

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

DURALIFE® ACTIVE SULFUR NEAT CUTTING OIL- ALL GRADES

Product Use : Metalworking Fluid – Neat

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

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

Classification of the substance or mixture : SKIN IRRITATION - Category 2

EYE IRRITATION - Category 2A

GHS Label Elements

Hazard pictograms



Signal word : Warning

Avoid contact with skin and clothing. Wash thoroughly after handling.

Hazard statements : Causes serious eye irritation.

Causes skin irritation.

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. Wash hands thoroughly after handling.

Response : IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. 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 : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : Defatting to the skin. Prolonged or repeated contact may dry skin and cause irritation.

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SECTION 3. COMPOSITION INFORMATION/ INGREDIENTS

COMPONENTS	CAS NUMBER	% WEIGHT
Distillates (petroleum), hydrotreated light/heavy naphthenic.	64742-52-5, 64742-53-6	70 - 95
Distillates (petroleum), hydrotreated light/heavy paraffinic	64742-55-8, 64742-54-7	70 - 95
Pentene, 2,4,4-trimethyl-, sulfurized	68515-88-8	< 5.0

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

Eye Contact : Immediately flush eyes with large amounts of water for at least 15 minutes. Get medical attention if irritation persists.

Skin Contact : Wash with plenty of soap and water. 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.

Inhalation(Breathing) : Move the exposed person to fresh air . If not breathing, give artificial respiration . If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue

Ingestion(Swallowing) : 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. 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, tie, belt or waistband.

Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : Irritating to mouth, throat and stomach.

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Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following: pain or irritation, watering, redness

Inhalation : No known significant effects or critical hazards.

Skin contact : Adverse symptoms may include the following: irritation, redness

Ingestion : No known significant effects or critical hazards.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media :In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

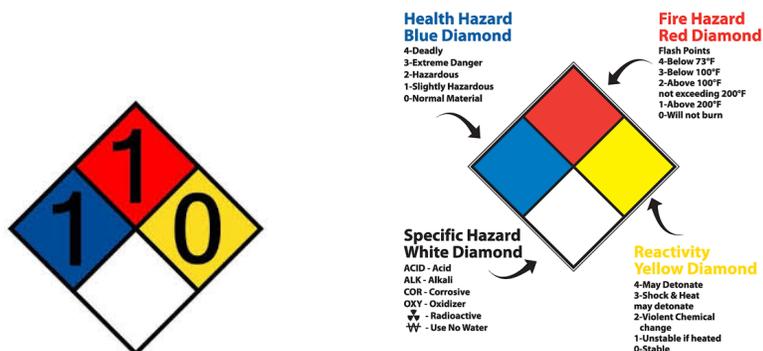
Hazardous combustion products: Combustion products may include the following: carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides, phosphorus oxides metal oxide/oxides.

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.

Protective equipment and precautions for firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

NFPA 704 HAZARD RATINGS:



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. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Contact emergency personnel.

For emergency responders : Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. 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. U.S.A. regulations may require reporting spills of this material that could reach any surface waters

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. Alternatively, or if water-insoluble, 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. 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. Contaminated absorbent material may pose the same hazard as the spilled product. Dispose of via a licensed waste disposal contractor.

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

Protective measures : Put on appropriate personal protective equipment (see Section 8).

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Avoid breathing vapor or mist. Avoid contact of spilled material and runoff with soil and surface waterways. Avoid contact with eyes, skin and clothing. Do not ingest. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Avoid prolonged or repeated contact with skin. During metal working, solid particles from workpieces or tools will contaminate the fluid and may cause abrasions of the skin. Where such abrasions result in a penetration of the skin, first aid treatment should be applied as soon as reasonably possible. The presence of certain metals in the workpiece or tool, such as chromium, cobalt and nickel, can contaminate the metalworking fluid and as a result may induce allergic skin reactions. Evaporation of water from soluble cutting fluids during use may lead to an increase in concentration which may result in the development of skin conditions due to irritation and defatting. It is important to monitor fluid strength on a regular basis with a

refractometer and maintain it at the recommended concentration. Lubricants from other sources and other contaminants should be minimized. Swarf and other debris should be removed. To maintain optimum performance and minimize bacterial spoilage, machine tool coolant systems should be cleaned on a regular basis.

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 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. 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

Appropriate engineering controls : All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Engineering exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures, such as personal protective equipment

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Eye/face protection: Safety glasses with side-shields.

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.

Skin and Body 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.

Wear suitable gloves. Undiluted fluid: Wear chemical resistant gloves. Recommended: nitrile gloves. Diluted fluid: Wear protective gloves if prolonged or repeated contact is likely. Recommended: nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Consult your supervisor or Standard Operating Procedure (S.O.P) for special handling instructions.

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.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. For protection against metal working fluids, respiratory protection that is classified as “resistant to oil” (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m³), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m³). Where organic vapors are a potential hazard during metalworking operations, a combination particulate and organic vapor filter may be necessary. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection

Occupational Exposure Limits:

Ingredient Name	ACGIH TLV (United States, 4/2014)	OSHA PEL (United States, 2/2013)	NIOSH REL (United States, 10/2013)
Distillates, petroleum, hydrotreated light/ heavy naphthenic	TWA: 5mg/m ³ 8hours Form: Inhalable fraction	TWA: 5mg/m ³ 8 hours	TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist
Distillates, petroleum, hydrotreated light/ heavy paraffinic	TWA: 5mg/m ³ 8hours Form: Inhalable fraction	TWA: 5mg/m ³ 8 hours	TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist

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Ingredient Name	Exposure limits
Pentene, 2,4,4-trimethyl-, sulfurized	None.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Clear, Amber	Partition coefficient: n- octanol/water: Not available
Odor : Mild	Solubility : insoluble in water.
Physical State : Liquid	Viscosity @ 40 °C : 10.0 – 48.0 cSt
Percent Volatile: No data available	Vapor Pressure : No data available
Boiling Point : No data available	Vapor Density (air=1) : >1
Melting Point : Not Applicable (N/A)	pH : Not available
Specific Gravity : < 1	Auto-ignition Temperature: Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal use conditions.

Conditions to avoid

Keep away from open flames, hot surfaces and 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 Name	Results	Species	Dose
Pentene, 2,4,4-trimethyl-, sulfurized	Oral LD 50	Rat	3641 mg/kg

Irritation/Corrosion: There is no data available.

Sensitization : No known effect.

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Mutagenic Effects :There is no data available.

Carcinogenicity: No known effect.

Reproductive effects: No known effect.

Teratogenicity : There is no data available.

Specific target organ toxicity (single exposure): There is no data available.

Specific target organ toxicity (repeated exposure) : Not available.

Aspiration hazard

Product Name	Results
Distillates (petroleum), hydrotreated light / heavy naphthenic	ASPIRATION HAZARD - Category 1
Distillates, petroleum, hydrotreated light/ heavy paraffinic	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following: pain or irritation, watering, redness

Skin contact : Adverse symptoms may include the following: irritation, redness, dryness, cracking.

Inhalation: No specific data.

Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure .

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects: Not available.

Long term exposure

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Potential chronic health effects

Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

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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

Not available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

No testing has been performed by the manufacturer.

Persistence and degradability: Not available.

Bioaccumulative potential; Not available.

Mobility in soil

Soil/water partition coefficient (KOC): Not available.

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

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Method : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. 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 emptied 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.

SECTION 14. TRANSPORT INFORMATION

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

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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 to Annex II of MARPOL and the IBC Code: Not available.

SECTION 15. REGULATORY INFORMATION

US Federal Regulations:

United States inventory (TSCA 8b): All components are listed or exempted.

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not 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

Composition/information on ingredients

No products were found.

SARA 304 RQ :Not applicable.

SARA 311/312

Classification: 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
Distillates, petroleum, hydrotreated light/heavy naphthenic	70-95	No.	No.	No.	Yes.	No.
Distillates, petroleum, hydrotreated light/heavy paraffinic	70-95	No.	No.	No.	Yes.	No.
Pentene, 2,4,4-trimethyl-, sulfurized	<5	No.	No.	No.	Yes.	No.

SARA 313

Form R - Reporting requirements: This product does not contain any hazardous ingredients at or above regulated thresholds.

Supplier notification: This product does not contain any hazardous ingredients at or above regulated thresholds.

State regulations

Massachusetts: None of the components are listed.

New York : None of the components are listed.

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New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65: No products were found

Other regulations

Australia inventory (AICS) : All components are listed or exempted.

Canada inventory : All components are listed or exempted.

China inventory (IECSC) : All components are listed or exempted.

Japan inventory (ENCS) : All components are listed or exempted.

Korea inventory (KECI) : All components are listed or exempted.

Philippines inventory (PICCS) : 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

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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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