



Material Safety Data Sheet

Diesel Recovery Emergency Fuel Treatment

Section 1. Product and company identification

Product name

Diesel Recovery Emergency Fuel Treatment

Material uses

Fuel additive.

Supplier/Manufacturer

AMSOIL INC.
925 Tower Avenue
Superior, WI 54880

Code

DRC

MSDS authored by

AMSOIL INC.

In case of emergency

CHEMTREC: (800) 424-9300

Section 2. Hazards identification

Emergency overview

- Color** : Amber. [Light]
- Physical state** : Liquid. [Fluid.]
- Odor** : Mild hydrocarbon.
- Signal word** : WARNING!
- Hazard statements** : COMBUSTIBLE LIQUID AND VAPOR. CAUSES EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. SUSPECT CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER.
- Precautions** : Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
- OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin** : Irritating to skin.
- Eyes** : Irritating to eyes.

Potential chronic health effects

- Chronic effects** : Contains material that may cause target organ damage, based on animal data.
- Carcinogenicity** : Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.
- Target organs** : Contains material which may cause damage to the following organs: kidneys, upper respiratory tract, skin, eyes, central nervous system (CNS).

Over-exposure signs/symptoms

Inhalation	: No specific data.
Ingestion	: No specific data.
Skin	: Adverse symptoms may include the following: irritation redness
Eyes	: Adverse symptoms may include the following: pain or irritation watering redness
Medical conditions aggravated by over-exposure	: Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
See toxicological information (section 11)	

Section 3. Composition/information on ingredients

United States

Name	CAS number	%
Stoddart solvent	8052-41-3	60 - 100
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	10 - 30
Naphthalene	91-20-3	0.1 - 1

Canada

Name	CAS number	%
Stoddart solvent	8052-41-3	60 - 100
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	10 - 30
1,2,3,5-tetramethylbenzene	527-53-7	1 - 5
Naphthalene	91-20-3	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First aid measures

Eye contact	: Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
Skin contact	: After contact with skin, wash immediately with plenty of soap and water. Get medical attention if symptoms occur.
Inhalation	: Move exposed person to fresh air. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5. Fire-fighting measures

Flammability of the product	: Combustible liquid.
Extinguishing media	
Suitable	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Not suitable	: Do not use water jet.
Special exposure hazards	: Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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- Hazardous decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions** : Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Put on appropriate personal protective equipment (see section 8).
- 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).
- Methods for cleaning up**
- Small spill** : Absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
- Large spill** : Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

- Handling** : Put on appropriate personal protective equipment. Avoid contact with used product. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Keep away from heat, sparks and flame. Do not reuse container.
- Storage** : 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 and food and drink. 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.

Section 8. Exposure controls/personal protection

United States

Ingredient	Exposure limits
Stoddart solvent	<p>ACGIH TLV (United States, 1/2009). TWA: 525 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).</p> <p>NIOSH REL (United States, 6/2009). CEIL: 1800 mg/m³ 15 minute(s). TWA: 350 mg/m³ 10 hour(s).</p> <p>OSHA PEL (United States, 11/2006). TWA: 2900 mg/m³ 8 hour(s). TWA: 500 ppm 8 hour(s).</p>
Naphthalene	<p>ACGIH TLV (United States, 1/2009). STEL: 79 mg/m³ 15 minute(s). STEL: 15 ppm 15 minute(s). TWA: 52 mg/m³ 8 hour(s). TWA: 10 ppm 8 hour(s).</p> <p>NIOSH REL (United States, 6/2009). STEL: 75 mg/m³ 15 minute(s). STEL: 15 ppm 15 minute(s). TWA: 50 mg/m³ 10 hour(s). TWA: 10 ppm 10 hour(s).</p> <p>OSHA PEL (United States, 11/2006). TWA: 50 mg/m³ 8 hour(s). TWA: 10 ppm 8 hour(s).</p>

Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	Notations
Stoddart solvent	US ACGIH 1/2009	100	525	-	-	-	-	-	-	-	
	AB 4/2009	100	572	-	-	-	-	-	-	-	
	BC 10/2009	-	290	-	-	580	-	-	-	-	
	ON 8/2008	-	525	-	-	-	-	-	-	-	
	QC 6/2008	100	525	-	-	-	-	-	-	-	
Naphthalene	US ACGIH 1/2009	10	52	-	15	79	-	-	-	-	
	AB 4/2009	10	52	-	15	79	-	-	-	-	[1]
	BC 10/2009	10	-	-	15	-	-	-	-	-	[1]
	ON 8/2008	10	52	-	15	78	-	-	-	-	
	QC 6/2008	10	52	-	15	79	-	-	-	-	

[1]Absorbed through skin.

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : 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. Use explosion-proof ventilation equipment.

Hygiene measures : Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Respiratory : 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. Not required under normal conditions of use. Recommended: Wear an appropriate NIOSH approved respirator if concentration levels exceed the safe exposure limits.

Hands : Use gloves appropriate for work or task being performed. Not required under normal conditions of use. Recommended: Natural rubber (latex).

- Eyes** : Safety eyewear should be used when there is a likelihood of exposure. Not required under normal conditions of use. Recommended: Safety glasses with side shields.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. No special protective clothing is required. Recommended: Coveralls.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Section 9. Physical and chemical properties

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|-------------------------|---|----------------------------------|---------------------|
| Physical state | : Liquid. [Fluid.] | Odor | : Mild hydrocarbon. |
| Color | : Amber. [Light] | pH | : Not available. |
| Flash point | : Closed cup: 42°C (107.6°F) [Tagliabue.] | Auto-ignition temperature | : Not available. |
| Flammable limits | : Not available. | Melting point/ Pour point | : Not available. |
| Boiling point | : Not available. | Vapor pressure | : Not available. |
| Relative density | : 0.786 | Vapor density | : Not available. |
| Volatility | : Not available. | Evaporation rate | : Not available. |
| Viscosity | : Not available. | Solubility | : Not available. |

Section 10. Stability and reactivity

- Chemical stability** : The product is stable.
- 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. Avoid exposure - obtain special instructions before use.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Solvent naphtha (petroleum), heavy aromatic	LC50 Inhalation Vapor	Rat	>590 mg/m3	4 hours
1,2,3,5-tetramethylbenzene	LD50 Oral	Rat	5157 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Dermal	Rat	>2500 mg/kg	-
	LD50 Oral	Rat	490 mg/kg	-

Chronic toxicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Naphthalene	A4	2B	-	None.	Possible	-

Section 12. Ecological information

Environmental effects : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aquatic ecotoxicity

Product/ingredient name	Result	Species
Naphthalene	Acute EC50 1600 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours 48 hours
	Acute LC50 2350 ug/L Marine water	Crustaceans - Palaemonetes pugio 48 hours
	Acute LC50 213 ug/L Fresh water	Fish - Melanotaenia fluviatilis - LARVAE - 1 days 96 hours
	Chronic NOEC 600 ug/L Fresh water	Daphnia - Daphnia magna - <=24 hours 48 hours





Section 13. Disposal considerations



Waste disposal : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1268	PETROLEUM DISTILLATES, N.O.S. (Stoddart solvent, Solvent naphtha (petroleum), heavy aromatic)	3	III		-
TDG Classification	UN1268	PETROLEUM DISTILLATES, N.O.S. (Stoddart solvent, Solvent naphtha (petroleum), heavy aromatic)	3	III		-
IMDG Class	UN1268	PETROLEUM DISTILLATES, N.O.S. (Stoddart solvent, Solvent naphtha (petroleum), heavy aromatic). Marine pollutant (Stoddart solvent, 1,2,3,5-tetramethylbenzene)	3	III	 	-

IATA-DGR Class	UN1268	PETROLEUM DISTILLATES, N.O.S. (Stoddart solvent, Solvent naphtha (petroleum), heavy aromatic)	3	III	 	-
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PG* : Packing group

Exemption to the above classification may apply.

AERG : 128

Section 15. Regulatory information

United States

HCS Classification : Combustible liquid
Irritating material
Carcinogen
Target organ effects

U.S. Federal regulations : **TSCA 4(a) final test rules:** Naphthalene
TSCA 8(a) PAIR: Naphthalene
United States inventory (TSCA 8b): All components are listed or exempted.
TSCA 12(b) one-time export: Naphthalene
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Stoddart solvent
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
Stoddart solvent: Fire hazard, Immediate (acute) health hazard
Clean Water Act (CWA) 307: Naphthalene; Benzene
Clean Water Act (CWA) 311: Naphthalene; Benzene
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

SARA 313

	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
Form R - Reporting requirements	: Naphthalene	91-20-3	0.1 - 1
Supplier notification	: Naphthalene	91-20-3	0.1 - 1

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: Stoddart solvent
New York : The following components are listed: Naphthalene
New Jersey : The following components are listed: Stoddart solvent; Naphthalene
Pennsylvania : The following components are listed: Stoddart solvent; Naphthalene

California Prop. 65

WARNING: This product contains 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.

<u>Ingredient name</u>	<u>Cancer</u>	<u>Reproductive</u>	<u>No significant risk level</u>	<u>Maximum acceptable dosage level</u>
Naphthalene	Yes.	No.	Yes.	No.
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)

Canada

WHMIS (Canada) : Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
 Class D-2A: Material causing other toxic effects (Very toxic).
 Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists : **CEPA Toxic substances:** The following components are listed: Naphthalene
Canadian ARET: None of the components are listed.
Canadian NPRI: The following components are listed: Stoddart solvent; Solvent naphtha (petroleum), heavy aromatic
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

Canada inventory : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

International regulations

International lists : **Australia inventory (AICS):** Not determined.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: Not determined.
Korea inventory: All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.

Section 16. Other information

United States

Label requirements : COMBUSTIBLE LIQUID AND VAPOR. CAUSES EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. SUSPECT CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER.

Hazardous Material Information System (U.S.A.) :

Health	*	2
Flammability		2
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



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