

MATERIAL SAFETY DATA SHEET
NO BAKE 5000 VM -- RELEASE AGENT

Section 1. Supplier Information

CMI Chemical Corporation
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Emergency Telephone: 1-800-424-9300

Section 2. Hazardous Ingredients

<u>Hazardous Component(s)</u>	<u>CAS #</u>	<u>PEL TWA</u>	<u>PEL Ceiling</u>	<u>TLV TWA</u>	<u>TLV STEL</u>	<u>MFG Limits</u>	<u>WGT %</u>
Solvent naphtha, light aliph.	64742-89-8	5 mg/m3	N/E	5 mg/m3*	10 mg/m	400 ppm	60-70
Heptane	142-82-5	500 ppm	N/E	400 ppm	500 ppm	N/E	20-30
Mineral spirits	8052-41-3	500 ppm	N/E	100 ppm	N/E	N/E	< 3
Aluminum	7429-90-5	5 mg/m3	15 mg/m	10 mg/m3	N/E	N/E	< 5

N/A = Not Applicable; N/E = Not Established; * = Mists; # = Skin; ' = Respirable Dust; " = Total Dust; ^ = Vapor; ** = Fumes; C = Ceiling Limit

All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory and the Canadian Domestic Substances List (DSL), or are exempt from the listing.

Section 3. Hazards Identification

Primary Routes of Entry

Inhalation: YES
Skin: YES
Ingestion: YES

Hazardous Materials Information System (HMIS) Ratings

Health: * 2
Fire: 3
Reactivity: 0
0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe
* = Chronic Hazard

Signs of Symptoms of Exposure:

INHALATION: High vapor or mist concentrations may produce nose, throat, and respiratory irritation and may cause central nervous system (CNS) depression.

SKIN: Material is mildly irritating to the skin. Prolonged or repeated contact may cause defatting and drying of the skin, resulting in irritation and dermatitis.

EYES: Minimally irritating to the eyes. High vapor concentrations may be irritating.

INGESTION: Ingestion of this product may result in vomiting. Aspiration (breathing) of vomitus into the lungs must be avoided, as even small quantities may result in aspiration pneumonitis.

Chemical Listed as Potential Carcinogens:

NTP: NO

IARC: NO

OSHA: NO

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Target Organs: Skin, respiratory system, heart, auditory, and CNS

Section 4. Emergency And First Aid Procedures

INHALATION: If adverse effects such as dizziness, nausea, or irritation are noted, move person to fresh air. If not breathing, give artificial respiration. Get medical attention!

SKIN: Immediately wash skin with large amounts of soap and water. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing.

EYES: Flush eyes immediately with water for at least 15 minutes. If irritation persists, call a physician.

INGESTION: DO NOT INDUCE VOMITING! Contact a physician immediately!

Section 5. Fire Fighting Measures

Flash Point: < 20 °F (typical) Method Used: Pensky-Martens Closed Cup

Flammable Limits in Air % by Volume: LEL: 1 UEL: 8 ; for solvent naphtha.

Extinguisher Media: Dry chemical, carbon dioxide, or foam. Use water to cool exposed containers.

Special Fire Fighting Procedures: Firefighters should wear a self-contained breathing apparatus with a full facepiece operated in pressure demand or other positive pressure mode, and protective clothing.

Unusual Fire And Explosion Hazards: In extreme fire conditions, this material may present a floating fire hazard. Concentrated vapors can be ignited by a high intensity ignition source.

Section 6. Accidental Release Measures

If material is spilled, eliminate all ignition sources. Keep people away. Recover free product. Add sand, earth or other suitable absorbent to spill area; place in closed containers for disposal. Ventilate confined spaces. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas. Continue to observe precautions for volatile, combustible vapors from absorbed material.

CERCLA (Superfund) Reportable Quantity (in lbs This material is covered by CERCLA's petroleum exclusion (40 CFR 300.5), therefore, releases are not reportable under EPA-CERCLA.

Section 7. Handling and Storage

Handling: Avoid contact with skin and eyes; wash thoroughly after handling. Avoid breathing vapor; use with adequate ventilation.

Storage: Store in area approved for flammables. Ground all containers when transferring material. Keep container closed and maintain all original markings and labels. Keep this container and vapors from this container away from heat, sparks, flame, and other ignition sources.

Other: CAUTION! Do not use cutting or welding torches on containers, even when empty. Containers, even those that have been emptied, will retain product residue and vapors. Do not reuse container without recycling or reconditioning. Handle empty containers as if they were full.

Section 8. Exposure Controls and Personal Protection

Respiratory Protection: Use NIOSH / MSHA approved respirator where high vapor or mist

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concentrations are present.

Local Exhaust: Do not use in closed or confined spaces. Open doors and/or windows. Use ventilation to maintain exposure levels below exposure limits.

Mechanical Exhaust: Mechanical ventilation should be sufficient to maintain exposure levels below exposure limits.

Protective Gloves: Wear chemical resistant gloves.

Eye Protection: Safety glasses with side shields. Do NOT wear contact lenses. Chemical goggles and/or faceshield should be worn where splashing is possible.

Other Protection: Eye wash and safety shower should be readily available. Wear a chemical resistant apron and boots where splashing is possible.

Hygienic Practices: Protective equipment and clothing should be selected, used and maintained according to applicable standards and regulations. For further information, contact the clothing or equipment manufacturer. Do not eat, drink, or smoke while using this product. Wash hands prior to eating, drinking, smoking, or using restrooms. Cleanse skin thoroughly after contact, before breaks and meals, and at the end of the work shift.

Section 9. Physical and Chemical Properties

Boiling Point: 194 °F initial

Specific Gravity (H₂O=1): 0.7 - 0.8

Vapor Pressure (mm Hg): ~ 119 @ 100 °F

Vapor Density (air=1) ~ 3.3

Solubility in Water: Negligible.

Reactivity in Water: None.

Weight per Gallon (lb/gal): 5.8 - 6.5 lbs/gal

% Volatile by Volume: 89-91%

% Solid by Weight: 9-11%

Appearance and Odor: Silver gray liquid with a solvent odor.

Theoretical VOC: 5.4 - 6.0 lbs/gal
(>0.1 mm Hg @ 20 ° C)

Analytical VOC : 5.4 - 6.0 lbs/gal
(EPA method 24)

pH: N/A ; product is solvent based.

Degree of water solubility:
Negligible = Less than 0.1%
Slight = 0.1% - 1%
Moderate = 1% - 10%
Appreciable = More than 10%
Complete = 100%

Section 10. Stability and Reactivity

Stability: Stable. Hazard Polymerization: Will not occur!

Conditions to Avoid: FLAMMABLE! Keep from heat, sparks, or open flame.

Incompatibility (Materials to Avoid): Strong oxidizing agents.

Hazardous Decomposition Products: Aluminum fume, silicon oxides, and oxides of carbon.

Section 11. Toxicological Information

Solvent naphtha, light aliphatic [CASRN 064742-89-8]

ACUTE TOXICITY

Oral LD50 (rat) > 7.1 g/kg Eye Irritation: minimal irritation [Rabbit]

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Dermal LD50 (rabbit) > 2.84 g/kg Dermal Irritation: slight irritation [Rabbit, 24 hrs]
Inhalation LD50 (rat) = 15,000 ppm, 4 hrs

Subchronic Testing: While there is no evidence that industrially acceptable levels of light hydrocarbon vapors (e.g., the occupational exposure limit) have produced cardiac effects in humans, animal studies have shown that inhalation of high levels produced cardiac sensitization. Such sensitization may cause fatal changes in heart rhythms, which was shown to be enhanced by hypoxia or the injection of adrenaline-like substances.

Neurotoxicity: Prolonged and repeated exposures to high concentrations of some volatile hydrocarbon solvents have resulted in hearing loss in rats. Solvent abusers and noise interaction with these solvents in the work environment may cause symptoms of hearing loss.

Other Testing: Kidney effects in male rats were observed in laboratory animals exposed to a similar material. Effects were consistent with male rat hyaline droplet nephropathy which is of questionable significance to human health.

Mutagenicity: Some effects to chromosomes but no mutagenic effects were observed in genotoxicity studies conducted for similar hydrocarbon solvent mixtures. The biological significance of the chromosomal findings is unknown. [18,7-18,18,7-060500]

Mineral Spirits [CASRN 008052-41-3]

ACUTE TOXICITY Oral LD50 (rat) > 5 g/kg Dermal LD50 (rat) > 2 g/kg
Inhalation LC50 (rat), 4 hr > 5500 mg/kg
Eye Irritation, Draize (rabbit) moderate irritation (500 mg /24 hr) [20,8-18,18-120197]

Section 12. Ecological Information

Section 13. Disposal Considerations

Waste Disposal Methods (Federal, State, Local):

In accordance with all federal, state and local requirements.

RCRA Hazardous Waste Number: D001

Section 14. Transport Information

Hazardous Material Description:

(Proper shipping name, hazard class, hazard ID#, packing group)

Domestic ground non-bulk: HEPTANES, 3, UN1268, PG II

Domestic ground bulk: HEPTANES, 3, UN1206, PG II

International: HEPTANES, 3, UN1206, PG II

Section 15. Regulatory Information

SARA 313 Information

This product contains the following chemical(s) above de minimis concentrations and may be subject to reporting under section 313:

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Aluminum (fume or dust), CAS# 7429-90-5, < 5%

Section 16. Other Information

This MSDS contains revisions in the following sections: New format

Prepared by: Andrew J. Thomas Chemist

Revised by: Andrew J. Thomas Chemist

The development of this Material Safety Data Sheet (MSDS) relies upon information provided to us by each of our raw material suppliers. This MSDS will be updated as changes occur to their MSDS(s).

We believe the recommendations and technical information contained herein to be accurate. However, they are given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damage, direct or indirect, as a result of their use.