MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name	**Cal-Blast™ (4132-20)**
CAS #	Mixture
Product use	Cleaner
Manufacturer	Nu-Calgon 2008 Altom Court St. Louis, MO 63146 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. Hazards Identification

Emergency overview

DANGER
HARMFUL IF INHALED.
Contents under pressure. Containers may explode when heated.
Toxic. CONTAINS MATERIAL WHICH MAY CAUSE CANCER.
MAY CAUSE ALLERGIC SKIN REACTION. Contains a potential mutagen.
CAUSES SKIN IRRITATION. CAUSES EYE IRRITATION.
CAUSES RESPIRATORY TRACT IRRITATION.

Potential short term health effects

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Eyes	May cause irritation.
Skin	Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals.
Inhalation	This product may be fatal if it is inhaled. Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
Ingestion	May cause stomach distress, nausea or vomiting.
Target organs	Eyes. Liver. Lungs. Skin. Heart. Central nervous system.
Chronic effects	Prolonged or repeated exposure can cause drying, defatting and dermatitis.
Signs and symptoms	Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms are prostration, gasping, pallor, and uncoordinated movements. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
OSHA Regulatory Status	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
Potential environmental effects	Components of this product have been identified as having potential environmental concerns.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Methylene chloride	75-09-2	60 - 100
D-Limonene	5989-27-5	1 - 5

4. First Aid Measures

First aid procedures

Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Obtain medical attention immediately.
Skin contact	Immediately flush with water. Wash with soap and water. Obtain medical attention if irritation persists.
Inhalation	If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.
Ingestion	Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician	Symptoms may be delayed.
General advice	Do not puncture or incinerate container. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children. Immediate medical attention is required.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS/OSHA criteria. Aerosol flame extension: None Containers may explode when heated.
Extinguishing media	
Suitable extinguishing media	Carbon dioxide. Dry chemical. Foam. Water.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. Cool containers with flooding quantities of water until well after fire is out.
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Chlorine gas. Phosgene.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Remove sources of ignition. Although the chance of a significant spill or leak is unlikely in aerosol containers, in the event of such an occurrence, absorb spilled material with a non-flammable absorbent such as sand or vermiculite.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. Use only with adequate ventilation. Avoid breathing vapors or mists of this product. Do not get this material in your eyes, on your skin, or on your clothing. Avoid prolonged or repeated skin contact with this material. Wash thoroughly after handling. When using do not eat or drink. Keep container tightly closed.
Storage	Keep out of reach of children. Do not store at temperatures above 49 °C (120.2°F). Keep away from heat, open flames or other sources of ignition.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
D-Limonene	**ACGIH-TLV** Not established **OSHA-PEL** Not established
Methylene chloride	**ACGIH-TLV** TWA: 50 ppm **OSHA-PEL** TWA: 25 ppm STEL: 125 ppm

Engineering controls General ventilation normally adequate. Provide adequate ventilation.

Personal protective equipment

Eye / face protection Wear safety glasses with side shields.

Hand protection Rubber gloves. Confirm with a reputable supplier first.

Skin and body protection As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands and face before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Clear.
Color	Colorless
Form	Aerosol.
Odor	Solvent
Odor threshold	Not available
Physical state	Gas
pH	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	> 1 (BuAc=1)
Flash point	Not available
Auto-ignition temperature	1032.80 °F (556 °C)
Flammability limits in air, lower, % by volume	12
Flammability limits in air, upper, % by volume	19
Vapor pressure	Not available
Vapor density	> 1
Specific gravity	1.29 - 1.33
Octanol/water coefficient	Not available
Percent volatile	100

10. Stability and Reactivity

Reactivity Reacts vigorously with alkaline material or metals.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Aerosol containers are unstable at temperatures above 49°C (120.2°F). Do not mix with other chemicals.
Incompatible materials	Caustics. Acids. Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Chlorine gas. Phosgene.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
D-Limonene	Not available
Methylene chloride	14250 mg/m3 rat

Component analysis - Oral LD50

Ingredient(s)	LD50
D-Limonene	4400 mg/kg rat; 5600 mg/kg mouse
Methylene chloride	1410 mg/kg rat

Effects of acute exposure

Eye	May cause irritation.
Skin	Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals.
Inhalation	This product may be fatal if it is inhaled. Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
Ingestion	May cause stomach distress, nausea or vomiting.
Sensitization	Non-hazardous by WHMIS/OSHA criteria. Contains a potential skin sensitizer.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	Hazardous by WHMIS/OSHA criteria. Contains a potential carcinogen.

ACGIH - Threshold Limit Values - Carcinogens

Methylene chloride	75-09-2	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC - Group 2B (Possibly Carcinogenic to Humans)

Methylene chloride	75-09-2	Monograph 71 [1999]; Supplement 7 [1987]

IARC - Group 3 (Not Classifiable)

D-Limonene	5989-27-5	Monograph 73 [1999] (overall evaluation downgraded from 2B to 3 with supporting evidence from other relevant data)

NTP (National Toxicology Program) - Report on Carcinogens - Reasonably Anticipated to be Human Carcinogens

Methylene chloride	75-09-2	Reasonably Anticipated To Be A Human Carcinogen

U.S. - California - Proposition 65 - Carcinogens List

Methylene chloride	75-09-2	carcinogen, initial date 4/1/88

Mutagenicity	Methylene chloride is considered mutagenic based on positive results obtained in mice exposed by inhalation.
Reproductive effects	Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.
Name of Toxicologically Synergistic Products	Not available

12. Ecological Information

Ecotoxicity	See below

Ecotoxicity - Freshwater Algae - Acute Toxicity Data

Methylene chloride	75-09-2	96 Hr EC50 Pseudokirchneriella subcapitata: >500 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: >500 mg/L

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

D-Limonene	5989-27-5	96 Hr LC50 Pimephales promelas: 0.619-0.796 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 35 mg/L
Methylene chloride	75-09-2	96 Hr LC50 Pimephales promelas: 140.8-277.8 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 262-855 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 193 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 193 mg/L [flow-through]

Ecotoxicity - Water Flea - Acute Toxicity Data

Methylene chloride	75-09-2	48 Hr EC50 Daphnia magna: 1532 - 1847 mg/L [Static]; 48 Hr EC50 Daphnia magna: 190 mg/L

Persistence / degradability	Not available

Bioaccumulation / accumulation	Not available
Mobility in environmental media	Not available
Environmental effects	Not available
Aquatic toxicity	Not available
Partition coefficient	Not available
Chemical fate information	Not available
Other adverse effects	Not available

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Consumer Commodity ORM-D

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

Proper shipping name	AEROSOLS, non-flammable, containing substances in Class 6.1, packing group III
Hazard class	2.2
UN number	1950
Additional information:	
Special provisions	80
Packaging exceptions	<1L - Consumer Commodity

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - CEPA - Schedule I - List of Toxic Substances

Methylene chloride	75-09-2	Present

Canada - WHMIS - Ingredient Disclosure List

D-Limonene	5989-27-5	1 %
Methylene chloride	75-09-2	0.1 %

WHMIS status	Controlled
WHMIS classification	Class A - Compressed Gas, Class D - Division 1B, 2A, 2B

WHMIS labeling

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical	Yes
US Federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Methylene chloride	75-09-2	1000 Lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Methylene chloride	75-09-2	0.1 % de minimis concentration

U.S. - CWA (Clean Water Act) - Priority Pollutants

Methylene chloride	75-09-2	Present

U.S. - CWA (Clean Water Act) - Toxic Pollutants

Methylene chloride	75-09-2	Present (listed under Halomethanes)

CERCLA (Superfund) reportable quantity

Methylene chloride: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - Yes Reactivity Hazard - No
Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	Yes
Clean Air Act (CAA)	Not available
Clean Water Act (CWA)	Not available
State regulations	WARNING: This product contains a chemical known to the State of California to cause cancer.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Methylene chloride	75-09-2	Present

U.S. - California - Proposition 65 - Carcinogens List

Methylene chloride	75-09-2	carcinogen, initial date 4/1/88

U.S. - Illinois - Toxic Air Contaminant Carcinogens

Methylene chloride	75-09-2	NTP Suspect Carcinogen; ACGIH A2 Carcinogen; IARC Group 2B Carcinogen

U.S. - Illinois - Toxic Air Contaminants

Methylene chloride	75-09-2	Present

U.S. - Louisiana - Reportable Quantity List for Pollutants

Methylene chloride	75-09-2	1000 Lb final RQ; 454 kg final RQ

U.S. - Massachusetts - Right To Know List

Methylene chloride	75-09-2	Carcinogen; Extraordinarily hazardous

U.S. - Michigan - Critical Materials List

Methylene chloride	75-09-2	10 Lb Annual usage threshold

U.S. - Minnesota - Hazardous Substance List

Methylene chloride	75-09-2	Carcinogen

U.S. - New Jersey - Right to Know Hazardous Substance List

Methylene chloride	75-09-2	sn 1255

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

Methylene chloride	75-09-2	1000 Lb RQ (air); 1 lb RQ (land/water)

U.S. - North Carolina - Control of Toxic Air Pollutants

Methylene chloride	75-09-2	0.024 mg/m3 (carcinogens); 1.7 mg/m3 (acute systemic toxicants)

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

Methylene chloride	75-09-2	Present

U.S. - Pennsylvania - RTK (Right to Know) List

Methylene chloride	75-09-2	Environmental hazard; Special hazardous substance

U.S. - Rhode Island - Hazardous Substance List

Methylene chloride	75-09-2	Toxic; Flammable

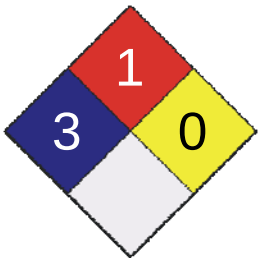
Inventory name

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0



Disclaimer

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Other information For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.