

MATERIAL SAFETY DATA SHEET

Republic Powdered Metals, Inc.

P. O. Box 724, 2628 Pearl Road

Medina, OH 44258

(216) 225-3192

(800) 255-1136

FAX: (216) 273-5061

NPCA - HMIS RATING METHOD

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I. PRODUCT IDENTIFICATION

MSDS # 248

TRADE NAME: GEOFLEX SOLVENT

SYNONYMS: Adhesive.

DOT HAZARD CLASSIFICATION: Flammable liquid, N.O.S., (Naphtha, Toluene) Class 3, UN1993, PGII.

II. HAZARDOUS INGREDIENTS

INGREDIENT/CAS#	OSHA PEL	ACGIH TLV	NUISANCE DUST*	LD50	LC50	SARA 302	SARA 313	WEIGHT LESS THAN
Toluene 108-88-3	100 ppm	100 ppm	No	>2000 mg/m ³		No	Yes	45%
Naphtha 64742-89-8	300 ppm		No			No	No	55%

* Only a dust hazard when removing dry coating.

III. PHYSICAL DATA

INITIAL BOILING POINT: 206°F

VAPOR DENSITY: Heavier than air

FREEZING POINT: N/A

APPEARANCE AND ODOR: Clear liquid, mild solvent odor

SPECIFIC GRAVITY (H₂O = 1): 0.81

SOLUBILITY IN WATER: Non-soluble

pH: N/A

EVAPORATION RATE: Slower than n-Butyl Acetate

VOC: 810 g/l

IV. FIRE AND EXPLOSION DATA

FLASH POINT °F (Tag Closed Cup): 35°F

FLAMMABLE LIMITS IN AIR BY VOLUME-

LOWER: 0.9%

UPPER: 7.1%

EXTINGUISHING MEDIA: Foam, alcohol foam, CO₂, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus (NIOSH-approved).

UNUSUAL FIRE & EXPLOSIVE HAZARDS: Vapor heavier than air-may accumulate in lower areas and explode. Residue in empty container may explode if ignited.

SENSITIVITY TO STATIC DISCHARGE: Possible

SENSITIVITY TO IMPACT: Possible

V. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY: Strong oxidizing agents.

CONDITIONS TO AVOID: Keep from heat, sparks and open flames.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Fire conditions may yield carbon monoxide or carbon dioxide.

VI. HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE - AVENUE OF ENTRY:

EYES: Contact with liquid or vapor may irritate eyes.

SKIN: Possible irritation and dermatitis. Prolonged contact with skin may be hazardous.

INHALATION: Possible nasal irritation, dizziness, nausea and asphyxiation..

SWALLOWING: Toxic affects possible, can cause gastrointestinal problems.

FIRST AID:

IF IN EYES: Flush eyes with copious amounts of water-get medical attention.

IF ON SKIN: Wash skin thoroughly with soap and water. Launder contaminated clothes.

IF INHALED: Move to fresh air. Administer artificial respiration if breathing has stopped. Get medical attention.

IF SWALLOWED: Do not induce vomiting. Vomit in lungs can cause chemical pneumonitis. Give water. Call a Physician.

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove source of heat, flames, sparks and confine spill. For large spill, notify authorities. Add absorbent to spill. Avoid breathing fumes. Wear appropriate respirator. Ventilate area.

WASTE DISPOSAL METHOD: Dispose at approved disposal site under RCRA regulations for hazardous waste.

PRECAUTIONS TO TAKE IN STORAGE AND HANDLING: Store in accordance with regulations for a flammable material.

OTHER PRECAUTIONS: Keep product away from heat, sparks and open flames. Keep containers closed when not in use. Use with adequate ventilation. Avoid prolonged or repeated inhalation of mist or vapor and skin contact. Dispose of in accordance with RCRA hazardous waste disposal rules. Do not use empty containers for other purposes. Residual vapors in drum may be explosive if ignited and are hazardous. Do not use welding torch cutting torch on the "EMPTY" containers. **CAUTION: KEEP OUT OF THE REACH OF CHILDREN.**

VIII. SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION: Self-contained breathing apparatus for concentrations above TLV limits.

VENTILATION: Yes, if conditions exist that permit high vapor concentrations in air.

PROTECTIVE GLOVES: Oil resistant gloves.

EYE PROTECTION: Chemical splash-proof goggles recommended.

OTHER PROTECTIVE EQUIPMENT: Protective clothing and shoes recommended.

HYGIENIC PRACTICES: After using product, wash hands with soap and water. Remove contaminated clothing, launder before reuse.

IX. DISCLAIMER

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with Republic or not. Recipients are advised to confirm in advance of need that the information is current, applicable and suitable to their circumstances.

DEFINITIONS

HMS - Hazardous Materials Identification System
DOT - Department of Transportation
PEL - Permissible Exposure Limit
LC 50 - Lethal Concentration
RCRA - Resource Conservation & Recovery Act
T/S - Trade Secret

VOC - Volatile Organic Compound
CAS - Chemical Abstracts Service
TLV - Threshold Limit Value
LD 50 - Lethal Dose
CFR - Code of Federal Regulations
N/A - Not Available

ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety & Health Administration
NPCA - National Paint & Coatings Association
SARA - Superfund Amendments & Reauthorization Act of 1980
NIOSH - National Institute for Occupational Safety & Health
N/E - Not Established.

TRADE NAME: GEOFLEX SOLVENT

PREPARED BY: Christopher J. Balsat

COMPANY: Republic Powdered Metals, Inc.

TELEPHONE: (800) 255-1136

ADDRESS: P. O. Box 724, 2628 Pearl Road, Medina, OH 44258

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