GOODWAY REFINING, LLC
Safety Data Sheet

*** 1. Product and Company Identification ***

Material Name: Distillate Blend Stock ECA marine Fuel

Synonyms: Distillate Blend Stock, Marine Fuel, Distillate Feedstock, Fuel Oil

Recommended Use: Fuel oil blend stocks, Marine diesel oil, Fuel oil diluent, and Process feed stocks.

Supplier:
Goodway Refining, LLC
4745 Ross Rd.
Atmore, AL 36502
251-294-5660

Emergency Telephone #: CHEMTREC 800-424-9300
Goodway Refining, LLC 251-294-5660

*** 2. Hazards Identification ***

GHS Classification:

Flammable Liquids – Category 3
Skin Corrosion/Irritation – Category 2
Germ Cell Mutagenicity – Category 2
Serious Eye Damage/Eye Irritation – Category 2A
Carcinogenicity – Category 1B; IARC, NTP, and OSHA list as possible human Carcinogen (Group 2B)
Aquatic Toxicity Acute Hazard– Category 2
Specific Target Organ Toxicity (Single Exposure) – Category 3 (Respiratory Irritation, narcosis)

GHS Label Elements
Symbol(s):

Signal Word(s): Danger

Hazard Statements:
Flammable Liquid and Vapor:
Causes skin irritation:
Causes eye irritation:
Inhalation Hazard: Aspiration hazard if inhaled. Can enter lungs when vapor is emitted causing lung damage, respiratory irritation?
Ingestion Hazard: Low to moderate degree toxicity if swallowed

Chronic: Repeated and prolonged occupational over exposure can cause permanent brain and nervous system damage.
Carcinogenicity: NTP Group 2B, IARC Monographs Group 2B, OSHA Regulated Group 2B.

Precautionary Statements

Prevention: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, sparks, open flames and hot surfaces.
No smoking.
Keep containers tightly closed.
Ground/bond container and receiving equipment,
Use explosion proof electrical, ventilating and lighting equipment.
Use only non- sparking tools.
Take precautionary measures against static discharge.
Do not breathe mist, vapors or spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well ventilated area.
Wear protective gloves, protective clothing and proper eye protection.
Wear respiratory protection.
Keep away from open flames and heat sources.
Avoid release to environment.

Response: If swallowed immediately call poison control center or doctor. Seek medical attention.
Do not induce vomiting.
If on skin or hair take off all contaminated clothing, wash skin with water/shower.
If skin irritation occurs seek medical attention.
Wash hand and skin thoroughly after handling.
If inhaled remove person to fresh air and keep comfortable and call poison control center or doctor. Seek medical attention.
Wash contaminated clothing before reuse.
In case of fire use dry chemical, CO2, water spray or foam to extinguish.

Storage: Use and storage conditions should be suitable for an OSHA Class III A combustible liquid.
Store in a well ventilated area away from heat and ignition sources.
Keep container tightly closed.
Keep cool.
Protect containers from physical damage.
Do not store next to oxidizers.
No smoking in storage areas.

Disposal: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Other Hazards: No applicable information was found.

This material is considered hazardous by OSHA hazard communication standard 29CFR 1910.1200

Product may contain small amounts of dye and other additives (<0.15%) which are not considered hazardous at the concentrations used.

*** 3. Composition/Information on Ingredients

Mixture Description:

CAS #	Chemical Identity/ Component	Concentration %
8008-20-6	Goodway Refining, LLC Distillate Blend Stock / Kerosene (petroleum)	99.96 – 99.99%
91-20-3	Naphthalene	0.01 – 0.04%

A complex distillation of petroleum hydrocarbons produced from high temperature fractionation of petroleum crude oil.
The amount of sulfur varies with product specification and does not affect the health and safety of this safety data sheet.

*** 4. First Aid Measures ***

General Information:

Inhalation: Remove person to fresh air. If person is not breathing provide artificial respiration (AR) or if heart has stopped Cardiopulmonary resuscitation (CPR). Seek medical attention immediately.

Acute and delayed symptoms and effects:
May cause drowsiness or dizziness. May cause respiratory irritation signs/symptoms may include cough, nasal discharge, headache, hoarseness, and throat and nose pain.
Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or consciousness.

Skin Contact: IF on skin (or hair) immediately remove all contaminated clothing, wash skin (Hair) with Soap and water or waterless hand cleaner. Wash contaminated clothing before reuse. If skin irritation occurs seek medical attention.

Acute and delayed symptoms and effects:
Causes skin irritation, signs and symptoms may include localized redness, swelling and itching.

Eye Contact: If in eyes rinse cautiously with water for at least 15 minutes. Remove contacts lenses if present and easy to do so. Continue rinsing the eyes for another 15 minutes. If eye irritation persists seek medical attention immediately.

Acute and delayed symptoms and effects:
Causes eye irritation, signs and symptoms may include redness, swelling, pain, tearing and blurred or hazy vision.

Ingestion: If swallowed do not induce vomiting. Immediately call poison control center or medical doctor. If Vomiting occurs naturally have the victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person. If breathing or heart stops trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR).

Acute and delayed symptoms and effects:
May be fatal if swallowed and enters airways. May cause gastrointestinal irritation, signs/ Symptoms may include abdominal pain, upset stomach, nausea, vomiting and diarrhea.

Note to Physicians: Symptoms may not appear immediately.

*** 5. Fire Fighting Measures ***

General Fire Hazards: This product has been determined to be a Flammable liquid per OSHA hazard communication standard and should be handled accordingly. Vapors may form explosives mixtures with air. Vapors may travel to sources of ignition and flash back. Vapors are heavier than air and will collect in low lying areas or confined spaces. Run off to sewer or drains may create a fire or explosion hazard, containers may explode when heated. This hydrocarbon material will float on water.

Hazardous Combustion Products: This product when burned or combusted will emit carbon monoxide, carbon dioxide. Material may have trace amounts of H2S (Hydrogen Sulfide) and could produce SO2 when burned.

Suitable Extinguishing Media:

Small Fire: (dry chemical, carbon dioxide, water spray, foam and class B fire extinguisher).

Large Fires: Water Spray, firefighting foam, fog or any approved extinguishing agent for class B fires. Water spray can be used to cool fire exposed containers but may be ineffective in fighting the actual fire.

Unsuitable Extinguishing Media: None

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Fire Fighting Equipment/Instructions: Consider initial downwind evacuation for at least 300 Meters (1000 feet). Fire fighters should use NIOSH approved SCBA and full protective equipment when fighting fire. Use water spray to cool nearby fire exposed containers or tank shells. If tank, rail car or truck tank is involved in a fire, isolate for 800 meters (1/2 mile) in all directions. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Large storage tank fires may require withdrawal, allowing the tank to burn. Withdraw immediately in case of rising sound from venting or discoloration of tanks.

*** 6. Accidental Release Measures ***

Recovery and Neutralization: Carefully contain and stop the source of the spill, if safe to do so. Prevent spreading of material into sewers. Avoid allowing water run off contact spilled material.

Materials and Methods for Cleanup: Absorb or cover with dry earth, sand or other appropriate non combustible absorbent material and transfer into containers. Use clean non sparking tools to collect absorbed material.

Emergency Methods: As an immediate precautionary measure isolate spill or leak area for at least 50 meters (150ft) in all directions. Consider initial downwind evacuation for at least 300 Meters (1000 feet). Keep unauthorized personnel away from spill area. Ventilate close spaces before entering. Eliminate all ignition sources, no smoking, Sparks, electrical equipment or flames in Immediate area. All equipment used when handling product must be grounded/bonded.

Personal Protections and
Protective Equipment: Response and cleanup crews must be properly trained and utilize proper protective equipment. Do not walk through spilled material. Use personal protection recommended in section 8. Stay upwind of release. Emergency eye capability should be available. Wear respiratory protection as conditions warrant.

Environmental Precautions: Protect waterways by diking, absorbent boom, or other absorbents if possible. Protect from sewage drains and drainage systems unless the drainage system is designed to handle such material. Some firefighting foams may be useful in certain situations to reduce vapors.

*** 7. Handling and Storage ***

Handling Procedures: Do not handle material until all safety precautions have been read and understood. Keep away from heat, sparks, open flame and hot surfaces. Keep containers tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Wash thoroughly after handling. Do not breath mist, vapors or spray. Do not eat, drink or smoke while using this product. Use only outdoors or in a well ventilated area. See section 8 for information on personal protection equipment (PPE).

Storage Procedures: Store in a cool, dry, well ventilated area. Use approved containers that are tightly closed and labeled. Storage area should comply with NFPA 30 "Flammable & Combustible liquid Code". Do not store with incompatible materials such as oxidizers. Protect storage containers from physical damage, sunlight and all sources of ignition. Post areas as NO SMOKING.

Incompatibles: Keep away from oxidizers.

Other Advice:

*** 8. Exposure Controls/Personal Protection ***

Component Exposure Limits:

Material	Source	Type	Ppm	mg/m3	Notation
Hydrogen Sulfide	ACGIH	TWA	1ppm		
	ACGIH	STEL	5ppm		
Naphthalene	ACGIH	TWA	10 ppm		
		STEL	15 ppm		
	OSHA	TWA	10 ppm	50mg/m3	
	Niosh	TWA	10 ppm	50mg/m3	
		STEL	15 ppm	75 mg/m3	

Engineering Measures/Controls: Use ventilation adequate to keep exposure (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits. Use explosion proof electrical, ventilating and lighting equipment.

Personal Protective Equipment: Personal Protective Equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory Protection: If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits, a NIOSH approved air purifying respirator with

organic vapor cartridge or self-contained breathing apparatus (SCBA) must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air purifying respirators.

Hand/Skin Protection: Wear chemical protective clothing and flame resistant clothing that meets the NFPA 2112 standard is recommended in areas where material is stored and handled. Wear protective (nitrile, neoprene, or PVC) gloves. Consult glove manufacture specifications for further information.

Eye Protection: Wear safety glasses, goggles or face shield to prevent eye and face contact. Ensure that eyewash stations are close to workstation location. Use equipment for eye protection that meets standards referenced by OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

*** 9. Physical and Chemical Properties ***

Appearance: Clear to light yellow color
Odor: Petroleum Hydrocarbon, Diesel fuel odor (Characteristic)
Odor threshold: ND
Physical State: Liquid
PH: ND
Vapor Pressure (mm HG): 1
Vapor Density (air =1): 4-5
Initial Boiling Point: 148.8° C (300° F)
Boiling Range: 148.8° to 287.78° C (300° to 550° F)
Flash Point (and method) : >60.0° C (140° F) D-93 PMCC
Water Solubility: Insoluble, negligible
Flammability: NA
Upper/Lower Flammability Limits: Lower: 0.6 Upper: 7.5
Auto Ignition Temp: >228.85° C (443.9° F)
Percent Volatile: ND
Evaporation Rate (Butyl Acetate = 1): .212
Relative Density: .8017 to .82
Melting point/Freezing point: ND
Decomposition Temperature: ND
Viscosity: 1.0 To 2.1 @ 50°C
Partition Coefficient: n-octonal/H2O: ND

*** 10. Stability and Reactivity ***

Chemical Stability: This material is stable.

Hazardous Reaction Potential: Hazardous polymerization cannot occur.

Conditions to Avoid: Avoid storing with oxidizers; avoid open flames, heat sources sparks, and welding and other ignition sources.

Incompatible Materials: Keep away from strong Oxidizers.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, sulfur oxides and various low molecular weight hydrocarbons and hydrocarbon derivatives.

*** 11. Toxicological Information ***

Basis for Assessment: Information given is based on product data, knowledge of the components and the toxicology of similar products.

Likely Routes of Exposure: Inhalation, skin contact, and eye contact are the primary routes of exposure, although accidental ingestion is possible.

Acute Oral Toxicity: Rat oral, LD50: 9g/kg produces gastrointestinal effects. Ingestion of this product may also cause effects similar to inhalation of the product. Aspiration may result in chemical pneumonia, respiratory failure, lung damage and even death.

Acute Dermal Toxicity: May cause skin irritation with prolonged or repeated contact. May cause dermal sensitization.

Acute Inhalation Toxicity: This product presents little inhalation at ambient temperatures because of its low vapor pressure. Fumes may evolve during heating or fire. Inhalation of fumes, vapor or mist may result in respiratory tract irritation and central nervous system. Effects may include loss of coordination, dizziness, headache, unconsciousness, suffocation and death.

Skin Corrosion/Irritation: Causes skin irritation
Serious Eye Damage/Irritation: Can cause eye irritation.
Respiratory Irritation: Inhalation of vapors or mist causes irritation to the respiratory system.
Respiratory or Skin Sensitization: Not expected to be a sensitizer.
Aspiration Hazard: Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.
Germ Cell Mutagenicity: Not expected to be mutagenic.
Carcinogenicity: Causes cancer in laboratory animals.

Material	**Carcinogenicity Classification**
Fuels, Diesel	ACGIH Group A3: Confirmed animal carcinogen with unknown relevance to humans.
Fuels, Diesel	GHS/CLP Carcinogenicity Category 2
Kerosene	ACGIH Group A3: Confirmed animal carcinogen with unknown relevance to humans.
Kerosene	IARC 3: Not classified as to carcinogenicity to humans
Kerosene	GHS/CLP: No Carcinogenicity classification
Naphthalene	ACGIH Group A4: Not classified as a human carcinogen.
Naphthalene	NTP: Reasonably anticipated to be a human carcinogen.
Naphthalene	IARC 2B: Possibly carcinogenic to humans
Naphthalene	GHS / CLP: Carcinogenicity category 2

Reproductive and Development Toxicity: This product is not reported to have any reproductive toxicity effects and does not meet the criteria for classification in categories 1A/1B.
Specific Target Organ Toxicity Single Exposure: This product is not reported to have any specific target organ general toxicity single exposure effects.

Specific Target Organ Toxicity Repeated Exposure: This product is not reported to have any specific target organ general toxicity repeat exposure effects.

*** 12. Ecological Information ***

Basis for Assessment:	Fuels are typically made from blending several refinery streams. Eco toxicological studies have been carried out on a variety of Hydrocarbon blends and streams but not those containing additives. Information given is based on a knowledge of the components and The ecotoxicology of similar products.
Acute Toxicity:	Toxic to aquatic organisms.
Mobility:	May partition into air, soil and water.
Persistence/Degradability:	Not readily biodegradable.
Bioaccumulation:	May bio accumulates in aquatic organisms.
Other Adverse Effects:	Films formed on water may affect oxygen transfer and organisms.

*** 13. Disposal Considerations ***

Material Disposal:
Container Disposal:
Local Legislation: Disposal should be in accordance with applicable regional national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be in compliance. Recover and recycle if possible.

*** 14. Transport Information ***

DOT Information

Shipping Name: Flammable liquid, n.o.s. (Fuel Oil)
NA #: 1993
Hazard Class: 3
Packing Group: III
Placard:

*** 15. Regulatory Information ***

Component Analysis

UA TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

OSHA Hazard Communication Standard This product has been evaluated and determined to be hazardous as defined in OSHA's Hazard Communication Standard.

EPA Superfund Amendment & Reauthorization Act (SARA):

This material contains one of more of the following chemicals required to be identified under SARA Section 302, SARA Section 304, SARA Section 313, SARA Section 311/312, and/or CERCLA.

SARA Section 302 This product contains the following component(s) that have been listed on EPA's Extremely Hazardous Substance (EHS) List:

Name	SARA Section 302 EHS and TPQs
Saturated Hydrocarbons	NA
Aromatic Hydrocarbons	NA
Unsaturated Hydrocarbons	NA
Naphthalene	NA
Hydrogen Sulfide	=500 Ib TPQ

SARA Section 304 This product contains the following component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

Name	SARA Section 302 EHS and TPQs
Saturated Hydrocarbons	NA
Aromatic Hydrocarbons	NA
Unsaturated Hydrocarbons	NA
Diesel Oil	NA
Naphthalene	=100 Ib Final RQ =45.4 kg Final RQ
Hydrogen Sulfide	=100 Ib Final RQ =45.4 kg Final RQ

SARA Section 313 This product contains the following component(s) that may be subject to reporting on the Toxic Release Inventory (TRI) Form R:

Name	SARA Section 302 EHS and TPQs
Saturated Hydrocarbons	None
Aromatic Hydrocarbons	None
Unsaturated Hydrocarbons	None
Naphthalene	=0.1 % de minimis concentration
Hydrogen Sulfide	None

SARA Section 311/312 The following EPA hazard categories apply to this product:

Acute Health Hazard
Chronic Health Hazard
Fire Hazard
Extremely Hazardous

*** 16. Other Information ***

NFPA Hazard Rating:

Health: 1
Fire: 2
Reactivity: 0

HMIS Hazard Rating:

Health: 1 Slight
Fire: 2 Moderate
Physical: 0 Minimal
*Chronic
PPE: D Gloves, Apron, Full face Shield

Additional Information:

This document contains important information to ensure the safe storage, handling, and use of this product. The information in this document should be brought to the attention of the person in your organization responsible for advising on safety matters.

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures

are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of this material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.