

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND MANUFACTURER'S IDENTIFICATION

Product Code: Marker with NIPA NOSA 01-069 Ink
Product Name: Marker with NIPA NOSA 01-069 Ink
Revision Date: Mar 26, 2024 **Date Printed:** Mar 26, 2024
Version: 3.0 **Supersedes Date:** Nov 7, 2023
Manufacturer's Name: NOCOPI TECHNOLOGIES, INC.
Address: 480 Shoemaker Road, Suite 104, King of Prussia, PA 19406
Emergency Phone: (800) 424-9300 or (703) 527-3887
Information Phone Number: 610-834-9600
Fax:
Product/Recommended Uses:

SECTION 2) HAZARDS IDENTIFICATION

Classification

Chronic aquatic toxicity - Category 3
Flammable Liquids - Category 2

Pictograms



Signal Word

DANGER

Hazardous Statements - Physical

Highly flammable liquid and vapor

Hazardous Statements - Environmental

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P273 - Avoid release to the environment.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical equipment.

P280 - Wear protective gloves, protective clothing, eye protection/face protection.

Precautionary Statements - Response

P370 + P378 - In case of fire: Use dry chemical, foam, carbon dioxide, water spray or fog to extinguish.

Precautionary Statements - Storage

No precautionary statement available.

Precautionary Statements - Disposal

P501 - Dispose of contents/container to disposal recycling center. Waste management should be in full compliance with federal, state and local laws.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000064-17-5	ETHYL ALCOHOL	15%
0000057-55-6	PROPYLENE GLYCOL	5%
0095235-30-6	PHENOL, 4-[[4-(1-METHYLETHOXY)PHENYL]SULFONYL]-	3%
	MARKER COMPONENTS	77%

This section contain information with undisclosed CAS number due to its nonhazardous nature.

SECTION 4) FIRST-AID MEASURES

Inhalation

Get medical advice/attention if you feel unwell or are concerned. Eliminate all ignition sources if safe to do so.

Eye Contact

If irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 5 minutes, while holding the eyelids open. If eye irritation persists: Get medical advice/attention. Gently brush product off face. Do not rub eyes. Let the eyes water naturally for a few minutes. Look right and left, then up and down. Do not attempt to manually remove anything from the eyes.

Skin Contact

Rinse/wash with lukewarm, gently flowing water and mild soap for 5 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention. Take off immediately contaminated clothing. Store contaminated clothing under water and wash before re-use or discard.

Ingestion

Rinse mouth. If you feel unwell/If concerned: Get medical advice/attention.

Most Important Symptoms and Effects, Both Acute and Delayed

No data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

SECTION 5) FIRE-FIGHTING MEASURES

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Specific Hazards in Case of Fire

Fire will produce irritating gases. Runoff may pollute waterways. May be ignited by friction, heat, sparks or flames. Containers may explode in fire. Powders dust, shavings, borings, turnings or cuttings may explode or burn with explosive violence.

Suitable Extinguishing Media

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing dust. Avoid contact with skin, eye or clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material and water from clean-up/firefighting from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Wet down with water and dike for later disposal.

Methods and Materials for Containment and Cleaning up

Avoid raising dust. Safely collect powdered material and deposit in sealed containers for disposal. Ventilate and wash area after clean-up is complete

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use. Avoid contact with skin, eye or clothing. Avoid breathing dust. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. All containers must be properly labelled. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

Storage Room Requirements

Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and strong oxidizers. Store in approved containers and protect against physical damage.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear Dust-proof goggles with side shields

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact,

chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	ACGIH TWA (ppm)	ACGIH STEL (ppm)
ETHYL ALCOHOL	1		1000	1900				1000

Chemical Name	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	ACGIH Carcinogen	WES	ACGIH_Carcinogen_Threshold - Threshold for ACGIH Carcinogens	OSHA_Carcinogen_Threshold - Thresholds for OSHA Carcinogens
ETHYL ALCOHOL	1000	1900			A3	1		

Chemical Name	ACGIH TLV Basis	ACGIH Notations	ACGIH	OSHA	OSHA Skin designation	ACGIH STEL (mg/m3)	ACGIH TWA (mg/m3)	CAN_ONsmg
ETHYL ALCOHOL	URT irr	A3	1	1				

Chemical Name	CAN_ONtmg
ETHYL ALCOHOL	

A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, irr - Irritation, URT - Upper respiratory tract

The information in this Section does not list non-hazardous components that might have relevant CAN_ONtmg, WES regulatory values, if they are present at less than 100%. Please contact manufacturer for more information.

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Density 7.27 lb/gal

VOC 0.00 g/l

Appearance Liquid

Evaporation Rate Slower than Butyl Acetate

Odor N/A

Odor Threshold N/A

Particle Size N/A

Softening Point N/A

Vapor Density Heavier than Air lb/gal

Flash Point 16.00 °C

Water Solubility	Nil
Viscosity	N/A
Molecular Formula	Mixture

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable under normal storage and handling conditions.

Conditions to Avoid

Avoid all possible sources of ignition, heat, sparks, flame, build up of static electricity and contact with incompatible materials.

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Strong bases, acids, and oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation

Based on available data, the classification criteria are not met.

Serious Eye Damage/Irritation

Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive Toxicity

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met.

Aspiration Hazard

Based on available data, the classification criteria are not met.

Acute Toxicity

Based on available data, the classification criteria are not met.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

0000064-17-5 ETHYL ALCOHOL

LC50 (mouse): Approximately 21000 ppm (4-hour exposure); cited as 39 g/m3 (4-hour exposure) (1, unconfirmed)

LD50 (oral, rat): 7060 mg/kg (41); 10600 mg/kg (41); 13660 mg/kg (37)

LD50 (oral, mouse): 3450 mg/kg (1, unconfirmed)

LD50 (oral, guinea pig): 5560 mg/kg (37)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Harmful to aquatic life with long lasting effects

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

SECTION 14) TRANSPORT INFORMATION

	U.S. DOT Information	IMDG Information	IATA Information
UN Number	UN3175	UN3175	UN3175
UN proper shipping name	Solids containing flammable liquid, n.o.s.	Solids containing flammable liquid, n.o.s.	Solids containing flammable liquid, n.o.s.
Transport Hazard class(es)	4.1	4.1	4.1
Packing group	II	II	II
Environmental hazards	No Data Available	No Data Available	No Data Available
Special precautions for user	No Data Available	No Data Available	No Data Available

Transport in bulk according to Annex II of MARPOL and the IBC code	No Data Available	No Data Available	No Data Available
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SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000064-17-5	ETHYL ALCOHOL	15 %	DSL,SARA312,VOC,IARCCarcinogen,TSCA
0000057-55-6	PROPYLENE GLYCOL	5 %	DSL,IRIS,SARA312,VOC,TSCA
0095235-30-6	PHENOL, 4-[[4-(1-METHYLETHOXY)PHENYL]SULFONYL]-	3 %	SARA312,TSCA
	MARKER COMPONENTS	77 %	

The information in this Section does not list non-hazardous components that might have relevant DSL, IARCCarcinogen, IRIS, SARA312, TSCA, VOC regulatory values, if they are present at less than 100%. Please contact manufacturer for more information.

SECTION 16) OTHER INFORMATION

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

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DISCLAIMER

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