



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	CASTROL ANVOL SWX 46 FIRE RESISTANT HYDRAULIC FLUID	Code	75780-CE
Supplier	CASTROL INDUSTRIAL NORTH AMERICA INC. 1001 WEST 31ST STREET DOWNERS GROVE, IL 60515-1280 TEL.: 1 - 630-241-4000 (USA)	Validation Date	09/25/2003
Synonym	Not available.	Print Date	09/25/2003
Trade name	Not available.	Responsible Name	
Material Uses	Other non specified industry.: Hydraulic fluid For specific application advice see appropriate Technical Data Sheet or consult your Castrol representative	In Case of Emergency	CHEMTREC (800) 424-9300
Manufacturer	CASTROL INDUSTRIAL NORTH AMERICA INC 1001 WEST 31ST STREET DOWNERS GROVE, IL 60515-1280		

Section 2. Composition, Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits
Hazardous ingredients - None Known			

Section 3. Hazards Identification

Physical state / Appearance	Liquid. Mild. Odor Amber. Liquid.
Emergency Overview	CAUTION! MAY CAUSE EYE AND SKIN IRRITATION. MIST: MAY CAUSE RESPIRATORY TRACT IRRITATION. Avoid contact with skin and eyes. Wash thoroughly after handling. Do not ingest. However, in light of good industrial hygiene, exposure to any chemical should be kept to a minimum.
Routes of Entry	Skin Contact. Eye contact. Inhalation. Ingestion.
Potential Acute Health Effects	<i>Eyes</i> May cause eye irritation. <i>Skin</i> May cause skin irritation. <i>Inhalation</i> Vapor: Solution may cause irritation of mouth, throat, and esophagus. High vapor concentrations can cause headaches, dizziness, drowsiness, and nausea, and may lead to unconsciousness. Vapor: Prolonged repeated exposure may cause chemical pneumonitis. <i>Ingestion</i> Oral LD50: Not established. Ingestion may cause gastrointestinal irritation and diarrhea. No additional remark.

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Potential Chronic Health Effects Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
CARCINOGENIC EFFECTS: No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).
MUTAGENIC EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.
TERATOGENIC EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

Medical Conditions Aggravated by Overexposure: Repeated or prolonged exposure is not known to aggravate medical condition.

Over-exposure signs/symptoms Not available.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention.

Skin Contact Wash contaminated skin with soap and water. Get medical attention if irritation develops. Wash clothing before reuse.

Inhalation Breathing difficulty or Respiratory tract irritation: Remove to fresh air. If the victim is not breathing, perform mouth-to-mouth resuscitation. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion If affected person is conscious, give plenty of water to drink. NEVER give an unconscious person anything to ingest. Do not induce vomiting. ASPIRATION HAZARD. If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention immediately.

Notes to Physician Not available.

Section 5. Fire Fighting Measures

Flammability of the Product May be combustible at high temperature.

Auto-ignition temperature Not available.

Flash Point Open cup: 299°C (570.2°F) (Cleveland.).

Flammable Limits Not available.

Products of Combustion These products are carbon oxides (CO, CO₂).

Fire Hazards in Presence of Various Substances Slightly flammable to flammable in presence of open flames, sparks and static discharge, of shocks, of heat, of oxidizing materials.

Explosion Hazards in Presence of Various Substances This material is not explosive as defined by established regulatory criteria.

Fire Fighting Media and Instructions SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam.

Cool closed containers exposed to fire with water. Hot containers may explode. Use water spray to keep fire exposed containers cool. Do not use water jet.

Protective Clothing (Fire) Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Special Remarks on Fire Hazards None identified.

Special Remarks on Explosion Hazards None identified.

Section 6. Accidental Release Measures

Small Spill and Leak Absorb with an inert material and put the spilled material in an appropriate waste disposal. Do not allow any potentially contaminated water including rain water, runoff from fire fighting or spills to enter any waterway, sewer or drain.

Large Spill and Leak Absorb with an inert material and put the spilled material in an appropriate waste disposal. Do not allow any potentially contaminated water including rain water, runoff from fire fighting or spills to enter any waterway, sewer or drain.

Section 7. Handling and Storage

Aerosol.: Over-exposure by inhalation may cause respiratory irritation. However, in light of good industrial hygiene, exposure to any chemical should be kept to a minimum. Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

Section 8. Exposure Controls and Personal Protection

Engineering Controls Aerosol.: Over-exposure by inhalation may cause respiratory irritation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. However, in light of good industrial hygiene, exposure to any chemical should be kept to a minimum.

Personal Protection

Eyes Safety glasses with side shields. OR Chemical splash goggles.

Body Avoid prolonged or repeated contact with skin. Wear clothing and footwear that cannot be penetrated by chemicals or oil.

Respiratory A respirator is not needed under normal and intended conditions of product use. Wear appropriate respirator when ventilation is inadequate.

Hands Impervious gloves.

Feet Not applicable.

Protective Clothing (Pictograms)



Personal Protection in Case of a Large Spill Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name

Exposure Limits

Hazardous ingredients - None identified.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state / Appearance	Liquid.	Odor	Mild. Odor
Boiling/Condensation Point	Not available.	Taste	Not available.
Melting/Freezing Point	Not available.	Color	Amber. Liquid.
pH (Concentration)	Not applicable.		
pH Dilution % and Value	Not available.		
Critical Temperature	Not available.		
Specific Gravity	0.9 to 0.91 (Water = 1)		
Vapor Pressure	Not available.		
Vapor Density	Not available.		
Volatility	<1% (v/v).		
Odor Threshold	Not available.		
Evaporation Rate	Not available.		
VOC	1 (%)	VOC Method	Estimated.
Viscosity	Kinetic (40C): 41.4 to 50.6 cSt		
Dispersion Properties	Is not dispersed in cold water, hot water.		
Solubility	Insoluble in cold water, hot water.		
Physical Chemical Comments	Not available.		

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Avoid excessive heat.
Incompatibility with Various Substances	Strong oxidizing materials
Hazardous Decomposition Products	carbon oxides (CO, CO2), sulfur oxides (SO2, SO3...), nitrogen oxides (NO, NO2...)
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. CARCINOGENIC EFFECTS: No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA). MUTAGENIC EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen. TERATOGENIC EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic. REPRODUCTIVE EFFECTS: No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.
Other Toxic Effects on Humans	No specific information is available in our database regarding the other toxic effects of this material for humans.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.
Special Remarks on Other Toxic Effects on Humans	No additional remark.

Section 12. Ecological Information

Ecotoxicity	Not determined.
BOD and COD	Not determined.
Biodegradable/OECD	Not determined.
Mobility	Not determined.
Products of Degradation	carbon oxides (CO, CO ₂), sulfur oxides (SO ₂ , SO ₃ ...), nitrogen oxides (NO, NO ₂ ...)
Toxicity of the Products of Biodegradation	Not determined.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations. Keep out of waterways. Disposal of this material to the land may be banned by federal law (40 CFR 268).	
RCRA Waste Code(s)	USED OIL	
Waste Stream	Not determined.	
Consult your local or regional authorities.		

Section 14. Transport Information

DOT Classification Not a DOT controlled material (United States).

Marine Pollutant Not pollutant.

Special Provisions for Transport Not available.

ADR/RID Classification Not determined.

IMO/IMDG Classification Not determined.

ICAO/IATA Classification Not determined.

Section 15. Regulatory Information

U.S. Federal Regulations

SARA 302/304 emergency planning and notification: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: CASTROL ANVOL SWX 46 FIRE RESISTANT HYDRAULIC FLUID: immediate health hazard.
SARA 313 toxic chemical notification and release reporting: No products were found.

Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean air act (CAA) 112 accidental release prevention: No products were found.
Clean air act (CAA) 112 regulated toxic substances: No products were found.
Clean air act (CAA) 112 regulated flammable substances: No products were found.

State Regulations

No products were found.

California Prop 65: WARNING! This product contains trace amounts of the following chemicals which the State of California has found to cause cancer, birth defects or other reproductive harm.: 2-Naphthylamine; ANILINE; 1-NAPHTHYLAMIE

Inventory Lists

SCA 8(b) inventory: In compliance.

CEPA DSL: Not listed.

Australia (NICNAS): Not listed.

Korea (TCCL): In compliance.

Philippines (RA6969): Not determined.

MITI: Not determined.

EINECS: Not listed.

Section 16. Other Information

Label Requirements MAY CAUSE EYE AND SKIN IRRITATION.
MIST: MAY CAUSE RESPIRATORY TRACT IRRITATION.

**Hazardous Material
Information System
(U.S.A.)**

Health	1
Fire Hazard	1
Reactivity	0
Personal Protection	b

**National Fire
Protection
Association
(U.S.A.)**



References Not available.

**Other Special
Considerations**

Validated by Product Stewardship on 09/25/2003.

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CHEMTREC (800) 424-9300

Notice to Reader

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