



## Ardrox Concentrate SDS

Effective Date: February 11, 2014

24 Hour Emergency Contact:

ChemTel: (800)255-3924

www.pioneerforensics.com

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product:</b>	<b>Ardrox Concentrate</b>
<b>Product Number(s):</b>	Ardrox Concentrate
<b>CAS#:</b>	Mixture
<b>Synonyms:</b>	Mixture
<b>Manufacturer:</b>	Pioneer Forensics, LLC 804 E. Eisenhower Blvd. Loveland, CO 80537 - Ph: (970) 292-8487
<b>Distributor:</b>	Arrowhead Forensics 11030 Strang Line Rd. Lenexa, KS 66215 - Ph: (913) 894-8388
<b>Emergency Number:</b>	(800) 255-3924 (CHEM-TEL)
<b>Customer Service:</b>	(970) 292-8487



### 2. HAZARDS IDENTIFICATION

**Emergency Overview:** HARMFUL IF INHALED, SWALLOWED, OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

**Safety Ratings:** Health: 2, Moderate      Reactivity: 0, None  
Flammability: 1, Slight      Contact: 2, Moderate

**OSHA Regulatory Status:** This product is considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Potential Acute Health Effects:**

<b>Routes of Exposure:</b>	Inhalation, ingestion, skin contact, eye contact
<b>Inhalation:</b>	May cause irritation and breathing difficulty.
<b>Ingestion:</b>	May cause gastrointestinal irritation, vomiting, and diarrhea. May cause aspiration pneumonia if vomited.
<b>Skin Contact:</b>	May cause irritation, dryness, cracking, and delayed onset dermatitis.
<b>Eye Contact:</b>	May cause irritation and redness.

**Target Organs:** Skin, Eyes, Blood

**Chronic Health Effects:** Exposure to this chemical is not known to aggravate existing medical conditions.

**Potential Environmental Effects:** No information found.

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

<u>Components</u>	<u>CAS#</u>	<u>Hazardous</u>	<u>% by Weight</u>
Petroleum Distillate	64742-46-7	Yes	50-60
Glycol Ethoxylate	84133-50-6	Yes	10-20
Polyglycol Ether	9016-45-9	Yes	10-15
Diisodecyl Phthalate	26761-40-0	Yes	5-10

### 4. FIRST AID MEASURES

#### First Aid Procedures:

- Inhalation:** Remove to fresh air. If breathing is difficult, administer oxygen. If the victim is not breathing, provide artificial respiration. Get medical attention if symptoms persist.
- Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person.
- Skin Contact:** Wash affected area with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.
- Eye Contact:** Check for and remove contact lenses. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention if symptoms persist.

**General Advice:** In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

**Notes to Physician:** Treat symptomatically. Symptoms may be delayed.

### 5. FIRE FIGHTING MEASURES

**NFPA Ratings:** Health: 1 Flammability: 0 Reactivity: 0

**Flammable Properties:** May be combustible at high temperatures.

**Flash Point:** >200°F

**Auto-ignition Temp:** No information found.

**Flammable Limits in Air (% by volume):** Lower Explosion Limit: 1.1%  
Upper Explosion Limit: 6%

**Suitable Extinguishing Media:** Water spray, Dry powder, Alcohol resistant foam, Carbon dioxide

**Unsuitable Extinguishing Media:** Do not use a solid (straight) water stream as it may scatter and spread fire.

<b>Hazardous Combustion Products:</b>	Carbon monoxide, Carbon dioxide, Soot, Thick smoke
<b>Specific Hazards:</b>	Product misted as a fine aerosol becomes immediately flammable when exposed to open flame.
<b>Special Protective Equipment For Firefighters:</b>	As in any fire, wear MSHA/NIOSH approved (or equivalent) self-contained positive pressure or pressure-demand breathing apparatus and full protective gear.
<b>Specific Methods:</b>	Use water spray to cool unopened containers. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Ventilate area of leak or spill. Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Keep upwind. Keep out of low areas. Wear appropriate personal protective equipment as specified in the Exposure Control and Personal Protection Section 8. Avoid contact with eyes, skin, and clothing.
<b>Environmental Precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground. In case of large spill, dike if needed.
<b>Methods for Containment:</b>	Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Dike the spilled material, where this is possible. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors.
<b>Methods for Cleaning Up:</b>	Absorb spill with an inert material (e.g. vermiculite, dry sand, earth, cloth, fleece), and place in a suitable container for reclamation or disposal. Clean contaminated surface thoroughly. Never return spills in original containers for re-use. Clean up in accordance with all applicable regulations.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Wear personal protective equipment (see section 8). Use only in well-ventilated areas. Provide sufficient air exchange and/or exhaust in work rooms. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Do not ingest. When using, do not smoke. Keep away from incompatible materials. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquids). Observe all warnings and precautions listed for the product.
<b>Storage:</b>	Store in a cool, dry, ventilated area. Store away from incompatible materials. Store in original container and out of excessive light. Keep containers tightly closed and upright. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

## 8. EXPOSURE CONTROL AND PERSONAL PROTECTION

<b>Exposure Limits:</b>	
<b>Product:</b>	No exposure limits established for this product.

<b>Components:</b>	No information found.
<b>Engineering Controls:</b>	Ensure adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Personal Protective Equipment:</b>	
<b>Eye/Face Protection:</b>	Wear goggles or safety glasses with side shields and a face shield.
<b>Skin Protection:</b>	Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical resistant gloves (neoprene or nitrile).
<b>Respiratory Protection:</b>	Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.
<b>General Hygiene Considerations:</b>	Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Liquid
<b>Appearance:</b>	Yellow-Green Liquid
<b>Color:</b>	Yellow-Green
<b>Odor:</b>	Mild
<b>Molecular Formula:</b>	Mixture
<b>Molecular Weight:</b>	Mixture
<b>pH:</b>	No information found.
<b>Specific Gravity:</b>	0.871
<b>Freezing/Melting Point:</b>	No information found.
<b>Boiling Point:</b>	240°F
<b>Flash Point:</b>	>200°F
<b>Auto Ignition Temperature:</b>	No information found.
<b>Flammable Limits in Air (% by Volume):</b>	
<b>Upper:</b>	6%
<b>Lower:</b>	1.1%
<b>Solubility:</b>	Insoluble
<b>Vapor Pressure:</b>	>0.1 kPa at 20°C
<b>Vapor Density:</b>	2.69
<b>Percent Volatile:</b>	No information found.
<b>Odor threshold (ppm):</b>	No information found.
<b>Evaporation Rate:</b>	<1 (Water=1)
<b>Partition Coefficient (n-octanol/water):</b>	No information found.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal conditions.
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<b>Conditions to Avoid:</b>	Excessive heat, incompatibles.
<b>Incompatible Materials:</b>	Oxidizing agents, reducing agents, organic materials, metals, acids, bases
<b>Hazardous Decomposition Products:</b>	Carbon monoxide, Carbon dioxide, Soot, Thick smoke
<b>Possibility of Hazardous Reactions:</b>	Can react vigorously, violently or explosively with the incompatible materials listed above.
<b>Hazardous Polymerization:</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicological Data:</b>	Oral Rat LD50: 1310 mg/kg	Skin Rabbit LD50: 1869 mg/kg
<b>Acute Effects:</b>	May be harmful if swallowed, inhaled, or absorbed through skin.	
<b>Local Effects:</b>	Contact with skin or eyes may cause irritation.	
<b>Sensitization:</b>	No information found.	
<b>Chronic Effects:</b>	No information found.	
<b>Carcinogenic Effects:</b>	This product contains one or more ingredients that may cause cancer.	
<b>Skin Corrosion/Irritation:</b>	Minimal irritation.	
<b>Epidemiology:</b>	No epidemiological data is available for this product.	
<b>Mutagenicity:</b>	No information found.	
<b>Neurological Effects:</b>	No information found.	
<b>Reproductive Effects:</b>	No information found.	
<b>Teratogenic Effects:</b>	This product contains one or more ingredients that may cause birth defects.	
<b>Target Organs and Symptoms:</b>	Skin, eyes, blood.	

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicological Data:</b>	No information found.
<b>Ecotoxicity:</b>	This product may be harmful to aquatic organisms.
<b>Environmental Effects:</b>	This product may be harmful to the environment.
<b>Persistence and Degradability:</b>	No information available for the product as a whole, however, petroleum distillates are known to be non-biodegradable and therefore should not be discharged to watercourses.
<b>Partition Coefficient (n-octanol/water):</b>	No information found.

### 13. DISPOSAL INFORMATION

- Disposal Instructions:** All wastes must be handled in accordance with local, state and federal regulations.
- Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied. Offer rinsed packaging material to local recycling facilities.
- Waste Codes:** No information found.

### 14. TRANSPORT INFORMATION

Not regulated per U.S. DOT, IATA, or IMO.

### 15. REGULATORY INFORMATION

#### U.S. Federal Regulations:

- OSHA:** This product is considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- TSCA Inventory:** All components are listed on the TSCA inventory.

#### U.S. EPCRA (SARA Title III):

Sections 311/312:	Hazard Categories	List (Yes/No)
	Section 311 – Hazardous Chemical	Yes
	Immediate Hazard	No
	Delayed Hazard	Yes
	Fire Hazard	No
	Pressure Hazard	No
	Reactivity Hazard	No

International Inventories:	Country(s) or Region	Inventory Name	On Inventory (Yes/No)*
	Australia	Australian Inventory of Chemical Substances (AICS)	N/A
	Canada	Domestic Substances List (DSL)	Yes
	Canada	Non-Domestic Substances List (NDSL)	N/A
	China	Inventory of Existing Chemical Substances in China (IECSC)	N/A
	Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	N/A
	Europe	European List of Notified Chemical Substances (ELINCS)	N/A
	Japan	Inventory of Existing and New Chemical Substances (ENCS)	N/A
	Korea	Existing Chemicals List (ECL)	N/A
	New Zealand	New Zealand Inventory	N/A
	Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	N/A

\*A "Yes" indicates that the listed component(s) of this product comply with the inventory requirements administered by the governing country(s)

## 16. OTHER INFORMATION

<b>Product Use:</b>	Laboratory and/or field reagent
<b>Disclaimer:</b>	<p>Pioneer Forensics, LLC provides the information in this Safety Data Sheet in the belief that it is reliable but assumes no responsibility for its completeness or accuracy. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Pioneer Forensics, LLC makes and gives no representations or warranties with respect to the information contained herein or the product to which it refers, whether express, implied, or statutory, including without limitation, warranties of accuracy, completeness, merchantability, non-infringement, performance, safety, suitability, stability, and fitness for a particular purpose. No warranty against infringement of any patent, copyright or trademark is made or implied. This SDS is intended only as a guide to the appropriate handling of the material by a properly trained person. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. Accordingly, Pioneer Forensics, LLC assumes no liability whatsoever for the use of or reliance upon this information including results obtained, incidental or consequential damages, or lost profits.</p>
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<b>Reason for Revision:</b>	Not applicable