. H302: Harmful if swallowed. H335: May cause respiratory irritation.</p>	 <p>H225: Flammable liquid and vapor.</p>
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Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.

Response

IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage

Store locked up. Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 4 – First-Aid Measures

4.1. Description of first aid measures

Skin contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that gas or vapor is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit

does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Note to physicians

Treat symptomatically.

4.2. Most important symptoms and effects, both acute and delayed

N.A.

4.3. Indication of any immediate medical attention and special treatment needed

N.A.

Section 5 – Fire Fighting Measures

5.1. Suitable Extinguishing media

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

5.2. Specific hazards arising from the chemical

Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

5.3. Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Section 6 – Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

6.2. Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Land spill)

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor

Section 7 – Handling and Storage

7.1. Precautions for safe Handling

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Non equilibrium conditions may increase the fire hazard associated with this product. Always bond receiving containers to the fill pipe before and during loading. Always confirm that receiving container is properly grounded. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards. Carefully review operations that

may increase the risks such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. In addition to bonding and grounding, efforts to mitigate the hazards may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Always keep nozzle in contact with the container throughout the loading process. Do NOT fill any portable container in or on a vehicle.

7.2. Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.. No specific requirements. Provide appropriate ventilation and store bags such as to prevent any accidental damage.

Section 8 – Exposure Controls/Personal Protection

8.1. Control parameters

Ingredient name	Exposure limits
C9-C15 Cycloalkanes C7-C8 Alkanes	ACGIH TLV (United States). TWA: 400 ppm 8 hours. Form: Methylcyclohexane ACGIH TLV (United States). TWA: 1500 mg/m ³
Special Naphtholite 66/3	ACGIH TLV (United States) 247 ppm (1200 mg/m ³) 8 hour(s) Notes: The TLV for the hydrocarbon solvent is based on the procedure described in Appendix H ("Reciprocal Calculations Method for Certain Refined Hydrocarbon Solvent Vapors") of the ACGIH TLVs® and BEIs® guidelines. The GGVMixture (ACGIH TLV) is based on Column B (McKee et al., 2005) of Table 1 ("Group Guidance Values") of Appendix H.

8.2. Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Respiratory protection

Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eyes and hands protection

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. chemical splash goggles. If inhalation hazards exist, a full-face respirator may be required instead. Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.

Section 9 – Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance : Liquid

Odour : Characteristic hydrocarbon solvent odor

Odour threshold : N.A.

pH @ 20°C : N.A.

Boiling point : 129 to 144°C

Flash point : Closed cup: 20.5°C (68.9°F) [Tagliabue.]

Evaporation rate : 1

Flammability : N.A.

Upper/lower flammability or explosive limits : Lower: 0.9% Upper: 6.7%

Vapour pressure : 1.5 kPa

Vapour density : 4

Relative density : 0.76

Solubility in water : Slightly soluble

Partition coefficient: n-octanol/water : N.A

Auto-ignition temperature : Kinematic (room temperature): <0.01 cm²/s (<1 cSt)

Viscosity : N.A.

Section 10 – Stability and Reactivity

10.1. Reactivity

Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

10.2. Chemical stability

Product is stable.

10.3. Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid:

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

10.5. Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 – Toxicological Information

11.1. Information on toxicological effect

11.1.1. Substances

Acute toxicity⁽²⁾

C9-C15 Alkanes: In animal studies utilizing mineral spirits containing up to 22% aromatics indicated that the acute central nervous system effects are reversible. Based on existing animal studies, the potential for persistent effects is not clear.

Skin corrosion / irritation

Primary dermal irritation studies (four hour exposure) in rabbits utilizing mineral spirits containing less than 2% aromatics resulted in slight to moderate skin irritation. In humans, mineral spirits have produced slight to moderate skin irritation particularly with evaporation from the skin is prevented.

Serious eye damage/ irritation

Animal studies have demonstrated that mineral spirits produced mild respiratory tract irritation at elevated concentrations. Also, sensory respiratory tract irritation was evident by reduced breathing rates in the test animals in certain studies.

Respiratory or skin sensitization

In animal studies utilizing mineral spirits containing up to 18%, aromatics skin sensitization is not evident.

Germcell mutagenicity

In vivo and in vitro studies on mineral spirits containing up to 22 %aromatics indicate that these products are not genotoxic.

Carcinogenicity

The National Toxicology Program (NTP) conducted two-year carcinogenicity studies in rats and mice with Stoddard Solvent IIC (less than 2% aromatics). The studies indicated that there was some evidence of carcinogenic activity in male rats (adrenal medulla neoplasms and renal tubule adenoma) but no evidence of carcinogenic activity in female rats. Further, there was equivocal evidence of carcinogenic activity in female mice (hepatocellular adenoma) but no evidence of carcinogenic activity in male mice. A low carcinogenic potential is suggested by a lack of genotoxic potential identified in in vivo and in vitro genetic toxicity tests (with and without metabolic activation).

Reproductive toxicity

There were no treatment-related effects on pregnancy rate, mortality or gross post mortem observations in animal studies utilizing mineral spirits containing less than 2% aromatics.

STOT-single exposure

N.A.

STOT-repeated exposure

N.A.

Aspiration Hazard

N.A.

Section 12 – Ecological Information

12.1.Toxicity

Phytotoxicity

N.A.

Algal toxicity⁽⁹⁾

N.A.

Invertebrate toxicity⁽¹⁰⁾

N.A.

Fish toxicity⁽¹¹⁾

N.A.

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Other adverse effects

N.A.

Section 13 – Disposal Considerations

13.1. Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14 – Transport Information

DOT Classification

14.1. UN number : UN1268

14.2. UN proper shipping name : UN1268, Petroleum Distillates, n. o.s. (Naphtha Solvent), 3, PG II

14.3. Transport of hazard classes : 3

14.4. Packing group : II

14.5. Environmental hazards : NO

14.6. Special precautions for user : N.A

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: N.A.

Section 15 – Regulatory Information

15.1. Safety, health and environmental regulations

U.S. Federal regulations : TSCA 12(b) one-time export: Nonane, all isomers

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: Toluene; Ethylbenzene; Benzene; Naphthalene

Clean Water Act (CWA) 311: Xylene; Toluene; Ethylbenzene; Benzene; Naphthalene

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

SARA 302/304

Composition/information on ingredients

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
 Immediate (acute) health hazard
 Delayed (chronic) health hazard

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
C9-C15 Alkanes	Yes.	No.	No.	Yes.	No.
C9-C15 Cycloalkanes	Yes.	No.	No.	Yes.	No.
C7-C8 Cycloalkanes	Yes.	No.	No.	Yes.	No.
C7-C8 Alkanes	Yes.	No.	No.	Yes.	No.

State regulations

Massachusetts : The following components are listed: NONANE

New York : None of the components are listed.

New Jersey : The following components are listed: NONANE

Pennsylvania : The following components are listed: NONANE

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Section 16 : Additional Information

16.1. Mainly changes made to the previous version of this Material Safety Data Sheet (MSDS):

- This MSDS complies with ISO 11014; the requirements of UN-GHS

Revision No	Revision content
05	<ul style="list-style-type: none"> • This SDS is updated in accordance with the GHS (Rev.6) (2015)-Guidance on the Compilation of Safety data Sheets. • This SDS is updated in line with Eti Maden Corporate identity.

16.2. List of abbreviation and acronyms used in this MSDS

SDS : Safety Data Sheets

Index N° : atomic number of the element most characteristic of the properties of the substance

CAS No : Chemical Abstracts Service number

EC No : EINECS Number : European Inventory of Existing Commercial Substances

Repr. Cat. 2 : Substance presumed human reproductive toxicant

Acute Oral Cat. 5 : Substance which is of relatively low acute oral toxicity.

GHS : Globally Harmonised System of Classification and Labelling

LD₅₀ : Median Lethal Dose

LC₅₀ : Lethal Concentration, 50%

N.A. : Not Applicable

OSHA : Occupational Safety & Health Administration

Cal OSHA : The State of California Division of Occupational Safety and Health (DOSH)

PEL : Permissible Exposure Limits

ACGIH : American Conference of Governmental Industrial Hygienists

TLV : Threshold Limit Value

Japanese MITI : Japanese Ministry of International Trade and Industry

EC₅₀ : Half maximal effective concentration

UN : United Nations

U.S. EPA TSCA Inventory: Inventory of the chemical substances manufactured or processed in the United States according to Toxic Substances Control Act compiled and published under the authority of the Environmental Protection Agency

Canadian DSL: Canadian Domestic Substances List

16.3 Disclaimer of Liability

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