SAFETY DATA SHEET

Sid Harvey item # 4291-18 SDS # Z0354

1. Product and Company Identification

Product identifier **Aerosol Nu-Brite (4291-18)**

Other means of identification Not available

Recommended use Cleaner/Degreaser

Recommended restrictions None known.

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

Physical hazards	Flammable aerosols	Category 2
	Gases under pressure	Liquefied gas
	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 1A
	Serious eye damage/eye irritation	Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement

Flammable aerosol.
Contains gas under pressure; may explode if heated.
May be corrosive to metals.
Causes severe skin burns and eye damage.

Precautionary statement

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Keep only in original container. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
If inhaled: Remove person to fresh air and keep comfortable for breathing. Specific treatment (see this label).
Absorb spillage to prevent material damage.

Storage

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.
Store locked up.
Store in corrosive resistant container with a resistant inner liner.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information Not applicable.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Sodium hydroxide		1310-73-2	9.5

Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	2.95
Propane		74-98-6	2.05
Monoethanolamine		141-43-5	1.9

4. First Aid Measures

Inhalation
If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor/.

Skin contact
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Eye contact
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Ingestion
If swallowed: Rinse mouth. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed
Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Suitable extinguishing media
Dry chemical. Carbon dioxide. Fog.

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Special protective equipment and precautions for firefighters
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire-fighting equipment/instructions
Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. In the event of fire and/or explosion do not breathe fumes.

General fire hazards
Flammable aerosol.

Hazardous combustion products
May include and are not limited to: Oxides of nitrogen. Oxides of carbon.

Explosion data

Sensitivity to mechanical impact
Not available.

Sensitivity to static discharge
Not available.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Dike far ahead of spill for later disposal. Absorb spillage to prevent material damage. Scoop up used absorbent into drums or other appropriate container. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Avoid contact with eyes, skin and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Contents under pressure. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Keep away from heat, sparks and open flame. Avoid exposure to long periods of sunlight. Store in corrosive resistant container with a resistant inner liner. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Monoethanolamine (CAS 141-43-5)	PEL	6 mg/m3
		3 ppm
Propane (CAS 74-98-6)	PEL	1800 mg/m3
		1000 ppm
Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm
Monoethanolamine (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3
		800 ppm
Monoethanolamine (CAS 141-43-5)	STEL	15 mg/m3
		6 ppm
	TWA	8 mg/m3
		3 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3
		1000 ppm
Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical goggles are recommended.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA). In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards	Not applicable.
General hygiene considerations	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and Chemical Properties

Appearance	Compressed liquefied gas.
Physical state	Gas.
Form	Aerosol. Spray
Color	Clear Green
Odor	Caustic
Odor threshold	Not available.
pH	13.0 ± 0.5
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	Not available
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available
Evaporation rate	< 1 (Ether = 1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available
Flammability limit - upper (%)	Not available
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	481 kPa
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Auto-ignition temperature	Not available
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Heat of combustion	3.23 kJ/g

10. Stability and Reactivity

Reactivity	Strong acids.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Strong oxidizing agents. Acids. Reducing agents. Soft metals.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.

11. Toxicological Information

Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.
Information on likely routes of exposure	
Ingestion	Causes digestive tract burns.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns.

Eye contact	Causes serious eye damage.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Permanent eye damage including blindness could result. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects

Acute toxicity

Components	**Species**	**Test Results**
Butane (CAS 106-97-8)		
Acute		
Inhalation		
LC50	Mouse	680 mg/L, 2 Hours
	Rat	276000 ppm, 4 Hours
		658 mg/l/4h
Oral		
LD50	Not available	
Monoethanolamine (CAS 141-43-5)		
Acute		
Dermal		
LD50	Rabbit	1018 mg/kg
		1000 mg/kg
Inhalation		
LC50	Mouse	1210 mg/m3, 4 Hours
		484 ppm, 4 Hours
		1.2 mg/L, 4 Hours
Oral		
LD50	Guinea pig	620 mg/kg
	Mouse	1475 mg/kg
		700 mg/kg
	Rat	1970 mg/kg
		1720 mg/kg
Propane (CAS 74-98-6)		
Acute		
Inhalation		
LC50	Rat	> 1442.8 mg/L, 15 Minutes
Oral		
LD50	Not available	
Sodium hydroxide (CAS 1310-73-2)		
Acute		
Dermal		
LD50	Rabbit	1350 mg/kg
Inhalation		
LC50	Not available	
Oral		
LD50	Not available	

Skin corrosion/irritation	Causes severe skin burns and eye damage.
Exposure minutes	Not available.
Erythema value	Not available.
Oedema value	Not available.
Serious eye damage/eye irritation	Causes serious eye damage.
Corneal opacity value	Not available.
Iris lesion value	Not available.
Conjunctival reddening value	Not available.

Conjunctival oedema value	Not available.
Recover days	Not available.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, NTP, or OSHA.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Teratogenicity	Not available.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not likely, due to the form of the product.
Chronic effects	Prolonged inhalation may be harmful. May be harmful if absorbed through skin.
Further information	Not available.
Name of Toxicologically Synergistic Products	Not available.

12. Ecological Information

Ecotoxicity See below

Components		Species	Test Results
Monoethanolamine (CAS 141-43-5)			
Algae	IC50	Algae	15 mg/L, 72 Hours
Crustacea	EC50	Daphnia	65 mg/L, 48 Hours
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	114 - 196 mg/L, 96 hours
Sodium hydroxide (CAS 1310-73-2)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	34.59 - 47.13 mg/L, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/L, 96 hours

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Mobility in general	Not available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport Information

General Canada: TDG Proof of Classification: In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue. If applicable, the technical name and the classification of the product will appear below.

U.S. Department of Transportation (DOT)

Basic shipping requirements:

Proper shipping name	LTD QTY
Hazard class	Limited Quantity - US

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN1950
Proper shipping name	AEROSOLS, non-flammable, containing substances in Class 8, packing group II
Hazard class	Limited Quantity - Canada
Special provisions	80

IATA/ICAO (Air)

Basic shipping requirements:

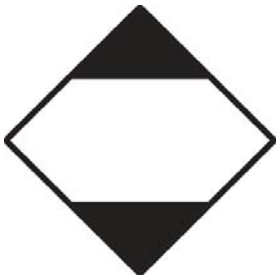
UN number	UN1950
Proper shipping name	Aerosols, non-flammable, containing substances in Class 8, Packing Group II
Hazard class	2.2
Subsidiary hazard class	8
ERG code	2C

IMDG (Marine Transport)

Basic shipping requirements:

UN number	UN1950
Proper shipping name	AEROSOLS
Hazard class	Limited Quantity - US

DOT; IMDG; TDG



IATA

15. Regulatory Information

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

Canada DSL Challenge Substances: Listed substance

Butane (CAS 106-97-8)	Listed.

Canada NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number

Butane (CAS 106-97-8)	1 TONNES
Propane (CAS 74-98-6)	1 TONNES

Canada WHMIS Ingredient Disclosure: Threshold limits

Butane (CAS 106-97-8)	1 %
Monoethanolamine (CAS 141-43-5)	1 %
Sodium hydroxide (CAS 1310-73-2)	1 %

WHMIS status Controlled

WHMIS classification Class A - Compressed Gas, Class B - Division 5 - Flammable Aerosol, Class E - Corrosive Material

WHMIS labeling

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

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US CWA Section 311 Hazardous Substances: Listed substance

Sodium hydroxide (CAS 1310-73-2)	Listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Butane (CAS 106-97-8)	Listed.
Propane (CAS 74-98-6)	Listed.
Sodium hydroxide (CAS 1310-73-2)	Listed.

US CAA Section 111 Volatile Organic Compounds: Listed substance

Monoethanolamine (CAS 141-43-5)	Listed.

US CAA Section 112(r) Accidental Release Prevention - Regulated Flammable Substance: Listed substance

Butane (CAS 106-97-8)	Regulated flammable substance.
Propane (CAS 74-98-6)	Regulated flammable substance.

US CAA Section 112(r) Accidental Release Prevention: Threshold quantity

Butane (CAS 106-97-8)	10000 LBS
Propane (CAS 74-98-6)	10000 LBS

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (CAS 106-97-8)	Listed.
Propane (CAS 74-98-6)	Listed.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

US CAA Section 612 SNAP Program: Listed substance

Butane (CAS 106-97-8)	Listed.
Propane (CAS 74-98-6)	Listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - Yes
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130) Hazardous substance

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Hazardous Substances (Director's): Listed substance

Butane (CAS 106-97-8)	Listed.
Monoethanolamine (CAS 141-43-5)	Listed.
Sodium hydroxide (CAS 1310-73-2)	Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US - Illinois Chemical Safety Act: Listed substance

Butane (CAS 106-97-8)	Listed.

Propane (CAS 74-98-6) Listed.
Sodium hydroxide (CAS 1310-73-2) Listed.

US - Louisiana Spill Reporting: Listed substance

Butane (CAS 106-97-8) Listed.
Propane (CAS 74-98-6) Listed.
Sodium hydroxide (CAS 1310-73-2) Listed.

US - Minnesota Haz Subs: Listed substance

Butane (CAS 106-97-8) Listed.
Monoethanolamine (CAS 141-43-5) Listed.
Propane (CAS 74-98-6) Listed.
Sodium hydroxide (CAS 1310-73-2) Listed.

US - New Jersey RTK - Substances: Listed substance

Butane (CAS 106-97-8) Listed.
Monoethanolamine (CAS 141-43-5) Listed.
Propane (CAS 74-98-6) Listed.
Sodium hydroxide (CAS 1310-73-2) Listed.

US - New York Release Reporting: Hazardous Substances: Listed substance

Sodium hydroxide (CAS 1310-73-2) Listed.

US - Texas Effects Screening Levels: Listed substance

Butane (CAS 106-97-8) Listed.
Monoethanolamine (CAS 141-43-5) Listed.
Propane (CAS 74-98-6) Listed.
Sodium hydroxide (CAS 1310-73-2) Listed.

US. Massachusetts RTK - Substance List

Butane (CAS 106-97-8) Listed.
Monoethanolamine (CAS 141-43-5) Listed.
Propane (CAS 74-98-6) Listed.
Sodium hydroxide (CAS 1310-73-2) Listed.

US. Pennsylvania RTK - Hazardous Substances

Butane (CAS 106-97-8) Listed.
Monoethanolamine (CAS 141-43-5) Listed.
Propane (CAS 74-98-6) Listed.
Sodium hydroxide (CAS 1310-73-2) Listed.

US. Rhode Island RTK

Butane (CAS 106-97-8) Listed.
Propane (CAS 74-98-6) Listed.
Sodium hydroxide (CAS 1310-73-2) Listed.

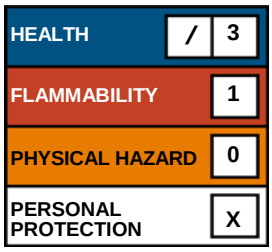
Inventory status

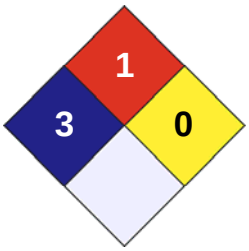
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





Disclaimer The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date 18-September-2015

Effective date 18-September-2015

Expiry date 18-September-2018

Further information	For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.
Prepared by	Nu-Calgon Technical Service Phone: (314) 469-7000
Other information	This Safety Data Sheet was prepared to comply with the current OSHA Hazard Communication Standard (HCS) adoption of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). This SDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.

MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Name	Phone Number			CHEMTREC
Nu-Calgon Wholesaler, Inc.	(314) 469-7000 / (800) 554-5499			(800) 424-9300
Street Address	**City**	**State**	**Postal Code**	**Last Update**
2008 Altom Court	St. Louis	MO	63146-4151	2/1/07
Product Name	**Product Number**	**Product Use**		**EPA Registration #**
Aerosol Nu-Brite	4291-18	Alkaline cleaner/degreaser		N/A

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	% By Wt.	CAS Number	TLV	PEL
CAUSTIC SODA 50%	9.69%	1310-73-2	No Data.	No Data.
SODIUM CHLORIDE	0.19%	7647-14-5	No Data.	No Data.
MONOETHANOLAMINE	1.64%	141-43-5	No Data.	No Data.
ORGANIC ACID	0.95%	526-95-4	No Data.	No Data.
BUTANE	2.95%	106-97-8	No Data.	No Data.
PROPANE	2.05%	74-98-6	No Data.	No Data.

SECTION 3 – HAZARD IDENTIFICATION

Emergency Overview: No Data.

Potential Health Effects

Eyes: CAN CAUSE EYE IRRITATION.

Skin: SLIGHT SKIN IRRITATION, CAN CAUSE DERMATITIS.

Ingestion: MAY CAUSE CHEMICAL PNEUMONIA IF ASPIRATED INTO LUNG.

Inhalation: SHORTNESS OF BREATH, DIZZINESS AND LIGHTHEADEDNESS.

Chronic Exposure: PROLONGED EXPOSURE ABOVE THE OSHA PERMISSIBLE EXPOSURE LIMITS (PEL) MAY RESULT IN KIDNEY AND LIVER DAMAGE

Carcinogenicity: NOT DETERMINED

Medical Conditions Aggravated be Exposure: NONE RECOGNIZED

SECTION 4 – FIRST AID MEASURES

Eyes: FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 20 MINUTES. LIFTING UPPER AND LOWER LIDS OCCASIONALLY, GET MEDICAL ATTENTION

Skin: THOROUGHLY WASH EXPOSED SKIN WITH SOAP AND WATER.

Ingestion: DO NOT INDUCE VOMITTING. IMMEDIATELY DRINK TWO GLASSES OF WATER. NEVER GIVE ANYTHING TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION,

Inhalation: REMOVE INDIVIDUAL TO FRESH AIR. GIVE OXYGEN IF BREATHING IS LABORED. IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. KEEP PERSON WARM, QUIET AND SEEK MEDICAL ATTENTION.

SECTION 5 – FIREFIGHTING MEASURES

Flash Point: N/D°C/N/D°F

Autoignition Temp: N/D°C/N/D°F

Hazardous Products of Combustion: BURNING CAN PRODUCE CARBON MONOXIDE AND/OR CARBON DIOXIDE AND TRACES OF PHOSGENE GAS

Flammable Limits in Air: No Data.

Extinguishing Media: WATER FOG OR FINE SPRAY. CARBON DIOXIDE, DRY CHEMICAL, FOAM, ALCOHOL RESISTANT FOAMS (ATC TYPE) ARE PREFERRED IF AVAILABLE. GENERAL PURPOSE SYNTHETIC FOAMS (INCLUDING AFFF) OR PROTEIN FOAMS MAY FUNCTION, BUT MUCH LESS EFFECTIVELY.

Fire and Explosion Hazards: MATERIAL IS HIGHLY VOLATILE AND READILY GIVES OFF VAPORS WHICH MAY TRAVEL ALONG THE GROUND AND IGNITED BY PILOT LIGHTS, FLAMES, SPARKS, HEATERS, SMOKING, ELECTRIC MOTORS, STATIC DISCHARGES OR OTHER IGNITION SOURCE DISTANT FROM THE HANDLING POINT.

Special Firefighting Procedures: KEEP PEOPLE AWAY. ISOLATE FIRE AREA AND DENY UNNECESSARY ENTRY. BURNING LIQUIDS MAY BE MOVED BY FLUSHING WITH WATER TO PROTECT PERSONNEL AND MINIMIZE PROPERTY DAMAGE. BURNING LIQUIDS MAY BE EXTINGUISHED BY DILUTION WITH WATER. DO NOT USE DIRECT WATER STREAM, MAY SPREAD FIRE. WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND PROTECTIVE FIRE FIGHTING CLOTHING. IF PROTECTIVE EQUIPMENT IS NOT AVAILABLE, FIGHT FIRE FROM A PROTECTED LOCATION OR SAFE DISTANCE.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak: ISOLATE SPILL OR LEAK AREA IMMEDIATELY. KEEP UNAUTHORIZED PERSONNEL AWAY. VENTILATE AREA AND ELIMINATE ALL IGNITION SOURCES. SMALL SPILLS: CLEAN UP WITH INERT MATERIALS AND DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. LARGE SPILLS: DIKE AHEAD OF LIQUID SPILL FOR LATER DISPOSAL. DO NOT DISCHARGE EFFLUENT OF THIS PRODUCT INTO LAKES, STREAMS, PONDS OR OTHER WATERS UNLESS IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures and Equipment: KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS AND OPEN FLAMES. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT.

Storage Requirements: DO NOT STORE IN DIRECT SUNLIGHT, NEAR OPEN FLAMES/SPARKS OR AT TEMPERATURES EXCEEDING 120F

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: RESPIRATORY PROTECTION, MAY BE REQUIRED IF AIRBORNE CONCENTRATIONS CANNOT BE REDUCED TO BELOW THE ESTABLISHED EXPOSURE LIMITS.

Eye Protection: CHEMICAL SPLASH GOGGLES OR FACE SHIELD IS RECOMMENDED.

Protective Clothing: PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT AS LISTED IN 29CFR1910.132&133. ALL CONTAMINATED PERSONAL PROTECTIVE EQUIPMENT SHOULD BE COLLECTED AND DISPOSED OF ACCORDING TO ALL LOCAL, STATE AND FEDERAL REGULATIONS. APPROPRIATE CHEMICAL RESISTANT GLOVES SHOULD ALWAYS BE WORN.

Exposure Guidelines: CAUSTIC SODA 50% 2MG/M3; MONOETHANOLAMINE 3ppm; BUTANE 800 ppm TWA; PROPANE 1000 ppm PEL 2100 ppm IDLH; ORGANIC ACID None Established; SODIUM CHLORIDE None Established.

Specific Engineering Controls (such as ventilation, enclosed process): PROVIDE GENERAL AND/OR LOCAL EXHAUST VENTILATION TO CONTROL AIRBORNE LEVELS BELOW THE EXPOSURE GUIDELINES GENERAL VENTILATION MAY BE ADEQUATE FOR MAINTAINING AIRBORNE CONCENTRATIONS BELOW ESTABLISHED EXPOSURE LIMITS. IF GENERAL VENTILATION IS INADEQUATE, SUPPLEMENTAL LOCAL EXHAUST MAY BE REQUIRED. WHERE EXPLOSIVE MIXTURE MAY BE PRESENT, SYSTEMS SAFE FOR SUCH LOCATIONS SHOULD BE USED.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: AEROSOL SPRAY	**Freezing Point:** N/D°C/N/D°F	**% Volatile by Weight:** N/D%
Color: N/D	**Vapor Density [air =1]:** N/D	**Evaporation Rate:** IS SLOWER THAN ETHER
Odor: N/D	**Vapor Pressure:** N/D	**Specific Gravity:** N/D
Boiling Point: N/D°C/N/D°F	**Solubility in Water:** N/D	**pH (concentrate):** N/D

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: STABLE UNDER NORMAL CONDITIONS. KEEP AWAY FROM HEAT, SPARKS OR OPEN FLAMES.

Hazardous Polymerization: Will not occur.

Incompatibilities: STRONG OXIDIZING AGENTS, STRONG ALKALIES AND STRONG MINERAL ACIDS.

Reactive Conditions to avoid: CAN REACT WITH REACTIVE METALS SUCH AS IRON, STEEL, STRONG ALKALIES, ALUMINUM, ZINC, MAGNESIUM, COPPER, ETC. TO RELEASE HYDROGEN GAS WHICH CAN FORM EXPLOSIVE MIXTURE WITH AIR.

Decomposition Products: CARBON DIOXIDE AND CARBON MONOXIDE

SECTION 11 – TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #	LD 50 of Ingredient (Specify Species)	LC50 of Ingredient (Specify Species)
NOT DETERMINED				

SECTION 12 – ECOLOGICAL INFORMATION

Hazardous Ingredients	Aquatic Toxicity Data
NOT DETERMINED	

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: EMPTY AEROSOL CONTAINERS MAY BE DISPOSED OF THROUGH NORMAL CHANNELS. FULL OR PARTIALLY FULL CONTAINERS ARE CONSIDERED HAZARDOUS WASTE AND MUST BE DISPOSED OF ACCORDINGLY.

SECTION 14 – TRANSPORTATION INFORMATION

Special Shipping Information: FOR DOT REGULATORY INFORMATION, IF REQUIRED, CONSULT TRANSPORTATION REGULATIONS OR PRODUCT SHIPPING PAPERS.

Purview	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT (Land)	CONSUMER COMMODITY	No Data.	No Data.	ORM-D
IMO (Water)	No Data.			
ICAO (Air)	No Data.			

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification: (Workplace Hazardous Material Information System)	No Data.
SARA Title III: (Superfund Amendments & Reauthorization Act)	No Data.
OSHA: (Occupational Safety & Health Administration)	No Data.
TSCA: (Toxic Substance Control Act)	ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY
VOC: (volatile Organic Compounds)	No Data.
CPR: (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
EINECS: (European Inventory of Existing Commercial Chemical Substances)	No Data.
DSL / NDSL: (Canadian Domestic Substance List)(Non-Domestic Substance List)	No Data.
CERCLA: (Comprehensive Response Compensation & Liability Act)	No Data.
IDL: (Canadian Ingredient Disclosure List)	No Data.
NFPA (HMIS) Rating: (Hazardous Materials Identification System)	Health Hazard.....: 4 Fire Hazard.....: 3 Reactivity.....: 0 Personal Protection...: X

SECTION 16 – OTHER INFORMATION

INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING VAPORS AND INHALING CONTENTS CAN BE HARMFUL OR FATAL