Material Safety Data Sheet

NSI Solutions, Inc.

2 Triangle Drive PO Box 12313

Research Triangle Park, NC 27709

(800) 234-7837

Page 1 of 1 Revision Date: 06/98

Section 1 - Product Identification

| Product Name: Methanol | lol | | | | | |
|---------------------------|-----|-----------------------------------|-----------|-----------|-----------|---|
| | | Section 2 - Hazardous Ingredients | lazardous | Ingredien | 8 | |
| | | | | | | |
| Component | | CAS Number | % wt or | OSHA PEL | ACGIH TLV | ٦ |
| | | | % vol | TWA | TWA | 0 |
| Methyl alcohol | | 67-56-1 | >90 | 260 mg/m3 | 262 mg/m3 | 7 |
| Other Compounds- Refer to | 6 | N/A | <10 | | | 1 |
| 2.1.2 | | | | | | |

OSHA IARC CARCINOGEN z NIP

Section 3 - Hazards Identification

Certificate of Analysis

숙숙숙숙숙 Emergency Overview 숙숙숙숙숙

Potential Health Effects

Specific health effects data is not available for this mixture, however, data has been provided for the solvent, Methyl

All chemicals should be considered hazardous - direct physical contact should be avoided

Major Health Hazards: Respiratory tract irritation, skin irritation, eye irritation, may cause convulsions, may affect the central

Carcinogenicity: Refer to hazards listing on the Certificate of Analysis and label

Section 4 - First Aid Measures

Inhalation: When safe to enter area, remove from exposure to fresh air immediately. Use a bag valve mask or similar device to perform artificial respiration if needed. Keep warm and at rest.

Eye Contact: Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains

Skin Contact: Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes).

After first aid, get appropriate medical support immediately Ingestion: If ingestion of methanol is discovered within two hours, give syrup of ipecac. If vomiting occurs, keep head lower liters) of tap water with sodium bicarbonate (20 g/L) added. Lavage should be performed by qualified medical personnel than hips to help prevent aspiration. If person is unconscious, turn head to side. Lavage thoroughly with large amounts (2-4

Section 5 - Fire-Fighting Measures

Flash Point: 52 °F (11 °C)

Autoignition Temperature: 725 °F (385 °C) Flammability Classification: IB (OSHA)

Extinguishing Media: Dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For larger fires, use water spray fog or alcohol-resistant foam

Fire or Explosion Hazards: Dangerous fire hazard. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flash back. Vapor-air mixtures are explosive.

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode

Section 6 - Accidental Release Measures

Spill/Leak Procedures: Due to the small quantity involved, spills or leaks should not pose a significant problem. Wear personal procedures followed. Absorb small spills on paper, vermiculite or other absorbent protective equipment and protect from ignition. A leaking container may be placed in a plastic bag and normal disposal

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Use appropriate OSHA/MSMA approved safety equipment. Wear chemical goggles, face shield, gloves, and chemical resistant clothing such as a laboratory coat and/or a rubber apron to prevent contact with eyes, skin, and

Storage Requirements: Store tightly closed in a cool, dry place. Ventilation required. Avoid heat, flames, sparks, and other sources of ignition. Protect from physical damage.

Regulatory Requirements: Store and handle in accordance with all current regulations and standards

Section 8 - Exposure Controls / Personal Protection

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to

environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations conjunction with contact lenses.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Specific physical and chemical properties for this mixture have not been determined, however, data has been provided for the solvent, Methyl alcohol.

Odor Threshold: 100 ppm Appearance and Odor: Characteristic alcoholic odor. Physical State: Liquid

Freezing/Melting Point: -137 °F (-94 °C) Boiling Point: 149 °F (65 °C)

pH: Neutral Formula Weight: 32.04 Density: 0.7914

> Other Solubilities: Soluble in ether, benzene, alcohol, Water Solubility: Very soluble. organic solvents. acetone, chloroform, ethanol, ketones, and most other

Evaporation Rate: (Butyl acetate = 1) 4.6 Vapor Pressure: 97.25 mm Hg at 20 °C Viscosity: 0.59 cP @ 20 °C Vapor Density (Air=1): 1.11

Section 10 - Stability and Reactivity

Specific stability and reactivity data is not available for this mixture, however, data has been provided for the solvent, Methyl alcohol.

Chemical Incompatibilities: Oxidants (such as barium perchlorate, bromine, chlorine, hydrogen peroxide, lead perchlorate, Polymerization: Hazardous polymerization has not been reported to occur under normal temperatures and pressures Stability: Stable at room temperature in closed containers under normal storage and handling conditions cyanuric chloride, diethyl zinc, nitric acid, potassium tertbutoxide). bromide, alkyl aluminum salts, beryllium dihydride, carbon tetrachloride + metals, chloroform + heat or sodium hydroxide, perchloric acid, sodium hypochlorite); Active metals (such as potassium & magnesium); Specific chemicals (including acetyl

Conditions to Avoid: Avoid heat, flames, sparks, and other sources of ignition

Section 11- Toxicological Information

Specific toxicological data has not been determined for this mixture.

Section 12 - Ecological Information

Due to the small quantity involved, ecological hazards should not pose a significant problem.

Section 13 - Disposal Considerations

Disposal Regulatory Requirements: Subject to disposal regulations - U.S. EPA 40 CFR 262 Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 173.4):

This standard is packaged and shipped in accordance with 49 CFR 173.4: Hazardous Materials in Excepted Quantities

Section 15 - Regulatory Information

Specific regulatory information is not available for this mixture, however, data has been provided for the solvent, Methyl

EPA Regulations:
RCRA Hazardous Waste Number (40 CFR 261.33): U154
TSCA Inventory Status: Y
CERCLA Hazardous Substance (40 CFR 302.4): Y
CERCLA Reportable Quantity (RQ): 500 lbs

SARA 311/312: Reactive: N

Sudden Release: N

SARA FIRE Chemical (40 CFR 372.65): Y

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): N

OSHA Regulations:
Air Contaminant (29 CFR 1910, 1000, Table Z-1, Z-1-A): Y
OSHA Specifically Regulated Substance: N

Section 16 - Other Information

Disclaimer: The information stated in this Material Safety Data Sheet (MSDS) is believed to be correct on the date of publication and must not be considered all inclusive. This data should be used only as a guide in handling the material. NSI SOLUTIONS, INC. shall not be held liable for any damage resulting from handling or from contact with this product. This product is furnished for laboratory use ONLY! These standards may not be used as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.

COPYRIGHT: 1998 NSI SOLUTIONS, INC. ALL RIGHTS RESERVED