



Compliant SDS for GHS: HazCom 2012 / United States; WHMIS 2015 / Canada

SAFETY DATA SHEET

Diesel Injector Clean

Section 1. Identification Version		: 03/15/2017 : 7.1
GHS product identifier	: Diesel Injector Clean	
Code	: ADF, ADFP	
Product type	: Liquid.	
Identified uses	: Diesel Fuel Additive.	
Manufacturer	: AMSOIL INC. One AMSOIL Center Superior, WI 54880 Tel: +1 715-392-7101	
Initial Supplier (Canada)	: AMSOIL INC. Bordner, Ladner, Gervais Scotia Plaza, 40 King St W Toronto, ON, Canada M5H 3Y4 Tel: +1 416-367-6547	
Emergency telephone number (with hours of operation)	: CHEMTREC: Within USA and Canada: 1-800-424-9300; Outside USA and Cana (24/7)	

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (ACUTE) - Category 2

GHS label elements

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. Suspected of causing cancer. May be fatal if swallowed and enters airways. May cause respiratory irritation. Toxic to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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 release to the environment. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	 Collect spillage. IF exposed or concerned: Get medical attention. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER or physician. 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. Wash contaminated clothing before reuse. If skin irritation or rash 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.
Hazards not otherwise clas	
Physical hazards not otherwise classified (PHNOC)	: None known.
Health hazards not otherwise classified (HHNOC)	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

CAS number/other identifiers

CAS number	: Not a	pplicable.
Product code	: ADF,	ADFP

Solvent naphtha, light arom.	80 - 100	64742-95-6
1,2,4-Trimethylbenzene	25 - 40	95-63-6
Hydrogenated Base Oil (64742-94-5)	15 - 25	64742-94-5
Xylene	1 - 5	1330-20-7
Naphthalene	1 - 5	91-20-3
Phenol, 4-dodecyl-, branched	1 - 5	210555-94-5
Cumene	0.1 - 1	98-82-8
Ethylenediamine	0.1 - 1	107-15-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necess	ary first aid measures
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 20 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 fumes are 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. In the event of any complaints or symptoms, avoid further exposure.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. 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, the belt or waistband.
	tie, belt or waistband.

Most important sympto	oms/effects, acute and delayed
Potential acute health	<u>effects</u>
Eye contact	: Causes serious eye irritation.
Inhalation	 May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: May be fatal if swallowed and enters airways.
Over-exposure signs/	symptoms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing wheezing and breathing difficulties asthma reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate	e medical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

<u>Extinguishing media</u> Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet or water-based fire extinguishers.
Specific hazards arising from the chemical	: 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. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
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.
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, protect	ive equipment and emergency procedures
For non-emergency personnel	: 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.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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). Dispose 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

Precautions for safe handling	
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. 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. Avoid release to the environment. 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. Avoid contact with used product. Do not reuse container.
Advice on general occupational hygiene	: 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Under conditions which may generate mists, the following exposure limits are recommended: ACGIH TLV TWA: 5 mg/m³; STEL: 10 mg/m³.

United States

Ingredient name	Exposure limits
1,2,4-Trimethylbenzene	ACGIH TLV (United States, 3/2015). TWA: 25 ppm 8 hours. TWA: 123 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 25 ppm 10 hours. TWA: 125 mg/m ³ 10 hours.
Xylene	ACGIH TLV (United States, 3/2015). TWA: 100 ppm 8 hours. TWA: 434 mg/m ³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m ³ 15 minutes. OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. TWA: 435 mg/m ³ 8 hours.
Naphthalene	ACGIH TLV (United States, 3/2015). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 52 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 10 ppm 10 hours. TWA: 50 mg/m ³ 10 hours. STEL: 15 ppm 15 minutes. STEL: 75 mg/m ³ 15 minutes. OSHA PEL (United States, 2/2013). TWA: 10 ppm 8 hours. TWA: 50 mg/m ³ 8 hours.
Cumene	ACGIH TLV (United States, 3/2015). TWA: 50 ppm 8 hours. NIOSH REL (United States, 10/2013). Absorbed through skin. TWA: 50 ppm 10 hours. TWA: 245 mg/m ³ 10 hours. OSHA PEL (United States, 2/2013). Absorbed through skin. TWA: 50 ppm 8 hours. TWA: 245 mg/m ³ 8 hours.
Ethylenediamine	ACGIH TLV (United States, 3/2015). Absorbed through skin. TWA: 10 ppm 8 hours. NIOSH REL (United States, 10/2013). TWA: 10 ppm 10 hours. TWA: 25 mg/m ³ 10 hours. OSHA PEL (United States, 2/2013). TWA: 10 ppm 8 hours. TWA: 25 mg/m ³ 8 hours.

Canada Occupational exposure limits

Ingredient name	Exposure limits
1,2,4-Trimethylbenzene Naphthalene	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 123 mg/m³ 8 hours. 8 hrs OEL: 25 ppm 8 hours. CA British Columbia Provincial (Canada, 5/2015).
	 8 hrs OEL: 52 mg/m³ 8 hours. 15 min OEL: 79 mg/m³ 15 minutes. CA British Columbia Provincial (Canada, 5/2015). Absorbed through skin. TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 10 ppm 8 hours. TWA: 10 ppm 8 hours. TWA: 52 mg/m³ 8 hours. STEL: 15 ppm 15 minutes. STEL: 79 mg/m³ 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 10 ppm 8 hours. TWAEV: 52 mg/m³ 8 hours. STEL: 79 pm 15 minutes. CA Quebec Provincial (Canada, 1/2014). TWAEV: 10 ppm 8 hours. STEV: 15 ppm 15 minutes. TWA: 10 ppm 8 hours.
Cumene	 CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 246 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 5/2015). TWA: 25 ppm 8 hours. STEL: 75 ppm 15 minutes. CA Ontario Provincial (Canada, 7/2015). TWA: 50 ppm 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 50 ppm 8 hours. TWAEV: 246 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada). STEL: 74 ppm 15 minutes. TWA: 50 ppm 8 hours.
Ethylenediamine	 CA Alberta Provincial (Canada, 4/2009). Absorbed through skin. 8 hrs OEL: 25 mg/m³ 8 hours. 8 hrs OEL: 10 ppm 8 hours. CA British Columbia Provincial (Canada, 5/2015). Absorbed through skin. Skin sensitizer. TWA: 10 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 25 mg/m³ 8 hours. CA Quebec Provincial (Canada, 1/2014). Absorbed through skin. Skin sensitizer. TWAEV: 10 ppm 8 hours. TWAEV: 25 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada). Absorbed through skin.

	STEL: 15 ppm 15 minutes. TWA: 10 ppm 8 hours.		
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.		
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.		
Individual protection meas	<u>ures</u>		
Hygiene measures	: 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. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.		
Eye/face protection	: 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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.		
Skin protection			
Hand protection	: Chemical-resistant, impervious 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. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.		
Body protection	: 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.		
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.		
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.		

Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Amber.
Odor	: Aromatic hydrocarbon.

Odor threshold	: Not available.
рН	: Not available.
Melting point	: <-60°C (<-76°F)
Boiling point	: Not available.
Flash point	: Closed cup: 46 to 50°C (114.8 to 122°F) [Pensky-Martens.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.8833 to 0.8933
Solubility	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic: 0.011 to 0.015 cm ² /s (1.1 to 1.5 cSt) (40°C)
Volatility	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
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.
Incompatible materials	: 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.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Solvent naphtha, light arom.	LD50 Oral	Rat	8400 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
Xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
-	LD50 Oral	Rat	4300 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Oral	Rat	1400 mg/kg	-
Ethylenediamine	LD50 Oral	Rat	1200 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Solvent naphtha, light arom.	Eyes - Mild irritant	Rabbit	-	24 hours 100 µL	-
Hydrogenated Base Oil (64742-94-5)	Skin - Mild irritant	Rabbit	-	24 hours 500 µL	-
Xylene	Eves - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
Naphthalene	Skin - Mild irritant	Rabbit	-	495 mg	-
Cumene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eves - Mild irritant	Rabbit	-	86 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 mg	-
Ethylenediamine	Eyes - Severe irritant	Rabbit	-	24 hours 750 µg	-
	Eyes - Severe irritant	Rabbit	-	750 µg	-
	Skin - Moderate irritant	Rabbit	-	450 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 10 mg	-

Sensitization

There is no data available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP
Xylene	-	3	
Naphthalene Cumene	-		Reasonably anticipated to be a human carcinogen. Reasonably anticipated to be a human carcinogen.

Specific target organ toxicity (single exposure)

Name	Category	Target organs
1,2,4-Trimethylbenzene Phenol, 4-dodecyl-, branched Cumene	Category 3	Respiratory tract irritation Respiratory tract irritation Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

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Name		Result
Solvent naphtha, light arom.		ASPIRATION HAZARD - Category 1
Hydrogenated Base Oil (64742-94-5) Cumene		ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
Information on the likely routes of exposure	: Dermal contact. Eye contact. Inhala	ation. Ingestion.
Potential acute health effects	_	
Eye contact	: Causes serious eye irritation.	
Inhalation	: May cause respiratory irritation. M difficulties if inhaled.	ay cause allergy or asthma symptoms or breathing
Skin contact	: Causes skin irritation. May cause a	an allergic skin reaction.
Ingestion	: May be fatal if swallowed and enter	rs airways.
Symptoms related to the phy	sical, chemical and toxicological ch	aracteristics
Eye contact	: Adverse symptoms may include the pain or irritation watering redness	e following:
Inhalation	: Adverse symptoms may include the respiratory tract irritation coughing wheezing and breathing difficulties asthma reduced fetal weight increase in fetal deaths skeletal malformations	e following:
Skin contact	: Adverse symptoms may include the irritation redness reduced fetal weight increase in fetal deaths skeletal malformations	e following:
Ingestion	: Adverse symptoms may include the nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations	e following:
	ts and also chronic effects from sho	ort and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	: No known significant effects or criti	ical hazards.
Potential delayed effects	: No known significant effects or criti	ical hazards.
Long term exposure Potential immediate effects	: No known significant effects or criti	ical hazards.
Potential delayed effects Potential chronic health effe	: No known significant effects or criti	ical hazards.

General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: Suspected of damaging the unborn child.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	15381.8 mg/kg
Dermal	78867.2 mg/kg
Inhalation (gases)	358487.1 ppm
Inhalation (vapors)	85.71 mg/L

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure	
1,2,4-Trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus pectenicrus - Adult	48 hours	
	Acute LC50 7720 µg/l Fresh water	Fish - Pimephales promelas	96 hours	
Naphthalene	Acute EC50 1600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours	
	Acute LC50 2350 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours	
	Acute LC50 213 µg/l Fresh water	Fish - Melanotaenia fluviatilis - Larvae	96 hours	
Cumene	Acute EC50 2600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours	
	Acute EC50 7400 µg/l Fresh water	Crustaceans - Artemia sp Nauplii	48 hours	
	Acute EC50 10600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours	
	Acute LC50 2700 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours	
Ethylenediamine	Acute EC50 151000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours	
	Acute LC50 115.7 mg/L Fresh water	Fish - Pimephales promelas	96 hours	

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Solvent naphtha, light arom.	-	10 to 2500	high
1,2,4-Trimethylbenzene	3.63	243	low
Hydrogenated Base Oil (64742-94-5)	2.8 to 6.5	99 to 5780	high
Xylene	3.12	8.1 to 25.9	low
Naphthalene	3.4	36.5 to 168	low
Cumene	3.55	94.69	low
Ethylenediamine	-7.02	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: There is no data available.

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Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty 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.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
	1330-20-7	Listed	U239
	91-20-3	Listed	U165

Section 14. Transport information

	DOT	TDG	IMDG	IATA
UN number	UN1993	UN1993	UN1993	UN1993
UN proper shipping name	FLAMMABLE LIQUIDS, N.O.S. (Solvent naphtha, light arom.) RQ (Xylene, Naphthalene)	S. (Solvent naphtha, light arom.)	FLAMMABLE LIQUIDS, N.O.S. (Solvent naphtha, light arom.). Marine pollutant (1,2, 4-Trimethylbenzene, Naphthalene)	FLAMMABLE LIQUIDS, N.O.S. (Solvent naphtha, light arom.)
Transport hazard class(es)	3			3
Packing group	Ш	Ш		Ш
Environmental hazards	No.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information	This product may be re- classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity. Reportable quantity 5302.6 lbs / 2407.4 kg [0. 14237 gal / 0.53893 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. Remarks Limited Quantity Exemption	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2. 19 (Class 3), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail. <u>Remarks</u> Limited Quantity Exemption	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules (EmS) F-E, S-E Remarks Limited Quantity Exemption	The environmentally hazardous substance mark may appear if required by other transportation regulations. Remarks Limited Quantity Exemption
DOT-RQ Details	: Xylene		 / / 45.4 kg [13.946 gal / 52.7	AERG : 128

	Naphthalene	100 lbs / 45.4 kg
Special precautions for user :	•	premises: always transport in closed containers that are re that persons transporting the product know what to do in the billage.
Transport in bulk according : to Annex II of MARPOL and	Not available.	

the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	: United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 307: Naphthalene Clean Water Act (CWA) 311: Xylene; Naphthalene; Ethylenediamine; Formaldehyde
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Listed
Clean Air Act Section 602 Class I Substances	: Not listed
Clean Air Act Section 602 Class II Substances	: Not listed
DEA List I Chemicals (Precursor Chemicals)	: Not listed
DEA List II Chemicals (Essential Chemicals) <u>SARA 302/304</u>	: Not listed

Composition/information on ingredients

		SARA 302 TPQ SARA 3		SARA 304 I	304 RQ	
Name	EHS	(lbs)	(gallons)	(lbs)	(gallons)	
Ethylenediamine Formaldehyde	Yes. Yes.	10000 500	1337.1 73.9	5000 100	668.5 14.8	

SARA 304 RQ

: 1186957.7 lbs / 538878.8 kg [31.9 gal / 120.6 L]

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
Solvent naphtha, light arom.	Yes.	No.	No.	Yes.	No.
1,2,4-Trimethylbenzene	Yes.	No.	No.	Yes.	No.
Xylene	Yes.	No.	No.	Yes.	No.
Naphthalene	Yes.	No.	No.	Yes.	Yes.
Phenol, 4-dodecyl-, branched	No.	No.	No.	Yes.	Yes.
Cumene	Yes.	No.	No.	Yes.	Yes.
Ethylenediamine	Yes.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%	
Form R - Reporting requirements	1,2,4-Trimethylbenzene Xylene Naphthalene	95-63-6 1330-20-7 91-20-3	25 - 40 1 - 5 1 - 5	
Supplier notification	1,2,4-Trimethylbenzene Xylene Naphthalene	95-63-6 1330-20-7 91-20-3	25 - 40 1 - 5 1 - 5	

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

State regulations

Massachusetts	The following components are listed: 1,2,4-Trimethylbenzene; Xylene; Naphtha	Ilene
New York	The following components are listed: Xylene; Cumene; Naphthalene	
New Jersey	The following components are listed: 1,2,4-Trimethylbenzene; Xylene; Cumene Naphthalene	;
Pennsylvania	The following components are listed: 1,2,4-Trimethylbenzene; Xylene; Cumene 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.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Naphthalene	Yes.	No.	Yes.	No.
Cumene	Yes.	No.	No.	No.
Formaldehyde	Yes.	No.	Yes.	23000 µg/day (ingestion)
Methanol	No.	Yes.	No.	47000 µg/day (inhalation)

Canada

<u>Canadian lists</u>	
Canadian NPRI	 The following components are listed: Solvent naphtha, light arom.; 1,2, 4-Trimethylbenzene; Xylene; Hydrogenated Base Oil (64742-94-5); Naphthalene
CEPA Toxic substances	: The following components are listed: Naphthalene
Canada inventory	: All components are listed or exempted.

Section 16. Other information

<u>History</u>	
Date of issue mm/dd/yyyy	: 03/15/2017
Date of previous issue	: 02/15/2017
Version	: 7.1
Prepared by	: AMSOIL INC.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.