

**KANO LABORATORIES, INC.**  
**SAFETY DATA SHEET**

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**Manufacturer:** Kano Laboratories, Inc.  
1000 E. Thompson Lane  
Nashville, TN 37211  
**Information Phone Number:** (615) 833-4101  
**Fax:** (615) 833-5790 **Emergency:** 800-424-9300 (Chemtrec)  
**Website:** www.kanolaboratories.com

**Product Name:** MOLYFILM (AEROSOL)  
**MSDS Date of Preparation:** 12/14/2010  
**Product Use:** Dry Graphite Lubricant  
**IDENTIFICATION NUMBER:** 0158-01 (A-6042)

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

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ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT %
01	PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	45.0 %
02	2-PROPANONE	67-64-1	30.0 %
03	TOLUENE	108-88-3	25.0 %
04	ISOPROPYL ALCOHOL	67-63-0	5.0 %
05	MOLYBDENUM DISULFIDE	1317-33-5	5.0 %

----- EXPOSURE LIMITS -----

ITEM	ACGIH		OSHA		COMPANY	
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	TLV-TWA	SKIN
01	1000 PPM	N.E.	800 PPM	N.E.	N.E.	YES
02	750 PPM	1000 PPM	750 PPM	N.E.	N.E.	NO
03	50 PPM	150 PPM	100 PPM	150 PPM	N.E.	NO
04	400 PPM	500 PPM	400 PPM	N.E.	N.E.	NO
05	10 MG/M3	N.E.	10 MG/M3	N.E.	N.E.	NO

(See Section 16 for abbreviation legend)  
(Continued on Page 2)

**SECTION 3 - HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW:** Vapors irritating to eyes and respiratory tract. Vapors may cause flash fire or explosion.

**EFFECTS OF OVEREXPOSURE - EYE CONTACT:** Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.



PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

SPECIAL FIREFIGHTING PROCEDURES: Containers can build up pressure if exposed to heat (fire). As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

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**SECTION 7 - HANDLING AND STORAGE**

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HANDLING: Wash thoroughly after handling.

STORAGE: Keep away from heat, sparks and flame. Keep from freezing.

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**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

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ENGINEERING CONTROLS: Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. 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.

SKIN PROTECTION: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

OTHER PROTECTIVE EQUIPMENT: STANDARD INDUSTRIAL CLOTHING STANDARDS SHOULD BE FOLLOWED.

HYGIENIC PRACTICES: Wash hands before eating. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Avoid prolonged or repeated contact with skin. Avoid breathing vapors from heated material. Avoid contact with eyes, skin, and clothing.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

BOILING RANGE: -43 - 232 F VAPOR DENSITY : Heavier than air  
ODOR: Solvent ODOR THRESHOLD : ND  
APPEARANCE: Dark Gray EVAPORATION: Faster than Butyl  
Acetate  
SOLUBILITY IN H2O: Negligible

FREEZE POINT: 32 SPECIFIC GRAVITY: 0.6750  
VAPOR PRESSURE: 80-90 pH @ 0.0 % : NA  
PHYSICAL STATE: AEROSOL VISCOSITY : ND

COEFFICIENT OF WATER/OIL DISTRIBUTION: PARTIAL

(See Section 16 for abbreviation legend)

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**SECTION 10 - STABILITY AND REACTIVITY**

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CONDITIONS TO AVOID: ALL SOURCES OF IGNITION, WELDING ARCS, AND OPENFLAMES.

INCOMPATIBILITY: STRONG ACIDS, ALKALIS, OXIDIZERS, AND AMINES.

HAZARDOUS DECOMPOSITION PRODUCTS: OXIDES OF CARBON, OXIDES OF NITROGEN, AND MAY PRODUCE FORMS OF CHLORIDE, CHLORINE, AND PHOSGENE.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

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**SECTION 11 - TOXICOLOGICAL PROPERTIES**

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PRODUCT LD50: 2 mg/kg PRODUCT LC50: 61280 ppm

COMPONENT TOXICOLOGICAL INFORMATION:

CHEMICAL NAME	LD50	LC50
PROPANE/ISOBUTANE/N-BUTANE NE	NE	658000 MG/M3/4HRAT
2-PROPANONE	5800 MG/KG/RAT	50100 MG/M3/8H/RAT

TOLUENE	636 MG/KG/RAT	49000 MG/M3/4H/RAT
ISOPROPYL ALCOHOL	5045 MG/KG/RAT	72600 MG/M3/RAT
MOLYBDENUM DISULFIDE	>2 GM/KG/RAT	>2820 MG/M3/4H/RAT
AROMATIC HYDROCARBON	8400 MG/KG RAT	NE
HYDROXYPROPYL CELLULOSE	10200 MG/KG/RAT	ND
1,2,4-TRIMETHYLBENZENE	5000 MG/KG RAT	3658 PPM/4H RAT
BENZENE	930 MG/KG	N.E.
DIMETHYLBENZENE	4300 MG/KG RAT	30000 MG/M3/MAMMAL
CUMENE	1400 PPM/RAT	10 PPM/7H/MOUSE
ETHYLBENZENE	3500 MG/KG/RAT	NE

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**SECTION 12 - ECOLOGICAL INFORMATION**  
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 ECOLOGICAL INFORMATION: No Information.

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**SECTION 13 - DISPOSAL CONSIDERATIONS**  
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 DISPOSAL METHOD: DISPOSE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

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**SECTION 14 - TRANSPORTATION INFORMATION**  
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 DOT PROPER SHIPPING NAME: CONSUMER COMMODITY  
 DOT TECHNICAL NAME: ORM-D  
 DOT HAZARD CLASS: HAZARD SUBCLASS:  
 DOT UN/NA NUMBER: PACKING GROUP: RESP. GUIDE PAGE:

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**SECTION 15 - REGULATORY INFORMATION**  
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 U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:  
 This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD CHRONIC HEALTH HAZARD FIRE HAZARD  
 PRESSURIZED GAS HAZARD

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME	CAS NUMBER	WT/WT % IS LESS THAN
TOLUENE	108-88-3	25.0 %

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

CHEMICAL NAME	CAS NUMBER
AROMATIC HYDROCARBON	64742-95-6

U.S. STATE REGULATIONS: AS FOLLOWS -

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product:

CHEMICAL NAME	CAS NUMBER
No non-hazardous materials are among the top five ingredients.	

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**SECTION 15 - REGULATORY INFORMATION**

PENNSYLVANIA RIGHT-TO-KNOW:

The following non-hazardous ingredients are present in the product at greater than 3%:

CHEMICAL NAME	CAS NUMBER
No non-hazardous ingredients are present at greater than 3%.	

CALIFORNIA PROPOSITION 65:

WARNING: The chemical(s) noted below and contained in this product, are known to the state of California to cause cancer, birth defects or other reproductive harm:

CHEMICAL NAME	CAS NUMBER
TOLUENE	108-88-3
BENZENE	71-43-2

INTERNATIONAL REGULATIONS:

AS FOLLOWS -CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: No information available.

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**SECTION 16 - OTHER INFORMATION**

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HMIS RATINGS - HEALTH:           FLAMMABILITY:           REACTIVITY:

LEGEND: N.A. - Not Applicable, N.E. - Not Established,  
N.D. - Not Determined