

AZOLLA AF



Hidráulico



Aceite hidráulico antidesgaste, libre de cenizas.

APLICACIONES

- ◆ Para sistemas hidráulicos que operan bajo condiciones de alta presión y temperatura.
- ◆ Bombas de alta presión, de paletas, pistón y engranes.
- ◆ Circuitos hidráulicos sensibles que requieren de filtración absoluta del fluido (juego de válvulas servo muy fino): máquinas de moldeo de plástico.
- ◆ Cualquier sistema hidráulico donde existe el riesgo de cualquier contaminación del medio ambiente.
- ◆ Cualquier aplicación donde se necesite un lubricante con antidesgaste de alto rendimiento: diversas aplicaciones, cojinetes lisos, rodamientos, reductores de velocidad con carga baja etc.
- ◆ Lubricación de circuitos en donde la presencia de agua es accidental tales como: máquinas y herramientas, industrias agrícolas, fábricas de papel, fabricación de acero, etc.

ESPECIFICACIONES

Internacionales.

Fabricantes de equipo

- ◆ ADIN 51524 P2 HLP
- ◆ US steel 136, 127
- ◆ SEB 181222
- ◆ SAE MS 181222
- ◆ Bosch Rexroth RE 90220
- ◆ Eaton Vickers I-286 (Industrial) M-2950-s (Mobile)
- ◆ Cincinnati Milacron P 68, P69, P70

PROPIEDADES

- ◆ Excelentes propiedades antidesgaste que garantizan la protección de partes de la máquina.
- ◆ Excepcional antioxidante y estabilidad térmica, proporcionando mayor vida útil del aceite con alargamiento de los intervalos de cambio del lubricante.
- ◆ Excelente filtrabilidad con o sin presencia de agua.
- ◆ Notable resistencia a la hidrólisis y buenas propiedades demulsificantes
- ◆ Notables propiedades antioxidantes y anticorrosivas para una protección de los componentes del circuito.
- ◆ Reacciona muy bien al aire: purga de aire rápida y baja tendencia a la formación de espuma.
- ◆ AZOLLA AF, no contiene metales pesados o Zinc para evitar contribuir a su acumulación en el medio ambiente.

Total México S.A de C.V

Av. 8 de Julio 2462, Zona Industrial, CP 44940. Guadalajara, Jalisco, México
Conmutador. (0133) 3812-2300, Fax. (0133) 3810-6264
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www.total.com.mx

EMPRESA CERTIFICADA ISO 9001 / ISO TS16949

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TOTAL

CARACTERISTICAS

CARACTERISTICAS TIPICA	METODO ASTM	UNIDADES	AZOLLA AF				
			22	32	46	68	100
Densidad a 15°C	D-4052		0.865	0.873	0.878	0.883	0.888
Viscosidad cinemática a 40°C	D-445	cSt	22	32	46	68	102
Viscosidad cinemática a 100 °C	D-445	cSt	4.4	5.4	6.8	8.7	11.4
Indice de viscosidad	D-2270		104	100	100	97	98
Temperatura de inflamación	D-92	°C	215	227	238	247	263
Temperatura de fluidez	D-97	°C	-27	-27	-27	-21	-21
Prueba FZG (A/8,3/90) nivel de daño	DIN 51354- 2			12	12	>12	>12
Espuma secuencia 1	DIN 51566	ml/ml	40/0	40/0	0/0	0/0	0/0
AFNOR filtrabilidad(0.8 micrones),IF	NFE 48-690		1.03	1.07	1.12	1.10	1.10

Los valores típicos mostrados representan un promedio de resultados

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MATERIAL SAFETY DATA SHEET

TOTAL Specialties USA, Inc.. 5 N. Stiles Street, Linden NJ 07036
Phone 1-908-862-9300



Product AZOLLA AF
ORIGINAL ISSUE May 10-2010
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IDENTIFICATION AND EMERGENCY INFORMATION

PRODUCT NAME: AZOLLA AF PRODUCT #:
AZOLLA AF (ISO 32 to 68)

CHEMICAL NAME: N/A - Mixture CAS #'S: Mixture

PRODUCT APPEARANCE AND ODOR: Amber liquid, petroleum odor CHEMICAL FAMILY: Petroleum hydrocarbon

SYNONYMS: Petroleum-based AW hydraulic oil EMERGENCY TELEPHONE: 1-800-442-5823 or 1-908-862-9300

COMPONENTS AND HAZARD INFORMATION

COMPONENTS: W/W HAZARD DATA (TLV, LD50, LC50, ETC.):

Petroleum based lubricating oil 5 mg/m3 TWA (OSHA, ACGIH)
CAS# 64742-54-7, 64742-65-0, (as an oil mist)
64742-55-8*

*** Paraffinic base oil used are not limited to but include these CAS numbers.**

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS):
Health Flammability Reactivity
0 1 0

TRANSPORTATION INFORMATION

TRANSPORTATION/SHIPPING INFORMATION:

Department of Transportation (DOT): Not regulated

EMERGENCY FIRST AID

EYE CONTACT:
If splashed into the eyes, flush with clear water for 15 minutes or until irritation subsides. If irritation persists, call a physician.

SKIN CONTACT:
In case of skin contact, remove contaminated clothing and wash skin thoroughly with soap and water.

INHALATION:
Vapor pressure is very low. Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a physician. If breathing is irregular or has stopped, start resuscitation; administer oxygen if available. If overexposure to oil mist, remove from further exposure until excessive oil mist condition subsides.

INGESTION:
If ingested, do not induce vomiting. Call a physician immediately.

The following data are approximate or typical values and should not be used for precise design purposes.

BOILING RANGE: Wide range	VAPOR PRESSURE: < 0.1 @ 38°C/100°F
SPECIFIC GRAVITY (25°C/25°C): (WATER = 1) < 1.0	VAPOR DENSITY (AIR = 1): > 8
MOLECULAR WEIGHT: Wide range	PERCENT VOLATILE BY VOLUME: Negligible
EVAPORATION RATE @ 1 ATM. AND 25°C (77°F) (n-BUTYL ACETATE = 1): < 1.0	SOLUBILITY IN WATER @ 1 ATM. and 25°C (77°F): Negligible
POUR, CONGEALING OR MELTING POINT: n/e	FREEZING POINT: n/e

REACTIVITY

This product is stable and will NOT react violently with water. Hazardous olymerization will not occur. Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite, etc., as this represents a serious explosion hazard.

DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS:

Fumes, smoke, carbon monoxide, oxides of sulfur, and other decomposition products, in case of incomplete combustion.

CONDITIONS TO AVOID:

Open flames

TOXICITY

ORAL (Acute)	N/E
DERMAL (Acute)	N/E
EYE	N/E
INHALATION (Acute)	N/E
CHRONIC, SUBCHRONIC, ETC.	N/E

Medical Conditions Aggravated by Exposure: Unknown

This product does NOT contain any ingredients identified as carcinogenic by IARC, NTP, or OSHA.

SARA Section 313 Status: This material is not known to contain any chemicals on the SARA Section 313 list at a concentration greater than 1.0 percent or carcinogenic chemical on that list at a concentration greater than 0.1 percent.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Keep product out of sewers and watercourses by diking or impounding. Absorb with sand or inert material. Sweep or scoop up and remove. Prevent spread of spill. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with local regulations.

WASTE DISPOSAL METHOD: (Consult federal, state, or local authorities for proper disposal procedures.)

Assure conformity with applicable disposal regulations. Dispose of absorbed material at an approved waste site or facility.

PROTECTION AND PRECAUTIONS

VENTILATION: (Always maintain below permissible exposure limits.)
Use local exhaust to capture vapor, mist or fumes, if necessary. Provide ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air.

RESPIRATORY PROTECTION: (Use only NIOSH approved equipment.)
Normally not needed at ambient temperatures. Use supplied air respiratory protection in confined or enclosed spaces, if needed. Use filter, dust, fume, or mist respirator type under misting conditions. Use can or cartridge; gas or vapor respirator type under conditions exceeding TWA standard.

PROTECTIVE GLOVES:
Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

EYE PROTECTION:
Use splash goggles or face shield when eye contact may occur.

OTHER PROTECTIVE EQUIPMENT:
Use chemical-resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing which could result in prolonged or repeated skin contact.

WORK PRACTICES/ENGINEERING CONTROLS:
Keep containers closed when not in use. Do not handle near heat, sparks, flame or strong oxidants.

PERSONAL HYGIENE:
Minimize breathing vapor, mist, or fumes. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry-clean before reuse. Remove contaminated shoes and thoroughly clean before reuse; discard if oil-soaked. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

OTHER REGULATORY INFORMATION

OSH HAZARD DETERMINATION: This material is not known to be hazardous as defined by OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Inventory: All of the components of this material are listed on the Toxic Chemical Substances Inventory. This product is in compliance with the Toxic Substances control Act (TSCA).

SARA SECTION 311 - HAZARD CATEGORIES:

This product may meet one or more of the criteria for the hazard categories defined in 40 CFR Part 370 as established by Sections 311 and 312 of SARA as indicated below:

NO	IMMEDIATE (ACUTE) HEALTH HAZARD	NO	SUDDEN RELEASE OF PRESSURE HAZARD
NO	DELAYED (CHRONIC) HEALTH HAZARD	NO	REACTIVE HAZARD
NO	FIRE HAZARD		

SARA 302/304: There are no components in this product on the SARA 302/304 list.

SARA SECTION 313 - TOXIC COMPONENTS: This product does not contain >1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.

CLEAN WATER ACT (CWA):

Under the CWA, discharges of fluids to surface water without proper Federal and State permits must be reported immediately to the National Response Center at (800) 424-8802.

CERCLA HAZARDOUS SUBSTANCES:

As defined by CERCLA, the term "hazardous substance" does not include any ingredients or fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance.

CALIFORNIA PROPOSITION 65

This product contains no ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute.

NEW JERSEY RIGHT-TO-KNOW LABEL

Mineral oil

WHMIS CLASSIFICATION

This product is not a WHMIS controlled substance.

PREPARED BY: Alan Denniston	Technical Services
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