SAFETY DATA SHEET



1. Product and Company Identification

Product identifier Spray-n-Bond LV (4369-85)

Other means of identification Not available Adhesive. Recommended use None known. Recommended restrictions Nu-Calgon Manufacturer information

> 2611 Schuetz Road St. Louis, MO 63043 US

Phone: 314-469-7000 / 800-554-5499

Emergency Phone: 1-800-424-9300 (CHEMTREC)

Supplier See above.

2. Hazards Identification

Physical hazards Flammable aerosols Category 1

> Liquefied gas Gases under pressure Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2 Sensitization, skin Category 1 Reproductive toxicity Category 2

Specific target organ toxicity, single exposure Category 3 narcotic effects

Environmental hazards Not classified. WHMIS 2015 defined hazards Not classified

Label elements

Health hazards



Signal word Danger

Hazard statement Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin

irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause

drowsiness or dizziness. Suspected of damaging fertility or the unborn child.

Precautionary statement

Prevention Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. 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. Avoid breathing gas.

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical Response

advice/attention. Take off contaminated clothing and wash it before reuse. Specific treatment (see information on this label).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. 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.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store locked up. Storage

Store in a well-ventilated place.

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

WHMIS 2015: Health Hazard(s) not otherwise classified

(HHNOC)

WHMIS 2015: Physical

Hazard(s) not otherwise classified (PHNOC)

None known

None known

None known.

Supplemental information

None.

3. Composition/Information on Ingredients

/lixture			
Chemical name	Common name and synonyms	CAS number	%
Acetone		67-64-1	20-40
Butane		106-97-8	10-20
Propane		74-98-6	10-20
Heptane, Branched, Cyclic And Linear		426260-76-6	5-10
Naphtha (petroleum), hydrotreated light		64742-49-0	5-10
Solvent naphtha (petroleum), light aliphatic		64742-89-8	5-10
Benzene, 1-chloro-4(trifluoromethyl)-		98-56-6	2.5-10
Methane, oxybis-		115-10-6	2.5-10
Methyl acetate		79-20-9	2.5-10
1,3-butadiene, 2-methyl-, Homopolymer, Maleated		841251-34-1	1-5
Heptane		142-82-5	1-2.5

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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 or doctor/physician if you feel unwell.

Skin contact IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical

advice/attention. Take off contaminated clothing and wash it before reuse. Specific treatment (see

information on this label).

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Rinse mouth. 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.

Most important symptoms/effects, acute and

symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

General information

Ingestion

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

IF exposed or concerned: Get medical advice/attention. 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. Wash contaminated clothing before reuse. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire-fighting equipment/instructions

 $\label{lem:carbon} \mbox{Carbon dioxide. Alcohol resistant foam. Dry chemical powder.}$

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

Contents under pressure. Static charges generated by emptying package in or near flammable vapor may cause flash fire. Pressurized container may explode when exposed to heat or flame.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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. 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

Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when

exposed to heat or flame.

Hazardous combustion products

May include and are not limited to: Oxides of carbon.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Emergency personnel need self-contained breathing equipment. 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. 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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. 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. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not smoke while using or until sprayed surface is thoroughly dry. 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 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. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Pregnant or breastfeeding women must not handle this product. Use only in well-ventilated areas. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.

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 handle or store near an open flame, heat or other sources of ignition. Do not puncture, incinerate or crush. Store in a well-ventilated place. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Туре	Value	
Acetone (CAS 67-64-1)	STEL	1800 mg/m3 750 ppm	
	TWA	1200 mg/m3 500 ppm	
Butane (CAS 106-97-8)	TWA	1000 ppm	
Heptane (CAS 142-82-5)	STEL	2050 mg/m3 500 ppm	
	TWA	1640 mg/m3 400 ppm	
Methyl acetate (CAS 79-20-9)	STEL	757 mg/m3	
,		250 ppm	
	TWA	606 mg/m3 200 ppm	

Components	Туре	Value
Naphtha (petroleum), hydrotreated light (CAS 34742-49-0)	TWA	1590 mg/m3
		400 ppm
Propane (CAS 74-98-6)	TWA	1000 ppm
olvent naphtha petroleum), light aliphatic CAS 64742-89-8)	TWA	1590 mg/m3
· · · · · · · · · · · · · · · · ·		400 ppm
Canada. British Columbia OELs. (Occupational Exposure Limits	s for Chemical Substances, Occupational Health an
afety Regulation 296/97, as ame		
Components	Туре	Value
cetone (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm
sutane (CAS 106-97-8)	STEL	750 ppm
	TWA	600 ppm
leptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
lethane, oxybis- (CAS 15-10-6)	TWA	1000 ppm
flethyl acetate (CAS 9-20-9)	STEL	250 ppm
	TWA	200 ppm
Propane (CAS 74-98-6)	TWA	1000 ppm
Canada. Manitoba OELs (Reg. 21	7/2006, The Workplace Safety	And Health Act)
components	Туре	Value
cetone (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm
utane (CAS 106-97-8)	STEL	1000 ppm
leptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
lethyl acetate (CAS 9-20-9)	STEL	250 ppm
	TWA	200 ppm
anada. Ontario OELs. (Control o	of Exposure to Biological or Ch	nemical Agents)
omponents	Туре	Value
cetone (CAS 67-64-1)	STEL	750 ppm
	TWA	500 ppm
sutane (CAS 106-97-8)	TWA	800 ppm
leptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
lethyl acetate (CAS 9-20-9)	STEL	250 ppm
	TWA	200 ppm
ropane (CAS 74-98-6)	TWA	1000 ppm
canada. Quebec OELs. (Ministry components	of Labor - Regulation Respect Type	ing the Quality of the Work Environment) Value
acetone (CAS 67-64-1)	STEL	2380 mg/m3 1000 ppm
	TWA	1190 mg/m3
		1.1.2.W.111W/111W

Components	Туре	ing the Quality of the Work Environment) Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm
Heptane (CAS 142-82-5)	STEL	2050 mg/m3 500 ppm
	TWA	1640 mg/m3 400 ppm
Methyl acetate (CAS 79-20-9)	STEL	757 mg/m3
,		250 ppm
	TWA	606 mg/m3 200 ppm
Naphtha (petroleum), nydrotreated light (CAS 64742-49-0)	TWA	1590 mg/m3
		400 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm
Solvent naphtha (petroleum), light aliphatic	TWA	1590 mg/m3
(CAS 64742-89-8)		400 ppm
US. OSHA Table Z-1 Limits for Ai Components	r Contaminants (29 CFR 1910. [.] Type	1000) Value
Acetone (CAS 67-64-1)	PEL	2400 mg/m3 1000 ppm
Heptane (CAS 142-82-5)	PEL	2000 mg/m3 500 ppm
Methyl acetate (CAS 79-20-9)	PEL	610 mg/m3
		200 ppm
Naphtha (petroleum), hydrotreated light (CAS 64742-49-0)	PEL	400 mg/m3
		100 ppm
Propane (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm
Solvent naphtha (petroleum), light aliphatic (CAS 64742-89-8)	PEL	400 mg/m3
(5/16/04/42/00/0)		100 ppm
JS. ACGIH Threshold Limit Value Components	es Type	Value
Acetone (CAS 67-64-1)	STEL	500 ppm
10010110 (0/10 0/ '04-1)	TWA	250 ppm
Butane (CAS 106-97-8)	STEL	1000 ppm
Heptane (CAS 142-82-5)	STEL	500 ppm
10ptano (0/10 172-02-0)	TWA	400 ppm
Methyl acetate (CAS 79-20-9)	STEL	250 ppm
,	TWA	200 ppm
US. NIOSH: Pocket Guide to Cher Components	mical Hazards Type	Value
Acetone (CAS 67-64-1)	TWA	590 mg/m3 250 ppm
Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Туре	Value	
Heptane (CAS 142-82-5)	Ceiling	1800 mg/m3 440 ppm	
	TWA	350 mg/m3 85 ppm	
Methyl acetate (CAS 79-20-9)	STEL	760 mg/m3	
,		250 ppm	
	TWA	610 mg/m3 200 ppm	
Naphtha (petroleum), hydrotreated light (CAS 64742-49-0)	TWA	400 mg/m3	
· · · · · · · · · · · · · · · · · · ·		100 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm	
Solvent naphtha (petroleum), light aliphatic (CAS 64742-89-8)	TWA	400 mg/m3	
(0.12 0.1. 12 00 0)		100 ppm	
US. AIHA Workplace Environmen	ntal Exposure Level (WEEL) Gui	des	
Components	Type	Value	
Methane, oxybis- (CAS 115-10-6)	TWA	1880 mg/m3	
•		1000 ppm	

Biological limit values

Components	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	25 mg/L	Acetone	Urine	*

^{* -} For sampling details, please see the source document.

Exposure guidelines

Canada - Alberta OELs: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

Canada - British Columbia OELs: Skin designation

Can be absorbed through the skin. Benzene (CAS 71-43-2) Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

Canada - Manitoba OELs: Skin designation

Benzene (CAS 71-43-2) Can be absorbed through the skin. Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

Canada - Ontario OELs: Skin designation

Benzene (CAS 71-43-2) Can be absorbed through the skin. Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

Canada - Quebec OELs: Skin designation

Toluene (CAS 108-88-3) Can be absorbed through the skin.

Canada - Saskatchewan OELs: Skin designation

Naphthalene (CAS 91-20-3) Can be absorbed through the skin. Toluene (CAS 108-88-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Benzene (CAS 71-43-2) Can be absorbed through the skin. Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards Benzene, (1-methylethyl)- (CAS 98-82-8)

Can be absorbed through the skin.

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

Benzene, (1-methylethyl)- (CAS 98-82-8) Can be absorbed through the skin.

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 (or goggles).

Skin protection

Hand protection Impervious gloves. Confirm with reputable supplier first.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. 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).

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. Contaminated work clothing should not be allowed out of the workplace. When using do not eat or drink.

9. Physical and Chemical Properties

AppearanceClearPhysical stateGas.FormSpray

ColorNot available.OdorNot available.Odor thresholdNot available.pHNot available.Melting point/freezing pointNot available.

Initial boiling point and boiling

range

152.69 °F (67.05 °C) (estimated)

Pour point Not available.

Specific gravity 0.884 (estimated)

Partition coefficient Not available.

(n-octanol/water)

Flash point -156.0 °F (-104.4 °C) (Propellant) (estimated)

Evaporation rate Not available.
Flammability (solid, gas) Not available.
Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

> 2.2 (estimated)

Flammability limit - upper

(%)

< 11.4 (estimated)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 45 - 65 psig @ 70°F (estimated)

Vapor density

Relative density

Solubility(ies)

Auto-ignition temperature

Decomposition temperature

Viscosity

Not available.

Not available.

Not available.

Not available.

Other information

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

10. Stability and Reactivity

Reactivity This product may react with 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 Do not mix with other chemicals.

Incompatible materials

Hazardous decomposition

Strong oxidizing agents. Nitrates. Fluorine. Chlorine. May include and are not limited to: Oxides of carbon.

products

11. Toxicological Information

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

Information on likely routes of exposure

Ingestion May cause stomach distress, nausea or vomiting.

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be

harmful.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Causes serious eye irritation. Eye contact

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Narcotic effects. May cause an allergic skin reaction.

Components **Species Test Results**

1,3-butadiene, 2-methyl-, Homopolymer, Maleated (CAS 841251-34-1)

Acute Dermal

LD50 Not available

Inhalation

LC50 Not available

Oral

LD50 Not available

Acetone (CAS 67-64-1)

Acute

Dermal

LD50 Guinea pig > 7426 mg/kg, 24 Hours, ECHA

> 9.4 ml/kg, 24 Hours, ECHA

Rabbit > 15800 mg/kg, 24 Hours, ECHA

> > 7426 mg/kg, 24 Hours, ECHA > 20 ml/kg, 24 Hours, ECHA > 9.4 ml/kg, 24 Hours, ECHA

Inhalation

LC50 Rat 55700 ppm, 3 Hours, ECHA

50100 mg/m3, 8 hours, American Industrial

Hygiene Association Journal 132 mg/L, 3 Hours, ECHA

76 mg/L, 4 Hours, ECHA/HSDB 50.1 mg/L, 4 Hours, ECHA

50.1 mg/L, 8 Hours

Oral

LD50 Mouse 3000 mg/kg, Pharmaceutical Chemistry

Journal

Rat 5800 mg/kg, Journal of Toxicology and **Environmental Health**

9.1 ml/kg, ECHA

8.5 ml/kg, ECHA 5.6 ml/kg, ECHA 2.2 ml/kg, ECHA

#27962 Page: 8 of 18 Issue date 27-November-2017

Species Test Results Components Benzene, 1-chloro-4(trifluoromethyl)- (CAS 98-56-6) Acute Dermal > 2000 mg/kg LD50 Rabbit 0.1 ml/kg, 24 Hours Rat 0.5 - 1 ml/kg Inhalation LC50 Mouse 20000 mg/m3/4H 200 ppm, 4 Hours Rat 220 ppm, 4 Hours 33 mg/l/4h Oral LD50 Mouse 11500 mg/kg Rat 13000 mg/kg 382 mg/kg 1.4 ml/kg Butane (CAS 106-97-8) Acute Dermal LD50 Not available Inhalation LC50 Mouse 539600 ppm, 120 Minutes, ECHA 520400 ppm, 120 Minutes, ECHA 1237 mg/L, 120 Minutes 680 mg/L, 2 Hours, HSDB 57 %, 120 Minutes, ECHA 52 %, 120 Minutes Rat > 800000 ppm, 10 Minutes, ECHA 1442738 mg/m3, 10 Minutes, ECHA 1354944 mg/m3, 10 Minutes, ECHA 570000 ppm, 10 Minutes, ECHA 276000 ppm, 4 Hours, CCOHS 1443 mg/L, 10 Minutes, ECHA 1355 mg/L, 10 Minutes Oral Not available LD50 Heptane (CAS 142-82-5) Acute Dermal LD50 Rabbit > 2000 mg/kg, 24 Hours Inhalation Rat LC50 > 29.3 mg/L, 4 Hours 103 mg/L, 4 Hours LD50 Mouse 75 mg/L, 2 Hours Oral Rat > 5000 mg/kg LD50 15000 mg/kg

Test Results Components **Species**

Heptane, Branched, Cyclic And Linear (CAS 426260-76-6)

Acute Inhalation

LC50 Not available

Oral

LD50 Not available

Methane, oxybis- (CAS 115-10-6)

Acute Inhalation

LC50 Mouse

Rat

Oral

LD50 Not available

Methyl acetate (CAS 79-20-9)

Acute

Dermal

LD50 Rabbit

Rat

Inhalation

LC100 Rabbit

Rat LC50

Oral

LD50 Rabbit

Rat

Naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

Acute

Dermal

LD50 Guinea pig; Rabbit

Rabbit

Inhalation

LC50 Rat

Oral

LD50 Rat

Propane (CAS 74-98-6)

Acute

Dermal

LD50 Not available

Inhalation

LC50 Mouse

539600 ppm, 120 Minutes, ECHA

520400 ppm, 120 Minutes, ECHA

1237 mg/L, 120 Minutes 57 %, 120 Minutes, ECHA

386 ppm, 30 Minutes 308.5 mg/L, 4 Hours

> 5000 mg/kg

> 16000 ppm

3705 mg/kg 3.7 g/kg

> 5000 mg/kg 6482 mg/kg

3160 mg/kg

20 ppm 20 mg/l/4h

> 25 ml/kg 5000 mg/kg 4820 mg/kg

> 9.4 ml/kg, 24 Hours

> 1900 mg/kg, 24 Hours

> 4980 mg/m3, 4 Hours > 5 mg/L, 4 Hours 13700 ppm, 4 Hours

> 2000 mg/kg, 24 Hours

98.4 mg/L, 4 Hours

Components Species Test Results

52 %, 120 Minutes

Rat > 12000000 ppm, 4 hours

> 800000 ppm, 10 Minutes, ECHA
> 1464 mg/L, 15 Minutes, HSDB
1442738 mg/m3, 10 Minutes, ECHA
1354944 mg/m3, 10 Minutes, ECHA
570000 ppm, 10 Minutes, ECHA

1355 mg/L, 10 Minutes

Oral

LD50 Not available

Solvent naphtha (petroleum), light aliphatic (CAS 64742-89-8)

Acute

Dermal

LD50 Rabbit > 1900 mg/kg, 24 Hours

Inhalation

LC50 Not available

Rat > 4980 mg/m3, 4 Hours

> 5 mg/L, 4 Hours

Oral

LD50 Not available

Rat > 25 ml/kg 4820 mg/kg

Skin corrosion/irritation Causes skin irritation.

Exposure minutesNot available.Erythema valueNot available.Oedema valueNot available.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Corneal opacity value Not available.

Iris lesion value Not available.

Conjunctival reddening Not available.

value

Conjunctival oedema value Not available.

Recover days Not available.

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- (CAS Irritant

128-37-0)

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity See below.

Contains < 3% (w/w) DMSO-extract

ACGIH Carcinogens

Benzene (CAS 71-43-2) A1 Confirmed human carcinogen.

Benzene, ethyl- (CAS 100-41-4)

A3 Confirmed animal carcinogen with unknown relevance to

humans.

Naphthalene (CAS 91-20-3)

A3 Confirmed animal carcinogen with unknown relevance to

humans.

Canada - Alberta OELs: Carcinogen category

Benzene (CAS 71-43-2) Confirmed human carcinogen.

Canada - Manitoba OELs: carcinogenicity

BENZENE (CAS 71-43-2) Confirmed human carcinogen.

ETHYL BENZENE (CAS 100-41-4) NAPHTHALENE (CAS 91-20-3)

Confirmed animal carcinogen with unknown relevance to humans. Confirmed animal carcinogen with unknown relevance to humans.

Canada - Quebec OELs: Carcinogen category

Benzene (CAS 71-43-2) Detected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene (CAS 71-43-2) Volume 29, Supplement 7, Volume 100F 1 Carcinogenic to

humans.

Benzene, (1-methylethyl)- (CAS 98-82-8) Volume 101 - 2B Possibly carcinogenic to humans. Benzene, ethyl- (CAS 100-41-4) Volume 77 - 2B Possibly carcinogenic to humans.

Hydrous magnesium silicate (CAS 14807-96-6) Volume 42, Supplement 7, Volume 93 - 3 Not classifiable as to

carcinogenicity to humans.

Volume 93 - 2B Possibly carcinogenic to humans. Naphthalene (CAS 91-20-3) Volume 82 - 2B Possibly carcinogenic to humans.

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- (CAS Volume 40, Supplement 7 - 3 Not classifiable as to carcinogenicity

128-37-0) to humans. Toluene (CAS 108-88-3)

Volume 47, Volume 71 - 3 Not classifiable as to carcinogenicity to

humans.

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

Benzene (CAS 71-43-2)

Benzene, (1-methylethyl)- (CAS 98-82-8)

Benzene, ethyl- (CAS 100-41-4) Naphthalene (CAS 91-20-3)

US NTP Report on Carcinogens: Anticipated carcinogen

Benzene. (1-methylethyl)- (CAS 98-82-8) Reasonably Anticipated to be a Human Carcinogen. Naphthalene (CAS 91-20-3) Reasonably Anticipated to be a Human Carcinogen.

US NTP Report on Carcinogens: Known carcinogen

Benzene (CAS 71-43-2) Known To Be Human Carcinogen.

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

Benzene (CAS 71-43-2) Cancer

Suspected of damaging fertility or the unborn child. Reproductive toxicity

Not available. **Teratogenicity**

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not available.

Prolonged inhalation may be harmful. **Chronic effects**

12 Ecological Information

12. Ecological Information				
Ecotoxicity	See below			
Ecotoxicological data Components		Species	Test Results	
Acetone (CAS 67-64-1)				
Crustacea	EC50	Daphnia	13999 mg/L, 48 Hours	
Aquatic				
Crustacea	EC50	Water flea (Daphnia magna)	10294 - 17704 mg/L, 48 hours	
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/L, 96 hours	
Benzene, 1-chloro-4(trifluoro	methyl)- (CAS 98-56	3-6)		
Crustacea	EC50	Daphnia	3.68 mg/L, 48 Hours	
Heptane (CAS 142-82-5)				
Aquatic				
Fish	LC50	Mozambique tilapia (Tilapia mossambica)	375 mg/L, 96 hours	
Methyl acetate (CAS 79-20-9	9)			
Algae	IC50	Algae	120 mg/L, 72 hours	
Crustacea	EC50	Daphnia	1026.7 mg/L, 48 hours	
Aquatic				
Fish	LC50	Fathead minnow (Pimephales promelas)	295 - 348 mg/L, 96 hours	

Components Species Test Results

Naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

Aquatic

Crustacea EC50 Water flea (Daphnia pulex) 2.7 - 5.1 mg/L, 48 hours

Fish LC50 Rainbow trout, donaldson trout 8.8 mg/L, 96 hours

(Oncorhynchus mykiss)

8.8 mg/L, 96 hours

Solvent naphtha (petroleum), light aliphatic (CAS 64742-89-8)

Algae IC50 Algae 4700 mg/L, 72 Hours

Aquatic

Crustacea EC50 Water flea (Daphnia pulex) 2.7 - 5.1 mg/L, 48 hours

Fish LC50 Rainbow trout, donaldson trout 8.8 mg/L, 96 hours

(Oncorhynchus mykiss)

8.8 mg/L, 96 hours

Persistence and degradability

Bioaccumulative potential

No data is available on the degradability of this product.

Mobility in soil

Mobility in general

Other adverse effects

No data available.

Not available.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

13. Disposal Considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents

under pressure. Do not puncture, incinerate or crush. 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 Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal. Do not re-use empty containers.

14. Transport Information

Transport of Dangerous Goods (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.

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

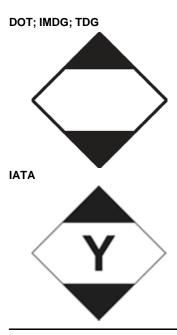
Proper shipping name Aerosols, flammable
Hazard class Limited Quantity - IATA

IMDG (Marine Transport)

Basic shipping requirements:

UN number UN1950 **Proper shipping name** AEROSOLS

Hazard class Limited Quantity - IMDG



15. Regulatory Information

Canadian federal regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada CEPA Schedule I: Listed substance

Benzene (CAS 71-43-2)
Hydrous magnesium silicate (CAS 14807-96-6)
Naphthalene (CAS 91-20-3)
Listed.
Listed.

Canada DSL Challenge Substances: Listed substance

Butane (CAS 106-97-8)

Naphthalene (CAS 91-20-3)

Listed.

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

 Benzene (CAS 71-43-2)
 1 TONNES

 Butane (CAS 106-97-8)
 1 TONNES

 Heptane (CAS 142-82-5)
 1 TONNES

 Methane, oxybis- (CAS 115-10-6)
 1 TONNES

 Naphtha (petroleum), hydrotreated light (CAS
 1 TONNES

64742-49-0)

Propane (CAS 74-98-6) 1 TONNES Solvent naphtha (petroleum), light aliphatic (CAS 1 TONNES

64742-89-8)

Toluene (CAS 108-88-3) 1 TONNES

Canada Priority Substances List (Second List): Listed substance

Hydrous magnesium silicate (CAS 14807-96-6) Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Acetone (CAS 67-64-1) Class B Toluene (CAS 108-88-3) Class B

WHMIS 2015 Exemptions Not applicable

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)

Benzene, 1-chloro-4(trifluoromethyl)- (CAS 98-56-6)

1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1)

Benzene (CAS 71-43-2)

Benzene, (1-methylethyl)- (CAS 98-82-8)

Benzene, ethyl- (CAS 100-41-4)

Butane (CAS 106-97-8)

Cyclohexane (CAS 110-82-7)

Listed.

Heptane (CAS 142-82-5)

Listed.

Methane, oxybis- (CAS 115-10-6)

Methyl acetate (CAS 79-20-9)

Naphthalene (CAS 91-20-3)

Propane (CAS 74-98-6)

Toluene (CAS 108-88-3)

Listed.

Listed.

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

Benzene (CAS 71-43-2) Cancer

Central nervous system

Blood Aspiration Skin Eye

respiratory tract irritation

Flammability

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

No

chemical

SARA 313 (TRI reporting)

Chemical nameCAS number% by wt.Solvent naphtha (petroleum), light aliphatic64742-89-85-10

Other federal regulations

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

Benzene (CAS 71-43-2)

Benzene, (1-methylethyl)- (CAS 98-82-8)

Benzene, ethyl- (CAS 100-41-4) Naphthalene (CAS 91-20-3)

Toluene (CAS 108-88-3)

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

Butane (CAS 106-97-8)

Methane, oxybis- (CAS 115-10-6)

Propane (CAS 74-98-6)

US state regulations

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

See below

Acetone (CAS 67-64-1) Listed. Benzene (CAS 71-43-2) Listed. Benzene, (1-methylethyl)- (CAS 98-82-8) Listed. Benzene, ethyl- (CAS 100-41-4) Listed. Butane (CAS 106-97-8) Listed. Cyclohexane (CAS 110-82-7) Listed. Heptane (CAS 142-82-5) Listed. Hydrous magnesium silicate (CAS 14807-96-6) Listed. Methyl acetate (CAS 79-20-9) Listed. Naphtha (petroleum), hydrotreated light (CAS Listed. 64742-49-0) Naphthalene (CAS 91-20-3) Listed. Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- (CAS Listed. 128-37-0) Solvent naphtha (petroleum), light aliphatic (CAS Listed. 64742-89-8) Toluene (CAS 108-88-3) Listed.

US - Illinois Chemical Safety Act: Listed substance

Acetone (CAS 67-64-1) Benzene (CAS 71-43-2)

Benzene, (1-methylethyl)- (CAS 98-82-8)

Benzene, ethyl- (CAS 100-41-4) Butane (CAS 106-97-8)

Cyclohexane (CAS 110-82-7) Heptane (CAS 142-82-5)

Methane, oxybis- (CAS 115-10-6) Methyl acetate (CAS 79-20-9)

US - Louisiana Spill Reporting: Listed substance

Acetone (CAS 67-64-1) Listed. Benzene (CAS 71-43-2) Listed. Benzene, (1-methylethyl)- (CAS 98-82-8) Listed. Benzene, ethyl- (CAS 100-41-4) Listed. Butane (CAS 106-97-8) Listed. Cyclohexane (CAS 110-82-7) Listed. Heptane (CAS 142-82-5) Listed. Methane, oxybis- (CAS 115-10-6) Listed. Methyl acetate (CAS 79-20-9) Listed. Naphthalene (CAS 91-20-3) Listed. Propane (CAS 74-98-6) Listed. Toluene (CAS 108-88-3) Listed.

US - Michigan Critical Materials Register: Parameter number

Benzene (CAS 71-43-2) BENZENE Toluene (CAS 108-88-3) TOLUENE

US - Minnesota Haz Subs: Listed substance

Acetone (CAS 67-64-1) Listed. Benzene (CAS 71-43-2) Listed. Benzene. (1-methylethyl)- (CAS 98-82-8) Listed. Benzene, ethyl- (CAS 100-41-4) Listed. Butane (CAS 106-97-8) Listed. Cyclohexane (CAS 110-82-7) Listed. Heptane (CAS 142-82-5) Listed. Hydrous magnesium silicate (CAS 14807-96-6) Listed. Methane, oxybis- (CAS 115-10-6) Listed. Methyl acetate (CAS 79-20-9) Listed. Naphtha (petroleum), hydrotreated light (CAS Listed. 64742-49-0) Naphthalene (CAS 91-20-3) Listed. Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- (CAS Listed. 128-37-0) Propane (CAS 74-98-6) Listed. Solvent naphtha (petroleum), light aliphatic (CAS Listed. 64742-89-8)

US - New Jersey RTK - Substances: Listed substance

Acetone (CAS 67-64-1)

Benzene (CAS 71-43-2)

Toluene (CAS 108-88-3)

Benzene, (1-methylethyl)- (CAS 98-82-8)

Benzene, 1-chloro-4(trifluoromethyl)- (CAS 98-56-6)

Benzene, ethyl- (CAS 100-41-4)

Butane (CAS 106-97-8)

Cyclohexane (CAS 110-82-7)

Heptane (CAS 142-82-5)

Hydrous magnesium silicate (CAS 14807-96-6)

Methane, oxybis- (CAS 115-10-6)

Methyl acetate (CAS 79-20-9)

Naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

Naphthalene (CAS 91-20-3)

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- (CAS 128-37-0)

Propane (CAS 74-98-6)

Solvent naphtha (petroleum), light aliphatic (CAS 64742-89-8)

Toluene (CAS 108-88-3)

US - North Carolina Toxic Air Pollutants: Listed substance

Benzene (CAS 71-43-2)

Toluene (CAS 108-88-3)

US - Pennsylvania RTK - Hazardous Substances: Special hazard

Benzene (CAS 71-43-2)

US - Texas Effects Screening Levels Hazard Data: Simple asphyxiant

Propane (CAS 74-98-6)

US - Texas Effects Screening Levels: Listed substance

Acetone (CAS 67-64-1)

Benzene (CAS 71-43-2)

Benzene, (1-methylethyl)- (CAS 98-82-8)

Benzene, 1-chloro-4(trifluoromethyl)- (CAS 98-56-6)

Listed.

Listed.

Benzene, ethyl- (CAS 100-41-4) Listed. Butane (CAS 106-97-8) Listed. Cyclohexane (CAS 110-82-7) Listed. Heptane (CAS 142-82-5) Listed. Hydrous magnesium silicate (CAS 14807-96-6) Listed. Methane, oxybis- (CAS 115-10-6) Listed. Methyl acetate (CAS 79-20-9) Listed. Naphtha (petroleum), hydrotreated light (CAS Listed. 64742-49-0) Naphthalene (CAS 91-20-3) Listed. Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- (CAS Listed. 128-37-0) Propane (CAS 74-98-6) Listed. Solvent naphtha (petroleum), light aliphatic (CAS Listed. 64742-89-8) Toluene (CAS 108-88-3) Listed.

US - Washington Chemical of High Concern to Children: Listed substance

Benzene (CAS 71-43-2)

Benzene, ethyl- (CAS 100-41-4)

Toluene (CAS 108-88-3)

US. Massachusetts RTK - Substance List

Acetone (CAS 67-64-1)

Benzene (CAS 71-43-2)

Benzene, (1-methylethyl)- (CAS 98-82-8)

Benzene, ethyl- (CAS 100-41-4)

Butane (CAS 106-97-8)

Cyclohexane (CAS 110-82-7)

Heptane (CAS 142-82-5)

Hydrous magnesium silicate (CAS 14807-96-6)

Methane, oxybis- (CAS 115-10-6)

Methyl acetate (CAS 79-20-9)

Naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

Naphthalene (CAS 91-20-3)

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- (CAS 128-37-0)

Propane (CAS 74-98-6)

Solvent naphtha (petroleum), light aliphatic (CAS 64742-89-8)

Toluene (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act

Benzene (CAS 71-43-2)

Benzene, (1-methylethyl)- (CAS 98-82-8)

Benzene, ethyl- (CAS 100-41-4)

Butane (CAS 106-97-8)

Cyclohexane (CAS 110-82-7)

Methane, oxybis- (CAS 115-10-6)

Naphthalene (CAS 91-20-3)

Propane (CAS 74-98-6)

Toluene (CAS 108-88-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Acetone (CAS 67-64-1)

Benzene (CAS 71-43-2)

Benzene, (1-methylethyl)- (CAS 98-82-8)

Benzene, ethyl- (CAS 100-41-4)

Butane (CAS 106-97-8)

Cyclohexane (CAS 110-82-7)

Heptane (CAS 142-82-5)

Hydrous magnesium silicate (CAS 14807-96-6)

Methane, oxybis- (CAS 115-10-6)

Methyl acetate (CAS 79-20-9)

Naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

Naphthalene (CAS 91-20-3)

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- (CAS 128-37-0)

Propane (CAS 74-98-6)

Solvent naphtha (petroleum), light aliphatic (CAS 64742-89-8)

Toluene (CAS 108-88-3)

US. Rhode Island RTK

Acetone (CAS 67-64-1)

Benzene (CAS 71-43-2)

Benzene, (1-methylethyl)- (CAS 98-82-8)

Benzene, ethyl- (CAS 100-41-4)

Butane (CAS 106-97-8)

Cyclohexane (CAS 110-82-7) Heptane (CAS 142-82-5)

Hydrous magnesium silicate (CAS 14807-96-6)

Methane, oxybis- (CAS 115-10-6) Methyl acetate (CAS 79-20-9)

Naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

Naphthalene (CAS 91-20-3)

Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- (CAS 128-37-0)

Propane (CAS 74-98-6)

Solvent naphtha (petroleum), light aliphatic (CAS 64742-89-8)

Toluene (CAS 108-88-3)

US. California Proposition 65

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

 Benzene (CAS 71-43-2)
 Listed: February 27, 1987

 Benzene, (1-methylethyl)- (CAS 98-82-8)
 Listed: April 6, 2010

 Benzene, ethyl- (CAS 100-41-4)
 Listed: June 11, 2004

 Naphthalene (CAS 91-20-3)
 Listed: April 19, 2002

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Benzene (CAS 71-43-2) Listed: December 26, 1997
Toluene (CAS 108-88-3) Listed: January 1, 1991

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

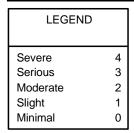
Benzene (CAS 71-43-2) Listed: December 26, 1997

Inventory status

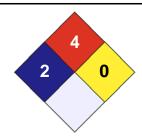
Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)NoCanadaNon-Domestic Substances List (NDSL)NoUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

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

16. Other Information







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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Prepared by Nu-Calgon Technical Service Phone: (314) 469-7000

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

document.