

SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	Nu-Kill II® Wasp & Hornet Killer (4292-75)
Other means of identification	Not available
Recommended use	Pesticide
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	Nu-Calgon
Address	2008 Altom Court St. Louis, MO 63146 United States
Telephone	314-469-7000 / 800-554-5499
E-mail	info@nucalgon.com
Emergency phone number	1-800-424-9300 (CHEMTREC)

2. Hazards Identification

Physical hazards	Flammable aerosols	Category 2
	Gases under pressure	Liquefied gas
Health hazards	Sensitization, skin	Category 1
	Reproductive toxicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	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 fatal if swallowed and enters airways.
 May cause an allergic skin reaction.
 May cause drowsiness or dizziness.
 Suspected of damaging fertility or the unborn child.

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. Avoid breathing mist or vapor. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting.
 If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see this label). Wash contaminated clothing before reuse.
 If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
 If exposed or concerned: Get medical advice/attention.

Storage

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Store locked up. Keep container tightly closed.

Disposal

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

Hazard(s) not otherwise classified (HNO C)

None known.

Supplemental information

This is a registered EPA product. The product labeling is in compliance with EPA regulations and guidelines.

3. Composition/Information on Ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates (petroleum), light hydrotreated		64742-47-8	90-100
Carbon dioxide		124-38-9	1-5
Permethrin		52645-53-1	0.1-1
Piperonyl butoxide, technical		51-03-6	0.1-1
Tetramethrin		7696-12-0	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	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Skin contact	If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.
Eye contact	If in eyes, 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 eye. Call a poison control center or doctor for treatment advice.
Ingestion	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
Most important symptoms/effects, acute and delayed	May cause an allergic skin reaction. Dermatitis. Rash. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. Contains petroleum distillate - vomiting may cause aspiration pneumonia.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. Fire Fighting Measures

Suitable extinguishing media	Alcohol resistant foam. Carbon dioxide. Dry chemical.
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.
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	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. 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. 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	Flammable aerosol.

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. Avoid inhalation of vapors or mists. 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.

Large Spills: Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Use water spray to reduce vapors or divert vapor cloud drift. Scoop up used absorbent into drums or other appropriate container. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. All equipment used when handling the product must be grounded. Avoid breathing mist or vapor. Avoid prolonged or repeated contact with skin. Avoid contact during pregnancy/while nursing. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use personal protective equipment as required. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.

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. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. 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). Do not contaminate water, food or feed by storage or disposal.

8. Exposure Controls/Personal Protection

Occupational exposure limits

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

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	PEL	9000 mg/m3
		5000 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3
		30000 ppm
		9000 mg/m3 5000 ppm
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)	TWA	100 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	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. 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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and Chemical Properties

Appearance	Clear
Physical state	Liquid.
Form	Aerosol. Liquefied gas.
Color	Colorless to light yellow
Odor	Solvent
Odor threshold	Not available.
pH	Not available.
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	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	80 - 90 hPa @ 21°C
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Insoluble
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Heat of combustion	45.66 kJ/g
VOC (Weight %)	0.2 (US Federal), 0.2 (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	Material is stable under normal conditions.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Information on likely routes of exposure

Ingestion	May be fatal if swallowed and enters airways.
Inhalation	May be fatal if swallowed and enters airways. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics May cause an allergic skin reaction. Dermatitis. Rash. 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. May cause an allergic skin reaction.

Components	Species	Test Results
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Carbon dioxide (CAS 124-38-9)

Acute

Inhalation

LC50

Not available

Oral

LD50

Not available

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

Permethrin (CAS 52645-53-1)

Acute

Dermal

LD50

Mouse

> 2500 mg/kg

Rabbit

> 2000 mg/kg

Rat

2500 mg/kg

Inhalation

LC50

Rat

2.3 mg/l/4h

Oral

LD50

Chicken

> 3000 mg/kg

Guinea pig

> 4000 mg/kg

Hen

> 1500 mg/kg

Mouse

250 - 500 mg/kg

Rabbit

> 4000 mg/kg

Rat

410 mg/kg

Piperonyl butoxide, technical (CAS 51-03-6)

Acute

Dermal

LD50

Rabbit

200 mg/kg

Inhalation

LC50

Rat

5.9 mg/l/4h

Components	Species	Test Results
<i>Oral</i> LD50	Cat	> 7500 mg/kg
	Dog	> 7500 mg/kg
	Mouse	2600 mg/kg
	Rabbit	2650 mg/kg
	Rat	6150 mg/kg
Tetramethrin (CAS 7696-12-0)		
Acute		
<i>Dermal</i> LD50	Mouse	> 1500 mg/kg
	Rat	> 1000 mg/kg
<i>Inhalation</i> LC50	Rat	> 2.7 mg/L, 3 Hours
<i>Oral</i> LD50	Albino rat	> 4640 mg/kg
	Mouse	1040 mg/kg
	Rat	4600 mg/kg
<i>Other</i> LD50	Mouse	527 mg/kg
	Rat	548 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	Direct contact with eyes may cause temporary 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	May cause an allergic skin reaction.	
Germ cell 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, ACGIH, NTP, or OSHA.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Permethrin (CAS 52645-53-1)	3 Not classifiable as to carcinogenicity to humans.	
Piperonyl butoxide, technical (CAS 51-03-6)	3 Not classifiable as to carcinogenicity to humans.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
Reproductive toxicity	Suspected of damaging fertility or the unborn child.	
Specific target organ toxicity - single exposure	Narcotic effects.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Chronic effects	Prolonged inhalation may be harmful.	
Further information	Not available.	

12. Ecological Information

Ecotoxicity	This product is extremely toxic to aquatic organisms, including fish and invertebrates. Do not apply directly to or near water.		
Components	Species		Test Results
Distillates (petroleum), light hydrotreated (CAS 64742-47-8)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/L, 96 hours
Permethrin (CAS 52645-53-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.001 - 0.002 mg/L, 48 hours
Fish	LC50	Apache trout (Oncorhynchus gilae apache)	0.001 - 0.002 mg/L, 96 hours
Piperonyl butoxide, technical (CAS 51-03-6)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.003 - 0.004 mg/L, 96 hours
Tetramethrin (CAS 7696-12-0)			
Aquatic			
Fish	LC50	Carp (Cyprinus carpio)	0.095 - 0.16 mg/L, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available.		
Partition coefficient n-octanol / water (log Kow)			
Permethrin		6.5	
Piperonyl butoxide, technical		4.75	
Tetramethrin		4.73	
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.
	IF EMPTY: Place in trash or offer for recycling if available. IF PARTLY FILLED: Call your local waste agency for disposal instructions.
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:

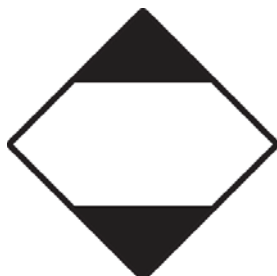
UN number	UN1950
Proper shipping name	Aerosols, flammable, (each not exceeding 1 L capacity), MARINE POLLUTANT
Hazard class	Limited Quantity - US
Marine pollutant	Yes
Special provisions	N82
Packaging exceptions	306

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, MARINE POLLUTANT
Hazard class	Limited Quantity - IMDG
Marine pollutant	Yes

DOT; IMDG**IATA**

15. Regulatory Information

US federal regulations

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

EPA Reg. # 10807-196-65516

PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS.
Causes moderate eye irritation. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
PHYSICAL OR CHEMICAL HAZARD: Contents under pressure. Keep away from heat, spark and open flame. Do not puncture. Exposure to temperatures above 130°F may cause bursting.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not 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
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SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

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

Not regulated.

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

Not regulated.

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

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

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

Not listed.

US - Minnesota Haz Subs: Listed substance

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

US - New Jersey RTK - Substances: Listed substance

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

Permethrin (CAS 52645-53-1) Listed.

Piperonyl butoxide, technical (CAS 51-03-6) Listed.

Tetramethrin (CAS 7696-12-0) Listed.

US - Texas Effects Screening Levels: Listed substance

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

Distillates (petroleum), light hydrotreated (CAS 64742-47-8) Listed.

Permethrin (CAS 52645-53-1) Listed.

US. Massachusetts RTK - Substance List

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

Distillates (petroleum), light hydrotreated (CAS 64742-47-8) Listed.

Permethrin (CAS 52645-53-1) 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

Permethrin (CAS 52645-53-1) Listed.

Piperonyl butoxide, technical (CAS 51-03-6) Listed.

Tetramethrin (CAS 7696-12-0) Listed.

Country(s) or region

Inventory name

On inventory (yes/no)*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

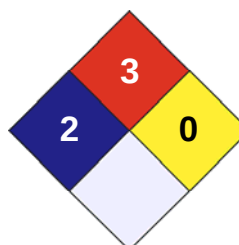
No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	*	2
FLAMMABILITY		3
PHYSICAL HAZARD		0
PERSONAL PROTECTION		X



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	23-October-2015
Further information	For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.
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).
Prepared by	Nu-Calgon Technical Service Phone: (314) 469-7000