

MATERIAL SAFETY DATA SHEET

DATE ISSUED :	1/16/2012
MSDS REF. No :	A-A-208

A-A-208 Type I, II, III & IV

1. PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: Ink, Marking, Stencil, Opaque

Colors: Black, Black 17038, NL Black 37038, NL Gray 36231, Red, Red 31136, Red 31158, Pink, White, NL White 37875, Blue, Gold, Maroon, Magenta, Fire Orange, Saturn Yellow, White 37875, Blue 35109, Blue 35466, Blue 83303, Violet, NL Aqua 35275, NL Green 85105, NL Yellow, NL Yellow 13538, NL Yellow 33538, NL Orange, NL Orange 32169, NL Green, NL Brown, NL Brown 30117, NL Green 34558, Silver.

MANUFACTURER INFORMATION

MACH-DYNAMICS
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24 HR. EMERGENCY TELEPHONE NUMBER

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2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE : Liquid

As noted in the preface to published values adopted by the ACGIH TLV's represent "conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect. Because of wide variation in individual susceptibility however, a small percentage of workers may experience discomfort from some substances at concentrations at or below the threshold limit, a smaller percentage may be affected more seriously by aggravation of pre-existing condition or by development of occupational illness".

POTENTIAL HEALTH EFFECTS

EYES : Slightly irritating to gastrointestinal tract. Can cause headache, diarrhea, drowsiness, breathing difficulties, nausea, vomiting.

SKIN : Slightly irritating. Prolonged or widespread contact may lead to irritation, defatting, or dermatitis;

INGESTION : Slightly irritating to gastrointestinal tract. Can cause headache, diarrhea, drowsiness, breathing difficulties, nausea, vomiting.

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INHALATION : Slightly irritating to nasal respiratory tracts. Can cause headache, drowsiness, dizziness, breathing difficulties, nausea.

CHRONIC : No chronic health concerns known.

CARCINOGENICITY : This material is not currently known to have carcinogenic properties.

MUTAGENICITY : This material is not known to have mutagenic effects on genetic material.

IRRITANCY: This material may cause irritation to the eyes, skin, and respiratory tract. Use correct PPE when handling this material.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS : This material is not known to cause any reproductive system damage.

TERATOGENIC EFFECTS : This material is not known to contain any teratogenic substances.

3. COMPOSITION/CHEMICAL INFORMATION

Chemical Name	CAS Number	Weight %	OSHA PEL	ACGIH TLV
Diacetone Alcohol	123-42-2	30-50	50 ppm	50 ppm
Ethyl Alcohol	64-17-5	10-20	1000 ppm	1000 ppm
Isopropyl Alcohol	67-63-0	0-10	400 ppm	400 ppm
Ethyl Acetate	141-78-6	0-10	400 ppm	400 ppm
nPropyl Alcohol	71-23-8	0-5	200 ppm	200 ppm
Isopropyl Acetate	106-21-4	0-2	250 ppm	250 ppm

* Toxic chemical subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

4. FIRST AID MEASURES

EYES : Immediately flush eyes with plenty of water for at least 15 minutes or until medical personnel indicate to stop, while holding eyelids open. Seek medical attention.

SKIN : Flush skin with soap and water while removing contaminated clothing. If irritation occurs, seek immediate medical attention. Do not reuse clothing or shoes until thoroughly cleaned.

INGESTION : DO NOT induce vomiting. Aspiration of material can cause chemical pneumonitis, which can be **fatal**. Seek medical attention.

INHALATION : Immediately remove victim to fresh air. If victim is not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Seek immediate medical attention.

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5. FIRE FIGHTING MEASURES

FLASH POINT AND METHOD : 46 Degrees Fahrenheit Tagliabue Closed Cup (TCC)

FLAMMABLE LIMITS : LEL: 1.8 UEL: Unknown

LEL value reported is lowest listed for any ingredient in mixture.

AUTOIGNITION TEMPERATURE : No data available.

EXTINGUISHING MEDIA : Use water fog, multipurpose foam, dry chemical, or CO2.

FIRE FIGHTING PROCEDURES : Fight as volatile liquid fire. Flashback fire may occur.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES : SPILL or LEAK PROCEDURES: Secure area and remove all sources of ignition and heat. Prevent additional discharge of material. Absorb small spills with sand, filter-aid, vermiculite or other inert absorbent material. For large spills, prevent material from entering sewers and or water courses. Contain spill with sand, or earth dikes. Recover as much as possible by pumping. Treat remainder as small spill. Dispose of waste in accordance with applicable government regulations. Wear chemical goggles, gloves, boots, and protective clothing. Wear respirator if necessary.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL : Keep material out of storm sewers and ditches which lead to waterways.

LAND SPILL : Contact applicable authorities and determine applicable regulations based on MSDS information.

AIR RELEASE : Contact applicable authorities and determine applicable regulations based on MSDS information.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE: 40 - 90°F

SHELF LIFE: Recommended use within 24 months.

HANDLING AND STORAGE PRECAUTIONS: Store in tightly closed properly vented container away from heat, sparks, open flame, or strong oxidizing agents. Containers must be properly grounded and adequate ventilation provided. Unscrew all caps slowly. Do not unscrew entirely until all pressure has been completely released.

REPAIR & MAINTENANCE OF CONTAMINATED EQUIPMENT: Handle all equipment containing liquid mixture as reported on this MSDS. Equipment with "dried mixture" must be handled with the same care as other dried organic coatings. All cleaning material should be handled according to their instructions and their MSDS.

COMMENTS : KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

SPECIAL PRECAUTIONS: None

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES :

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ENGINEERING CONTROLS: Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

SKIN: Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

RESPIRATORY: If exposure may or does exceed occupational exposure limits (Section 8) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134, use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

HYGIENIC WORK PRACTICES: Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE : Liquid

ODOR : Characteristic

pH : Not Applicable

BOILING POINT (°F) : approx. 180

FREEZING POINT (°F) : No data available

VOLATILE ORGANIC COMPOUNDS:

(VOC Theoretical – As Packaged)

% VOLATILE BY VOLUME: approx. 75

SOLUBILITY IN WATER : Appreciable

EVAPORATION RATE (nBuAcet=1): approx. 0.7

VAPOR DENSITY (AIR=1): approx. 3.2

SPECIFIC GRAVITY (water=1): 1.20

VAPOR PRESSURE (mm Hg): approx. 40

10. STABILITY AND REACTIVITY

STABLE : Yes

HAZARDOUS POLYMERIZATION : Will not occur

CONDITIONS TO AVOID : Strong oxidizing agents, strong acids, strong bases, alkali metals, halogens.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO₂, Organic Combustion Products, Oxides of Nitrogen.

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INCOMPATIBLE MATERIALS : Strong oxidizing agents, strong acids, strong bases, alkali metals, halogens.

11. TOXICOLOGICAL INFORMATION

GENERAL COMMENTS: None identified.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Keep out of waterways.

13. DISPOSAL INFORMATION

DISPOSAL METHOD: Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

EMPTY CONTAINER: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

RCRA/EPA WASTE INFORMATION: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME : UN1210, Printing Ink, Class 3, Pkg. Grp. II.
(UN#, Proper Shipping Name, Class, Packing Group)

*** MACH-DYNAMICS verifies that the material was supplied and shipped in the proper packages in accordance with DOT and federal regulations that are applicable to the mode of transportation selected. The shipper must verify that the packaging supplied is acceptable to be re-shipped in per the federal regulations applicable to the mode of transportation for re-shipment. Regulations may change depending on mode of transportation selected.***

15. REGULATORY INFORMATION

Chemical Name: Mixture

Formula: Proprietary Mixture

TSCA STATUS: Listed

Ingredient(s)	SARA 302	SARA 313	RECRA	PROP 65
Diacetone Alcohol	No	No	No	No
Ethyl Alcohol	No	No	No	No
Isopropyl Alcohol	No	No	No	No
Ethyl Acetate	No	No	U112	No
nPropyl Alcohol	No	No	No	No
Isopropyl Acetate	No	No	No	No

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313 REPORTABLE INGREDIENTS: To the best of our knowledge, this product is not listed as a toxic chemical.

302/304 EMERGENCY PLANNING

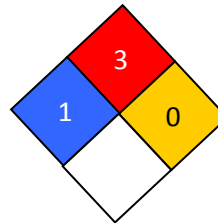
EMERGENCY PLAN: To the best of our knowledge, this material is not listed as an extremely hazardous substance.

16. OTHER INFORMATION

APPROVED BY : Mark Gingerella

TITLE : President / QC Manager

NFPA CODES



HMIS RATING	
Health :	1
Flammability :	3
Reactivity :	0
Personal Protection :	G

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