Nu-Calgon

10/24/16

SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	**Break-N-Lube (4128-03)**
Other means of identification	Not available
Recommended use	Lubricant
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)

Nu-Calgon Brake N Lube

2. Hazards Identification

Physical hazards	Flammable aerosols	Category 1
	Gases under pressure	Liquefied gas
Health hazards	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 1
	Aspiration hazard	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure.
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. Do not breathe gas. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
Response	If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If exposed: Call a poison center/doctor/. Specific treatment (see this label).
Storage	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
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	%
Distillates (petroleum), light hydrotreated		64742-47-8	60 - 100

Chemical name	Common name and synonyms	CAS number	%
Distillates (petroleum), hydrotreated light naphthenic		64742-53-6	5 - 10
Carbon dioxide		124-38-9	1 - 5
Solvent naphtha (petroleum), medium aliphatic		64742-88-7	1 - 5
Distillates (petroleum), solvent-refined heavy paraffinic		64741-88-4	0.1-1

Composition comments US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

4. First Aid Measures

Inhalation If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

Skin contact Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

Eye contact Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

Ingestion If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed May cause drowsiness or dizziness. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. If exposed or concerned: Get medical advice/attention. Avoid contact with eyes and skin. Keep out of reach of children. Do not puncture or incinerate container. Do not store at temperatures above 49°C. Keep away from sources of ignition. No smoking.

5. Fire Fighting Measures

Suitable extinguishing media Powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

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. Firefighters should wear a self-contained breathing apparatus.

Special protective equipment and precautions for firefighters Firefighters should wear full protective clothing including self contained breathing apparatus.

Fire-fighting equipment/instructions In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. Cool containers with flooding quantities of water until well after fire is out. 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. In the event of fire and/or explosion do not breathe fumes.

General fire hazards Extremely flammable aerosol.

Hazardous combustion products May include and are not limited to: 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 personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid breathing gas. 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. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. 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. Use water spray to reduce vapors or divert vapor cloud drift. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water. 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. 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. Do not re-use empty containers. Use only with adequate ventilation. Do not breathe gas. Avoid contact with eyes, skin and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using do not eat or drink. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. Pressurized container: Do not pierce or burn, even after use. Keep container tightly closed.
Conditions for safe storage, including any incompatibilities	Store locked up. 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. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Do not store at temperatures above 49 °C (120.2°F).

8. Exposure Controls/Personal Protection

Occupational exposure limits

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

Components	Type	Value	Form
Carbon dioxide (CAS 124-38-9)	PEL	9000 mg/m3	
		5000 ppm	
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	PEL	5 mg/m3	Mist.
		2000 mg/m3	
		500 ppm	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Carbon dioxide (CAS 124-38-9)	STEL	30000 ppm	
	TWA	5000 ppm	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	TWA	5 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3	
		30000 ppm	
	TWA	9000 mg/m3	
		5000 ppm	
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	STEL	10 mg/m3	Mist.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
	TWA	5 mg/m3	Mist.
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	TWA	100 mg/m3	
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

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 Wear safety glasses with side shields.

Skin protection

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

Other Wear appropriate chemical resistant clothing. As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

Thermal hazards Not applicable.

General hygiene considerations When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Opaque
Physical state	Gas.
Form	Aerosol
Color	Hazy Tan
Odor	Solvent
Odor threshold	Not available.
pH	Not applicable
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	0.810 g/mL
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Not available.
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	95 - 105 psig @ 70°F
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Negligible
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	< 20.5 mm²/s @ 40°C

Other information

Flame projection	> 36 in
Flammability (flash back)	Yes
Heat of combustion	45.4 kJ/g
VOC (Weight %)	3.1% (US Federal), 3.1% (CARB/OTC/LADCO)

10. Stability and Reactivity

Reactivity	Strong oxidizing agents.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals. Aerosol containers are unstable at temperatures above 49°C (120.2°F).
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Information on likely routes of exposure

Ingestion	May be fatal if swallowed and enters airways.
Inhalation	May be fatal if swallowed and enters airways. Prolonged inhalation may be harmful. May cause damage to organs by inhalation. Narcotic effects.
Skin contact	Prolonged skin contact may cause skin irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. Narcotic effects.

Components	**Species**	**Test Results**
Carbon dioxide (CAS 124-38-9)		
Acute		
Inhalation		
LC50	Not available	
Oral		
LD50	Not available	
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	2.2 mg/l/4h
Oral		
LD50	Rat	> 5000 mg/kg
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 2.8 mg/l/4h
Oral		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)		
Acute		
Dermal		
LD50	Rabbit	2000 mg/kg
Inhalation		
LC50	Rat	>= 2.2 mg/l/4h
Oral		
LD50	Rat	5000 mg/kg
Solvent naphtha (petroleum), medium aliphatic (CAS 64742-88-7)		
Acute		
Dermal		
LD50	Rabbit	3000 mg/kg
Inhalation		
LC50	Rat	5.3 mg/l/4h
Oral		
LD50	Rat	5000 mg/kg

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Exposure minutes	Not available.
Erythema value	Not available.
Oedema value	Not available.
Serious eye damage/eye irritation	May cause irritation.
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	Prolonged or repeated exposure can cause drying, defatting and dermatitis.
Germ cell mutagenicity	Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	The finished product is not expected to have chronic health effects. Contains < 3% (w/w) DMSO-extract

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Benzene (CAS 71-43-2)	Carcinogenic.
Benzene, ethyl- (CAS 100-41-4)	Carcinogenic.
Naphthalene (CAS 91-20-3)	Carcinogenic.

Reproductive toxicity	Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.
Specific target organ toxicity - single exposure	Narcotic effects.
Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Causes damage to organs through prolonged or repeated exposure.
Further information	Not available.
Name of Toxicologically Synergistic Products	Not available.

12. Ecological Information

Ecotoxicity	See below

Components		Species	Test Results
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)			
Crustacea	EC50	Daphnia	1000 mg/L, 48 Hours
Solvent naphtha (petroleum), medium aliphatic (CAS 64742-88-7)			
Crustacea	EC50	Daphnia	100 mg/L, 48 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	Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. This material and its container must be disposed of as hazardous waste. 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	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

U.S. Department of Transportation (DOT)

Basic shipping requirements:

UN number	UN1950
Proper shipping name	Aerosols, flammable, (each not exceeding 1 L capacity)
Hazard class	Limited Quantity - US

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN1950
Proper shipping name	AEROSOLS, flammable
Hazard class	Limited Quantity - Canada

IATA/ICAO (Air)

Basic shipping requirements:

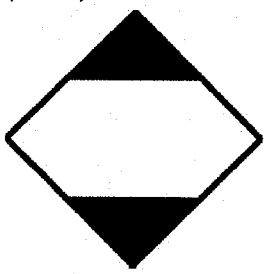
UN number	UN1950
Proper shipping name	Aerosols, flammable
Hazard class	Limited Quantity - IATA

IMDG (Marine Transport)

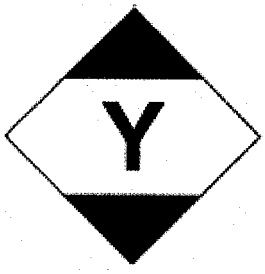
Basic shipping requirements:

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

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 CEPA Schedule I: Listed substance

Carbon dioxide (CAS 124-38-9)	Listed.

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

Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	1 TONNES
Solvent naphtha (petroleum), medium aliphatic (CAS 64742-88-7)	1 TONNES

Canada WHMIS Ingredient Disclosure: Threshold limits

Carbon dioxide (CAS 124-38-9)	1 %
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	1 %
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	1 %

WHMIS status Controlled

WHMIS classification Class A - Compressed Gas, Class B - Division 5 - Flammable Aerosol, Class D - Division 2B

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.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US – CAA Mandatory Reporting of GHGs: Global warming potential (100 year)

Carbon dioxide (CAS 124-38-9)	1

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

Not regulated.

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

Not regulated.

US CAA Section 612 SNAP Program: Listed substance

Carbon dioxide (CAS 124-38-9)	Listed.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	Listed.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	Listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes 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

Safe Drinking Water Act (SDWA)	Not regulated.
Food and Drug Administration (FDA)	Not regulated.

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

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

Carbon dioxide (CAS 124-38-9)	Listed.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	Listed.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	Listed.

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

Benzene (CAS 71-43-2)	Listed.
Benzene, ethyl- (CAS 100-41-4)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Toluene (CAS 108-88-3)	Listed.

US - Minnesota Haz Subs: Listed substance

Carbon dioxide (CAS 124-38-9)	Listed.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	Listed.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	Listed.

US - New Jersey RTK - Substances: Listed substance

Carbon dioxide (CAS 124-38-9)	Listed.

US - Texas Effects Screening Levels: Listed substance

Carbon dioxide (CAS 124-38-9)	Listed.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	Listed.
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	Listed.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	Listed.
Solvent naphtha (petroleum), medium aliphatic (CAS 64742-88-7)	Listed.

US. Massachusetts RTK - Substance List

Carbon dioxide (CAS 124-38-9)	Listed.
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	Listed.
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	Listed.
Distillates (petroleum), solvent-refined heavy paraffinic (CAS 64741-88-4)	Listed.

US. Pennsylvania RTK - Hazardous Substances

Carbon dioxide (CAS 124-38-9)	Listed.
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	Listed.

US. Rhode Island RTK
Not regulated.

Inventory status

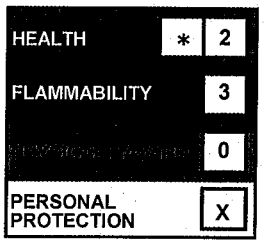
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes

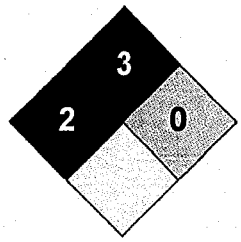
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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.

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Effective date 31-March-2015

Expiry date 31-March-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).