

SAFETY DATA SHEET

Performance Concentrate – Diesel Injector Clean

		: 08/15/2014 : 5.1	
GHS product identifier Code	: Performance Concentrate – Diesel Injector Clean : ADF, ADFP		
Product type	: Liquid.		
Identified uses Fuel additive.			
Supplier's details	: AMSOIL INC. One AMSOIL Center Superior, WI 54880		
Emergency telephone number (with hours of operation)	: CHEMTREC: Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls a (24/7)	accepted)	

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 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 9.8% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 9.8%
GHS label elements	
Hazard pictograms	
Signal word	: Danger

Hazard statements	 Flammable liquid and vapor. Harmful if swallowed or in contact with skin. Causes serious eye irritation. Causes skin irritation. 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. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Wear protective clothing. 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. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Response	: Collect spillage. 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. Rinse mouth. 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. Call a POISON CENTER or physician if you feel unwell. 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.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

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

	CAS	numbe	r/other	identifiers
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CAS number	: Not applicable.
Product code	: ADF, ADFP
United States	

Ingredient name	%	CAS number
1,2,4-Trimethylbenzene	30 - 60	95-63-6
Trimethylbenzene	30 - 60	25551-13-7
Solvent naphtha, heavy aromatic	5 - 10	64742-94-5
Xylene	5 - 10	1330-20-7
Cumene	5 - 10	98-82-8
2-Ethylhexan-1-ol	5 - 10	104-76-7
Mesitylene	1 - 5	108-67-8
1,2,3-Trimethylbenzene	1 - 5	526-73-8
Naphthalene	0.1 - 1	91-20-3

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	sary 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.
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. If necessary, call a poison center or physician. 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.

Most important sympt	oms/effects, acute and delayed
Potential acute health	h effects
Eye contact	: Causes serious eye irritation.
Inhalation	: May cause respiratory irritation.
Skin contact	: Harmful in contact with skin. Causes skin irritation.

Ingestion	: Harmful if swallowed. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
Over-exposure signs/sym	<u>ptoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: Adverse symptoms may include the following: nausea or vomiting
Indication of immediate me	dical 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

Extinguishing media	
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. 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	: 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, protective 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 specialised 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 co	tainment 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). Avoid exposure - obtain special instructions before use. 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

Ingredient name	Exposure limits
1,2,4-Trimethylbenzene	ACGIH TLV (United States, 6/2013). TWA: 123 mg/m ³ 8 hours. TWA: 25 ppm 8 hours. NIOSH REL (United States, 4/2013). TWA: 125 mg/m ³ 10 hours. TWA: 25 ppm 10 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 25 ppm 8 hours. TWA: 125 mg/m ³ 8 hours.
Trimethylbenzene	ACGIH TLV (United States, 6/2013). TWA: 123 mg/m ³ 8 hours. TWA: 25 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 25 ppm 8 hours. TWA: 125 mg/m ³ 8 hours.
Xylene	ACGIH TLV (United States, 6/2013). STEL: 651 mg/m ³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 434 mg/m ³ 8 hours. TWA: 100 ppm 8 hours. OSHA PEL (United States, 2/2013). TWA: 435 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.
Cumene	 ACGIH TLV (United States, 6/2013). TWA: 50 ppm 8 hours. NIOSH REL (United States, 4/2013). Absorbed through skin. TWA: 245 mg/m³ 10 hours. TWA: 50 ppm 10 hours. OSHA PEL (United States, 2/2013). Absorbed through skin. TWA: 245 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
Mesitylene	ACGIH TLV (United States, 6/2013). TWA: 123 mg/m ³ 8 hours. TWA: 25 ppm 8 hours. NIOSH REL (United States, 4/2013). TWA: 125 mg/m ³ 10 hours. TWA: 25 ppm 10 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 25 ppm 8 hours. TWA: 125 mg/m ³ 8 hours.
1,2,3-Trimethylbenzene	ACGIH TLV (United States, 6/2013). TWA: 25 ppm 8 hours. TWA: 123 mg/m ³ 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 25 ppm 8 hours.

	TWA: 125 mg/m ³ 8 hours.
	NIOSH REL (United States, 4/2013).
	TWA: 25 ppm 10 hours.
	TWA: 125 mg/m³ 10 hours.
Naphthalene	ACGIH TLV (United States, 6/2013). Absorbed through skin.
	STEL: 79 mg/m ³ 15 minutes.
	STEL: 15 ppm 15 minutes.
	TWA: 52 mg/m³ 8 hours.
	TWA: 10 ppm 8 hours.
	NIOSH REL (United States, 4/2013).
	STEL: 75 mg/m ³ 15 minutes.
	STEL: 15 ppm 15 minutes.
	TWA: 50 mg/m ³ 10 hours.
	TWA: 10 ppm 10 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 50 mg/m³ 8 hours.
	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 measure	<u>)</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. 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.
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	:	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.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid. [Clear.]
Color	: Brown.
Odor	: Aromatic hydrocarbon.
Odor threshold	: Not available.
рН	: Not available.
Melting point / Pour point	: -57°C (-70.6°F)
Boiling point	: Not available.
Flash point	: Closed cup: 49 to 50°C (120.2 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	: 0.8767 to 0.8833
Solubility	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic: 0.011 to 0.017 cm ² /s (1.1 to 1.7 cSt) (40°C)

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
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
	LD50 Oral	Rat	5 g/kg	-
Trimethylbenzene	LD50 Oral	Rat	8970 mg/kg	-
2-Ethylhexan-1-ol	LD50 Dermal	Rabbit	1970 mg/kg	-
,	LD50 Oral	Rat	3730 mg/kg	-
Xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
Cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Oral	Rat	1400 mg/kg	-
Mesitylene	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
	LD50 Oral	Rat	5000 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
-	LD50 Oral	Rat	490 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Trimethylbenzene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Solvent naphtha, heavy aromatic	Skin - Mild irritant	Rabbit	-	24 hours 500 µL	-
2-Ethylhexan-1-ol	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Moderate irritant	Rabbit	-	20 µg	-
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	415 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Severe irritant	Rabbit	-	0.5 mL	-
Xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Skin - Moderate irritant	Rabbit	-	100%	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Cumene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Mild irritant	Rabbit	-	86 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 mg	-
Mesitylene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
-	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
Naphthalene	Skin - Mild irritant	Rabbit	-	495 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.05 mL	-

Sensitization

There is no data available.

Carcinogenicity

Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Xylene	-	3	-	A4	-	-
Cumene	-	2B	-	-	-	-
Naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.	A4	-	None.

Specific target organ toxicity (single exposure)

Name 1,2,4-Trimethylbenzene 2-Ethylhexan-1-ol Cumene Mesitylene		Category	Route of exposure	Target organs
		Category 3 Category 3 Category 3 Category 3 Category 3	Not applicable. Not applicable. Not applicable. Not applicable.	Respiratory tract irritation Respiratory tract irritation Respiratory tract irritation Respiratory tract irritation
Specific target organ toxic There is no data available.	<u>ity (repeated exposu</u>	<u>re)</u>		
Aspiration hazard				
Name			Result	
Solvent naphtha, heavy aromatic Cumene			ASPIRATION HAZARD - (ASPIRATION HAZARD - (
nformation on the likely outes of exposure	: Dermal contact. E	Eye contact. Inhalation.	Ingestion.	
otential acute health effect	<u>S</u>			
Eye contact	: Causes serious e	ye irritation.		
Inhalation	: May cause respire	atory irritation.		
Skin contact	: Harmful in contac	t with skin. Causes ski	in irritation.	
Ingestion	: Harmful if swallow throat and stomad		allowed and enters airw	vays. Irritating to mouth
ymptoms related to the phy				
Eye contact	: Adverse sympton pain or irritation watering redness	ns may include the follo	wing:	
Inhalation	: Adverse sympton respiratory tract ir coughing	ns may include the follo ritation	wing:	
Skin contact	: Adverse sympton irritation redness	ns may include the follo	wing:	
Ingestion		: Adverse symptoms may include the following: nausea or vomiting		
elayed and immediate effe	cts and also chronic	effects from short and	d long term exposure	
Short term exposure		, , ,		
Potential immediate effects	: No known signific	ant effects or critical ha	azards.	
Potential delayed effects	: No known signific	ant effects or critical ha	azards.	
<u>Long term exposure</u>				
Long term exposure Potential immediate effects	: No known signific	ant effects or critical ha	azards.	
Potential immediate	-	ant effects or critical ha		
Potential immediate effects	: No known signific			

Carcinogenicity	: Suspected of causing 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.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value	
Oral Dermal Inhalation (gases) Inhalation (vapors)	1018.7 mg/kg 1994 mg/kg 73997.3 ppm 30.15 mg/L	

Section 12. Ecological information

Tox	icity
r	

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 22.4 mg/L Fresh water	Fish - Tilapia zillii	96 hours	
Trimethylbenzene	Acute LC50 5600 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours	
Xylene	Acute IC50 10 mg/L	Algae	72 hours	
,	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours	
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours	
Cumene	Acute EC50 2600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours	
	Acute EC50 11200 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours	
	Acute LC50 7400 µg/l Fresh water	Crustaceans - Artemia sp Nauplii	48 hours	
	Acute LC50 2700 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours	
2-Ethylhexan-1-ol	Acute LC50 28200 µg/l Fresh water	Fish - Pimephales promelas	96 hours	
Vesitylene	Acute LC50 13000 µg/l Marine water	Crustaceans - Cancer magister - Zoea	48 hours	
	Acute LC50 12520 to 15050 µg/l Fresh water	Fish - Carassius auratus	96 hours	
	Chronic NOEC 400 µg/l Fresh water	Daphnia - Daphnia magna	21 days	
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	
	Chronic NOEC 0.67 ppm Fresh water	Fish - Oncorhynchus kisutch	40 days	

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential	
1,2,4-Trimethylbenzene	3.63	243	low	
Trimethylbenzene	3.4 to 3.8	-	low	
Solvent naphtha, heavy aromatic	2.8 to 6.5	99 to 5780	high	
Xylene	3.12	8.1 to 25.9	low	
Cumene	3.55	94.69	low	
2-Ethylhexan-1-ol	2.9	25.33	low	
Mesitylene	3.42	161	low	
1,2,3-Trimethylbenzene	3.66	194.98	low	
Naphthalene	3.4	36.5 to 168	low	

Mobility in soil Soil/water partition coefficient (K _{oc})	: There is no data available.
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 spilled material and runoff and contact w
	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 #		Reference number
Xylene	1330-20-7	Listed	U239
Cumene	98-82-8	Listed	U055

Section 14. Transport information

	DOT Classification	IMDG	ΙΑΤΑ
UN number	UN1268	UN1268	UN1268
UN proper shipping name	PETROLEUM DISTILLATES, N.O.S. (Solvent naphtha, heavy aromatic, 1,2, 4-Trimethylbenzene)	PETROLEUM DISTILLATES, N.O.S. (Solvent naphtha, heavy aromatic, 1,2, 4-Trimethylbenzene)	PETROLEUM DISTILLATES, N.O.S. (Solvent naphtha, heavy aromatic, 1,2, 4-Trimethylbenzene)
Transport hazard class(es)	3	3	3
Packing group	111	Ш	111
Environmental hazards	No.	Yes.	No.
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 1479.9 lbs / 671.9 kg [200.95 gal / 760. 67 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency schedules (EmS)</u> F-E, S-E	The environmentally hazardous substance mark may appear if required by other transportation regulations.

AERG : 128

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according: Not available.to Annex II of MARPOL73/78 and 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: Benzene; Naphthalene Clean Water Act (CWA) 311: Xylene; Benzene; Naphthalene
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)	:	Not listed
SARA 302/304		
No products were found.		
SARA 304 RQ	:	Not applicable.
<u>SARA 311/312</u>		
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
1,2,4-Trimethylbenzene	30 - 60	Yes.	No.	No.	Yes.	No.
Trimethylbenzene	30 - 60	Yes.	No.	No.	Yes.	No.
Xylene	5 - 10	Yes.	No.	No.	Yes.	No.
Cumene	5 - 10	Yes.	No.	No.	Yes.	No.
2-Ethylhexan-1-ol	5 - 10	Yes.	No.	No.	Yes.	No.
Mesitylene	1 - 5	Yes.	No.	No.	Yes.	No.
1,2,3-Trimethylbenzene	1 - 5	Yes.	No.	No.	Yes.	No.
Naphthalene	0.1 - 1	No.	No.	No.	Yes.	Yes.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	1,2,4-Trimethylbenzene	95-63-6	30 - 60
	Xylene	1330-20-7	5 - 10
	Cumene	98-82-8	5 - 10
	Naphthalene	91-20-3	0.1 - 1
Supplier notification	1,2,4-Trimethylbenzene	95-63-6	30 - 60
	Xylene	1330-20-7	5 - 10
	Cumene	98-82-8	5 - 10
	Naphthalene	91-20-3	0.1 - 1

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; Trimethylbenzene; Xylene; Cumene; 1,2,3-Trimethylbenzene; Mesitylene; 2-Ethylhexan-1-ol
New York	: The following components are listed: Xylene; Cumene; Naphthalene
New Jersey	 The following components are listed: 1,2,4-Trimethylbenzene; Trimethylbenzene; Xylene; Cumene; 1,2,3-Trimethylbenzene; Mesitylene; Naphthalene
Pennsylvania	 The following components are listed: 1,2,4-Trimethylbenzene; Trimethylbenzene; Xylene; Cumene; 1,2,3-Trimethylbenzene; Mesitylene; 2-Ethylhexan-1-ol; 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
Cumene Naphthalene Benzene	Yes. Yes. Yes.	No. No. Yes.	No. Yes. 6.4 µg/day (ingestion) 13 µg/day (inhalation)	No. No. 24 µg/day (ingestion) 49 µg/day (inhalation)
ternational regulations Chemical Weapon Conventior	List Schedules I, II &	III Chemicals		
Ingredient name		.ist name		Status
Not listed.				
Iontreal Protocol (Annexes A	<u>, B, C, E)</u>			
Ingredient name		List name		Status
Not listed.				
Stockholm Convention on Per	sistent Organic Pollu	tants		
Ingredient name		List name		Status
Not listed.				
Rotterdam Convention on Price	or Inform Consent (Pl	<u>C)</u>		
Ingredient name		List name		Status
Not listed.				
INECE Aarhus Protocol on Po	OPs and Heavy Metals	<u>5</u>		I
Ingredient name		List name		Status
PAHs		POPs - Annex 3		Listed

Section 16. Other information

History

Date of issue mm/dd/yyyy	: 08/15/2014
Date of previous issue	: 06/15/2014
Version	: 5.1
Prepared by	: AMSOIL INC

Notice to reader

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