Safety Data Sheet

SDS No. 12052

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

DURALIFE® FLUSHING OIL
Product Use: Cleaner
Manufacturer :
AMTECOL, Inc.
810 Wright Ave, Richmond, CA 94804, U.S.A.
www.amtecol.com
Transportation Emergency & Emergency spill information :
Call CHEMTREC : (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)
Health Emergency : Amtecol Emergency Information Center : 1-866-268-1888
Other Product Information :
Technical Assistance/SDS info & Customer Service : 1-510-235-7979 Email : info@amtecol.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Hazard Classification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture:
Aspiration Hazard - Category 1
Chronic Aquatic Toxicity - Category 3.

Label Elements

Signal word: Danger

Hazard Statements

H304 - May be fatal if swallowed and enters airways.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention:
P102 - Keep out of reach of children.
P103 - Read label before use.
P273 - Avoid release to the environment.

Response:
P101 - If medical advice is needed, have product container or label at hand.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 - Do NOT induce vomiting.
P391 - Collect spillage.

Storage:
P405 - Store locked up.
Disposal:
P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other Hazards:
Excessive exposure may result in mild irritation to the skin or respiratory system as well as possible irritation to the eye. People with pre-existing skin conditions, such as eczema or dermatitis, should take precautions so as not to exacerbate the condition. As for all chemical products, persons should not expose open wounds, cuts, abrasions or irritated skin to this material.

SECTION 3. COMPOSITION INFORMATION/ INGREDIENTS

COMPONENTS	CAS NUMBER	% WEIGHT
DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC BASE OILS	64742-46-7, 64742-47-8, 64742-53-6, 72623-83-7,72623-84-8, 72623-85-9, 72623-86-0, 72623-87-1	80-90
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	68649-42-3	<10
C9-C11 AROMATIC HYDROCARBON	79693-06-0	<20

SECTION 4. FIRST AID MEASURES

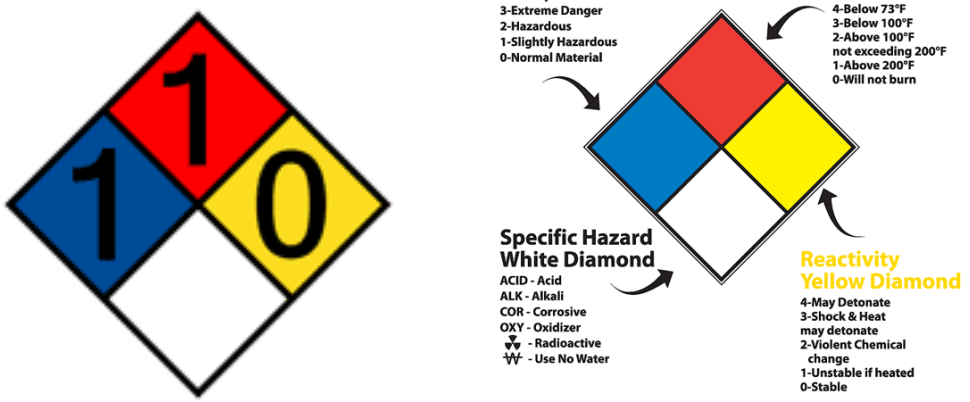
Inhalation: If affected, remove the patient from further exposure into fresh air, if safe to do so. If providing assistance, avoid exposure to yourself - only enter contaminated environments with adequate respiratory equipment. Once removed, lay patient down in a well-ventilated area and reassure them whilst waiting for medical assistance. If not breathing, provide artificial respiration and seek immediate medical assistance. If unconscious, place in a recovery position and seek immediate medical assistance. If irritation develops or persists, consult a Doctor.
Skin contact: Remove contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact: Rinse with water. Get medical attention if irritation develops and persists.
Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. 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.
Most important symptoms and effects, both acute and delayed:
Acute: Ingestion or inhalation of vapors may lead to irritation of the mouth and respiratory tract. Symptoms may include a burning sensation in the nose and throat, coughing or difficulty breathing. Ingestion may lead to nausea and diarrhea. If material is aspirated into the lungs it may exhibit as coughing, wheezing, congestion or fever. Eye contact may lead to localized burning, redness and tearing. Skin contact may lead to redness or itching.
Chronic: Skin contact may aggravate/exacerbate existing skin conditions, such as dermatitis.
Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if

large quantities have been ingested or inhaled.
Protection of first-aiders: No personnel shall place themselves in a situation that is potentially hazardous to themselves. As the product is hydrocarbon based and of low viscosity, if the person has ingested the product, do not use direct mouth-to-mouth resuscitation techniques. Always ensure that you are wearing gloves when dealing with first aid procedures involving chemicals and/or blood.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media: None known.
Specific hazards arising from the chemical: No specific fire or explosion hazard.

NFPA 704 HAZARD RATINGS:



Special remarks on fire hazards: Low fire hazard. This material must be heated before ignition will occur.
Special protective equipment and precautions for firefighters: In the event of a fire, Firefighters must wear full protective clothing and self-contained breathing apparatus (SCBA) with full-face piece operated in the pressure demand or other positive pressure mode.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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 and material for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. 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 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.

Reporting: Follow prescribed procedures for reporting and responding to larger releases. Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with the product by using appropriate protective equipment such as gloves, glasses or goggles and full-length clothing. Prevent small spills and leakage to avoid slip hazards. Properly dispose of any contaminated rags or cleaning materials in order to prevent fire hazards. Eating, drinking, and smoking should be prohibited in the area where this material is handled, stored and processed. Workers should follow good personal hygiene practices, such as washing hands before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Keep containers tightly closed when not in use. Prevent product from entering waterways, drains or sewers.

Conditions for safe storage including any incompatibilities

This product is a hydrocarbon-based liquid that will burn if preheated. Store in a dry, well ventilated area away from direct sunlight, ignition sources, oxidizing agents, foodstuffs and clothing. Keep containers closed when not in use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits

Component	ACGIH
Mixture of severely hydrotreated and hydrocracked base oil (petroleum).	TWA: 5 mg/m^3 STEL: 10 mg/m^3

Exposure controls

1. Engineering controls

Special ventilation is not normally required when using this product in normal use scenarios. However, in the operation of certain equipment, at elevated temperatures, or in confined spaces mists or vapor may be generated and local exhaust ventilation should be provided to maintain airborne concentration levels below the nominated exposure standard and at an acceptable

level that does not cause irritation.

2. 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.

3. Personal protective equipment (PPE)

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 or dusts.

Skin/hand protection

If there is the chance of contact with the material wear gloves to provide hand protection. Nitrile rubber gloves are recommended.

Respiratory protection

Use a properly fitted, air-purifying or air-fed 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. Recommended: organic vapor filter

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Viscous amber liquid	**Freezing Point :** No data available
Odor : No odor or slight petroleum oil like.	**Solubility :** Poorly Soluble in water
Physical State : Liquid	**Viscosity @ 40 °C**: 24 cSt
Evaporation Rate (nBuAc=1): No data available	**Vapor Pressure:** Not available
Boiling Point : Not available	**Vapor Density (air=1):** Not available
Melting Point : Not available	**pH :** N/A
Specific Gravity : 0.868	**Flammability (Explosive) Limits (% by volume in air):** No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: The product does not pose any further reactivity hazards other than those listed in the following sub-sections.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid : No specific data.

Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products: Hazardous decomposition products are not expected to form during normal storage requirements. The product contains a dithiophosphate compound that if heated in the presence of water may decompose to release hydrogen sulfide gas.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Name	Route	Species	Value
Mixture of severely hydrotreated and hydrocracked base oil (petroleum).	Dermal LD50 Inhalation LC 50 Oral LD 50	Rabbit Rat Rat	> 2,000 mg/kg > 2,500 mg/kg (4hr) > 5,000 mg/kg
Phosphorodithioic acid, o,o-di-c1-14-alkyl esters, zinc salts	Dermal LD 50 Oral LD 50	Rat Rat	Estimated 20,000 mg/kg Estimated 3,600 mg/kg

Chronic toxicity: Not available
Irritation/Corrosion: Not available
Sensitizer: Not available
Carcinogenicity: Not available
Mutagenicity: Not available
Mutagenicity: Not available
Reproductive toxicity: Not available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: Not available **Persistence and degradability**: Not available.
Bioaccumulative potential: Not available.
Mobility in soil : No data available.
Other adverse effects: No known significant effects or critical hazards.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of waste from residues / unused products:
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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste code:
F001: Waste Halogenated Solvent - Spent Halogenated Solvent Used in Degreasing F002: Waste Halogenated Solvent - Spent Halogenated Solvent
Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

SECTION 14. TRANSPORT INFORMATION

Regulatory information	UN number	Proper shipping name	Classes	Packing Group	Label	Additional information
TDG Classification	Not regulated	-	-	-	-	-
DOT Classification	Not available	Not available	Not available	-	-	-

SECTION 15. REGULATORY INFORMATION

United States
HCS Classification: Not regulated
Canada
WHMIS(CANADA): Not controlled under WHMIS(Canada).
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.
EU regulations
Risk phrases: This product is not classified according to EU legislation.
International regulations
Canada inventory: All components are listed or exempted.
United States inventory(TSCA 8b): All components are listed or exempted.
Europe inventory: All components are listed or exempted.

SECTION 16. OTHER INFORMATION

HMIS RATINGS: Health: 1 Flammability: 1 Reactivity: 0
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

OSHA - Occupational Safety and Health Administration	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
ACGIH - American Conference of Government Industrial Hygienists	CAS - Chemical Abstract Service Number
GHS - Globally Harmonized System	SDS - Safety Data Sheet

API - American Petroleum Institute	IMO/IMDG - International Maritime Dangerous Goods Code
DOT - Department of Transportation (USA)	NCEL - New Chemical Exposure Limit
IARC - International Agency for Research on Cancer	NFPA - National Fire Protection Association (USA)
EPA - Environmental Protection Agency	SCBA - Self-Contained Breathing Apparatus
TLV - Threshold Limit Value	NTP - National Toxicology Program (USA)
HMIS -Hazardous Materials Identification System	WHMIS -Workplace Hazardous Materials Information System
NIOSH-National Institute for Occupational Safety and Health	TSCA-Toxic Substances Control Act
CASRN - Chemical Abstracts Service Registry Number	CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act
INSHT - National Institute for Health and Safety at Work	IOPC - International Oil Pollution Compensation
LEL - Lower Explosive Limit	NE - Not Established
SARA - Superfund Amendments and Reauthorization Act	UEL - Upper Explosive Limit

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Disclaimer of Warranty : The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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