

Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name
• N7000-3 Unclad Laminate

Synonyms
• N7000-3 Fiberglass Unclad Laminate

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified

• Laminate for consumer and industrial electronics.

use(s)

Use(s) advised against • Consumer goods in direct contact with food stuffs, potable water, or continuous skin

contact

1.3 Details of the supplier of the safety data sheet

Manufacturer • AGC Multi Material America Inc.

1420 W. 12th Place Tempe, AZ 85281 United States

www.agc-multimaterial.com agc-ml.digital-po@agc.com

Telephone (General) • 1-480-967-5600

1.4 Emergency telephone number

● 1-480-967-5600- (8AM - 5PM CST) M-F

Manufacturer • +65 6861 7117 - Asia

Manufacturer • 1-800-424-9300 - CHEMTREC (US and Canada only)

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP • Not Classified

DSD/DPD • Not Classified

2.2 Label Elements

CLP

Hazard

• No label element(s) required.

statements DSD/DPD

Risk phrases • No label element(s) required.

2.3 Other Hazards

CLP

• This material is exempt from CLP/REACH obligations as an article as specified in REACH (1907/2006) and related ECHA guidance.

DSD/DPD

• Under European Directive 1999/45/EC these product(s) are exempt and considered manufactured article(s) under stated normal conditions of use.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS

Not Classified

2012

2.2 Label elements

OSHA HCS

2012

Hazard

• No label element(s) required.

statements

2.3 Other hazards

OSHA HCS

• Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), these product(s) are exempt and considered manufactured article(s) under stated normal use conditions.

Canada

2012

According to: WHMIS

2.1 Classification of the substance or mixture

WHMIS . Not classified

2.2 Label elements

WHMIS . No label element(s) required

2.3 Other hazards

WHMIS • Under Canadian regulations (Workplace Hazardous Materials Information System (WHMIS) – Hazardous Products Act (HPA), Section 11 (1)), these product(s) are exempt and considered manufactured article(s) under stated normal conditions of use.

Section 3 - Composition/Information on Ingredients

3.1 Substances

Material does not meet the criteria of a substance.

3.2 Mixtures

Composition						
Chemical Name	Identifiers	%				
	CAS:78-93-3					
2-Butanone	EC Number:201-159-0	<0.1%				
	EU Index:606-002-00-3					
4-Butyrolacone (GBL)	CAS: 96-48-0	<0.1%				
4-butyrolacone (GBL)	EC Number: 202-509-5	<0.176				
	CAS:108-65-6					
2-Methoxy-1-methylethyl acetate	EC Number:203-603-9	<0.1%				
	EU Index:607-195-00-7					
Phenothiazene	CAS:92-84-2	<0.1%				
Prienounazene	EC Number:202-196-5	<0.176				
Cured his malaimida reain mixture	CAS:NA	200/ TO 600/				
Cured bismaleimide resin mixture	EC Number:NA	30% TO 60%				
Class svide shamisals	CAS:65997-17-3	200/ TO 650/				
Glass, oxide, chemicals	EC Number: 266-046-0	30% TO 65%				

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalatio

• First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, move victim to fresh air. Administer oxygen if breathing is difficult. If signs/symptoms continue, get medical attention. Give artificial respiration if victim is not breathing.

Skin

• First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. In case of contact with substance, flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Wash skin with soap and water. If irritation develops and persists, get medical attention.

Eye

• First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion

• First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Obtain medical attention immediately if ingested.

4.2 Most important symptoms and effects, both acute and delayed

• Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician All treatments should be based on observed signs and symptoms of distress in the patient.
 Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Media

Suitable Extinguishing • LARGE FIRES: Water spray, fog or alcohol-resistant foam. SMALL FIRES: Dry chemical, CO2, water spray or alcohol-resistant foam.

Unsuitable

• Do not use straight streams.

Extinguishing Media

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • Hazardous decomposition will occur at elevated temperatures

Hazardous Combustion • Nitrous Oxides, Aldehydes, Carbon Monoxide, Various Acids, Hydrogen Cyanide

Products

5.3 Advice for firefighters

• Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions • No special precautions are expected to be necessary if material is used under ordinary conditions and as recommended. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Emergency **Procedures** • ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Ventilate closed spaces before entering.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up • Avoid generating dust.

Measures Carefully shovel or sweep up spilled material and place in suitable container.

6.4 Reference to other sections

• Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling • Avoid contact with heat and ignition sources. Minimize dust generation and accumulation. Use only with adequate ventilation. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe dust. Avoid contact with skin, eyes or clothing. Avoid breathing fumes generated during processing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage • Keep away from heat, sparks and flame. Store in a well-ventilated place. Keep container tightly closed. Avoid generating dust. Store at 77°F or below.

7.3 Specific end use(s)

• Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines										
	Result	ACGIH	Australia	Brazil	Canada Alberta	Canada British Columbia				
Phenothiazene (92-84-2)	TWAs	5 mg/m3 TWA	5 mg/m3 TWA		5 mg/m3 TWA	5 mg/m3 TWA				
2-Butanone	STELs		300 ppm STEL; 890 mg/m3 STEL		300 ppm STEL; 885 mg/m3 STEL	100 ppm STEL				
(78-93-3)	TWAs	200 ppm TWA	150 ppm TWA; 445 mg/m3 TWA		200 ppm TWA; 590 mg/m3 TWA	50 ppm TWA				
Glass, oxide, chemicals as Glass wool fiber	TWAs	1 fiber/cm3 TWA (respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers) as Glass wool fiber 0.5 fibre/mL TWA (listed under Synthetic mineral fibres) Not established Not established Not established		(respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers) 0.5 fibre/mL TWA (listed under Synthetic mineral fibres) Not established as Glass wool fiber		m3 TWA ble fibers: 5 µm, aspect 3:1, as ned by the ine filter at 400-450X cation [4-mm e], using ontrast tion, listed ynthetic fibers) 0.5 fibre/mL TWA (listed under Synthetic mineral fibres) as Glass wool fiber Not established as Glass wool fiber		(respirable fibers: length >5 μm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers) 0.5 fibre/mL TWA (listed under Synthetic mineral fibres) Not established as Glass wool fiber		1 fiber/cm3 TWA (respirable fibers: length >5 μm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phasecontrast illumination, listed under Synthetic vitreous fibers)
		Evno	euro Limite/Guido	lines (Con't)		fiber				
Exposure Limits/Guidelines (Con't.) Canada New Canada Northwest Canada Nova Canada										
		•	Canada New		Canada Nova	Canada				
	Resu			Canada Northwest Territories	Canada Nova Scotia	Canada Nunavut				
Phenothiazene	Resu TWAs	•	Canada New	Canada Northwest						
Phenothiazene (92-84-2)		It Canada Manitoba	Canada New Brunswick	Canada Northwest						
(92-84-2) 2-Butanone	TWAs	It Canada Manitoba	Canada New Brunswick 5 mg/m3 TWA	Canada Northwest						
(92-84-2)	TWAs	It Canada Manitoba	Canada New Brunswick 5 mg/m3 TWA Not established 300 ppm STEL; 885	Canada Northwest Territories 300 ppm STEL; 885	Scotia 300 ppm STEL 200 ppm TWA	Nunavut 300 ppm STEL; 885 mg/m3				
(92-84-2) 2-Butanone	TWAS STELS	Canada Manitoba 300 ppm STEL	Canada New Brunswick 5 mg/m3 TWA Not established 300 ppm STEL; 885 mg/m3 STEL 200 ppm TWA; 590 mg/m3 TWA 1 fiber/cm3 TWA (fibers > 5 µm with a	Canada Northwest Territories 300 ppm STEL; 885 mg/m3 STEL 200 ppm TWA; 590	300 ppm STEL 200 ppm TWA 1 fiber/cm3 TWA (respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filte method at 400-	Nunavut 300 ppm STEL; 885 mg/m3 STEL 200 ppm TWA; 590 mg/m3 TWA 3 fiber/cm3 TWA (with a diameter of <=3.5 μm and a length >=10 μm); 5 mg/m3 TWA (total mass) as Glass wool fiber				
(92-84-2) 2-Butanone (78-93-3) Glass, oxide, chemicals as Glass	TWAS STELS STELS TWAS	It Canada Manitoba 300 ppm STEL 200 ppm TWA 1 fiber/cm3 TWA (respirable fibers: length >5 μm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers) as Glass wool fiber Expo	Canada New Brunswick 5 mg/m3 TWA Not established 300 ppm STEL; 885 mg/m3 STEL 200 ppm TWA; 590 mg/m3 TWA 1 fiber/cm3 TWA (fibers >5 µm with a diameter of <3 µm, aspect ratio >5:1)	Canada Northwest Territories 300 ppm STEL; 885 mg/m3 STEL 200 ppm TWA; 590 mg/m3 TWA 3 fiber/cm3 TWA (with a diameter of <=3.5 µm and a length >=10 µm); 5 mg/m3 TWA (total mass) as Glass wool fiber	Scotia 300 ppm STEL 200 ppm TWA 1 fiber/cm3 TWA (respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filte method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers)	Nunavut 300 ppm STEL; 885 mg/m3 STEL 200 ppm TWA; 590 mg/m3 TWA 3 fiber/cm3 TWA (with a diameter of <=3.5 μm and a length >=10 μm); 5 mg/m3 TWA (total mass) as Glass wool fiber				

				Saskatchewan		
Phenothiazene	STELs	5 mg/m3 TWA	5 mg/m3 TWAEV	5 mg/m3 TWA		
(92-84-2)	TWAs	Not established	Not established	Not established		
2-Butanone	STELs	300 ppm STEL	100 ppm STEV; 300 mg/m3 STEV	300 ppm STEL	250 ppm STEL; 740 mg/m3 STEL	600 mg/m3 STEL
(78-93-3)	TWAs	200 ppm TWA	50 ppm TWAEV; 150 mg/m3 TWAEV	200 ppm TWA	200 ppm TWA; 590 mg/m3 TWA	300 mg/m3 TWA
Glass, oxide, chemicals as Glass wool fiber	TWAs	1 fiber/cm3 TWA (respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers) as Glass wool fiber	1 fibre/cm3 TWAEV (respirable, listed under Fibres-Artificial Vitreous Mineral Fibres) as Glass wool fiber	1 fiber/cm3 TWA (respirable fibers, listed under Synthetic vitreous fibers) as Glass wool fiber	30 mppcf TWA (dust or fiberous); 10 mg/m3 TWA (dust or fiberous) as Glass wool fiber	Not established
			sure Limits/Guideli	ines (Con't.)		
	Result	Czech Republic	Denmark	France	Germany DFG	Germany TRGS
	Ceilings		Not established	Not established		
Phenothiazene	TWAs		5 mg/m3	5 mg/m3		
	STELs		Not established	Not established		
	MAKs		Not established	Not established		
	Ceilings	900 mg/m3 Ceiling	Not established		200 ppm Peak; 600 mg/m3 Peak	Not established
2-Butanone (78-93-3)	TWAs	600 mg/m3 TWA	50 ppm TWA; 145 mg/m3 TWA	TWÁ [VME] (restrictive limit)		200 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 1); 600 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 1)
	STELs	Not established	Not established	STEL [VLCT] (restrictive limit)	Not established	Not established
	MAKs	Not established	Not established	Not established	200 ppm TWA MAK; 600 mg/m3 TWA MAK	Not established
Glass, oxide, chemicals as Glass wool fiber	TWAs	Not established	1 fiber/cm3 TWA as Glass wool fiber	Not established	Not established	Not established

			Expo	sure	Limits/Guid	delines	(Con't.)				
	Re	sult	Greece		India		Israel		Italy		Japan
Phenothiazene	TWAs							5 mg/ı	m3 TWA		•
(92-84-2)	STELS	;						Not es	stablished		
	TWAs		200 ppm TWA; 600 ng/m3 TWA		opm TWA; 590 n3 TWA	200 pp	om TWA		pm TWA; ng/m3 TWA		opm OEL; 590 n3 OEL
2-Butanone (78-93-3)	STELs		500 ppm STEL; 900 ng/m3 STEL		opm STEL; 885 n3 STEL	300 pp	om STEL	Breve 900 m	pm STEL termine; ng/m3 STEL termine	Not e	established
Glass, oxide, chemicals as Glass wool fiber	TWAs	r	Not established	Not e	stablished	(respir length aspec excep minera under	er/cm3 TWA irable fibers: h >5 µm, ct ratio >=3:1, pt asbestiform rals, listed r Synthetic ous fibers)		1 fi		er/cm3 OEL lass wool fiber
			Expo	sure	Limits/Guid	delines	(Con't.)				
	R	esult	Korea		Malays		Netherlar	nds	NIOSH		OSHA
Phenothiazene	TWA	S	5 mg/m3 TWA		_		5 mg/m3		5 mg/m3 TW	/A	Not established
(92-84-2)	STEL	.s	Not established				Not establish	ned	Not establish	ned	Not established
2-Butanone	TWAs		200 ppm TWA (Serial		200 ppm TWA: 500		590 mg/m3 ⁻	TWA 200 ppm TW 590 mg/m3			200 ppm TWA; 590 mg/m3 TWA
(78-93-3)	STEL	.s	300 ppm STEL (Ser No. 228); 885 mg/m STEL (Serial No. 22	Not established		d	900 mg/m3 STEL		300 ppm STEL; 885 mg/m3 STEL		Not established
Glass, oxide, chemicals	TWA	s	10 mg/m3 TWA (Se No. 007) as Glass wool fiber	1 fiber/cm3 TWA (respirable fibers: length >5 μm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective] using as Glass wool		ol	3 fiber/cm3 7 (fibers <= 3.9 in diameter a >= 10 µm in length); 5 mg TWA (total) as Glass wo fiber	5 µm and g/m3	Not established		
					as Glass wool						
					Limits/Gui						
		Result		gapor	е	;	South Africa			S	pain
		TWAs	5 mg/m3 TWA								
Phenothiazene		STELs	Not established								
(92-84-2)		Biologica Limit Values (BLV)	al								
2-Butanone (78-93-3)	2-Butanone STELS 300 ppm STELS		300 ppm STEL; 8	85 mg		300 ppm STEL	STEL; 885 n	ng/m3	300 ppm S mg/m3 ST		[VLA-EC]; 900 LA-EC]

	TWAs	200 ppm PEL; 590 mg/m3 PEL	200 ppm TWA; 590 mg/m3 TWA	200 ppm TWA [VLA-ED] (indicative limit value); 600 mg/m3 TWA [VLA-ED] (indicative limit value)
Glass, oxide, chemicals	TWAs	10 mg/m3 PEL as Glass wool fiber	Not established	1 fiber/cm3 TWA [VLA-ED] (Fibers with a random orientation, with a content in Alkaline and Alkali-earth oxide [Na2O+K2O+CaO+MgO+BaO] above 18% in weight; manufacturing, commercialization, and use restrictions under REACH. Respirable fibers: length >5 μm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers) as Glass wool fiber

OELs Not Included in Table

US WEEL

Exposure Control Notations

China

•N/A

Czech Republic

 $\bullet N/A$

Denmark

- •Phenothiazene (92-84-2): Skin Notations: (Potential for cutaneous absorption)
- •2-Butanone (78-93-3): Skin Notations: (Potential for cutaneous absorption)

Greece

•N/A

Italy

• Phenothiazene (92-84-2): Skin: (skin - potential for cutaneous absorption)

Netherlands

- Phenothiazene (92-84-2): **Skin:** (skin notation)
- •2-Butanone (78-93-3): Skin: (skin notation)

Canada Ontario

• Phenothiazene (92-84-2): Skin: (Absorption through skin, eyes, or mucous membranes)

Canada Quebec

• Phenothiazene (92-84-2): Skin: (Skin designation)

France

•Phenothiazene (92-84-2): Skin Notations: (Potential for cutaneous absorption)

Spain

•N/A

ACGIH

•Phenothiazene (92-84-2): Skin: (Skin - potential significant contribution to overall exposure by the cutaneous route)

Germany TRGS

•2-Butanone (78-93-3): Skin: (skin notation)

Germany DFG

•2-Butanone (78-93-3): Pregnancy: (no risk to embryo/fetus if exposure limits adhered to) | Skin: (skin notation)

Exposure Limits Supplemental

Czech Republic

•N/A

OSHA

•N/A

[•]Propylene glycol monomethyl ether acetate (108-65-6): TWA: 50 ppm

ACGIH

•2-Butanone (78-93-3): **BEIs:** (2 mg/L Medium: urine Time: end of shift Parameter: MEK (nonspecific)) | **TLV Basis - Critical Effects:** (CNS and PNS impairment; upper respiratory tract irritation)

Germany TRGS

•2-Butanone (78-93-3): BELs: (5 mg/L Medium: urine Time: end of shift Parameter: 2-Butanone)

8.2 Exposure controls

Engineering Measures/Controls

• Good general ventilation 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. Use explosion-proof electrical/ventilating/lighting/equipment.

Personal Protective Equipment

Respiratory

• In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face Skin/Body

· Wear chemical splash safety goggles.

• Wear Chemical Splash Salety goggles

Environmental Exposure Controls

Wear appropriate gloves. Wear long sleeves and/or protective coveralls.
Controls should be engineered to prevent release to the environment, including procedures

Controls should be engineered to prevent release to the environment, including procedures
to prevent spills, atmospheric release and release to waterways. Follow best practice for site
management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

BEI = Biological Exposure Indices

MAK = Maximale Arbeitsplatz Konzentration is the maximum

permissible concentration

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

STEL = Short Term Exposure Limits are based on 15-minute exposures

STEV = Short Term Exposure Value

TLV = Threshold Limit Value determined by the American Conference of

Governmental Industrial Hygienists (ACGIH)

TWA = Time-Weighted Averages are based on 8h/day, 40h/week

exposures

TWAEV = Time-Weighted Average Exposure Value

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Yellow solid sheet
Color	Yellow	Odor	None
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Not relevant	Melting Point	Data lacking
Decomposition Temperature	>200 C(392 F)	рН	Not relevant
Specific Gravity/Relative Density	1.2 to 2.0	Water Solubility	Negligible < 0.1 %
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility	•	•	-
Vapor Pressure	Not relevant	Vapor Density	Not relevant
Evaporation Rate	Not relevant	VOC (Wt.)	<0.3%
VOC (Vol.)	<0.3%	Volatiles (Wt.)	<0.3%

Page 9 of 19

Volatiles (Vol.)	<0.3%			
Flammability				
Flash Point	Not relevant	UEL	Data lacking	
LEL	Data lacking	Autoignition	Data lacking	
Flammability (solid, gas)	Data lacking			
Environmental	•	-		
Octanol/Water Partition coefficient	Data lacking			

9.2 Other Information

• No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

• No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

• Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

• Hazardous decomposition will occur at elevated temperatures.

10.4 Conditions to avoid

• Avoid exposure to excessive heat and flames, sparks, or other ignition sources.

10.5 Incompatible materials

• Strong acids, strong bases, strong oxidizers, amines.

10.6 Hazardous decomposition products

• Acrid vapors and fumes, aliphatic and aromatic hydrocarbons of variable composition, CO, CO2, NOx, HCN

Section 11 - Toxicological Information

11.1 Information on toxicological effects

	•	Components
2-Butanone (< 1%)	78-93-3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 2737 mg/kg; Inhalation-Rat LC50 • 23500 mg/m³ 8 Hour(s); Inhalation-Human TCLo • 1000 mg/m³; Sense Organs and Special Senses:Eye:Conjunctive irritation; Lungs, Thorax, or Respiration:Cough; Skin-Rabbit LD50 • 6480 mg/kg; Irritation: Eye-Human • 350 ppm; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; Reproductive: Inhalation-Rat TCLo • 1000 ppm 7 Hour(s)(6-15D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system
Glass, oxide, chemicals (30% TO 65%)	65997- 17-3	Multi-dose Toxicity: Inhalation-Rat TCLo • 16 mg/m³ 6 Hour(s) 13 Week(s)-Intermittent; Lungs, Thorax, or Respiration:Other changes

Potential Health Effects

Inhalation

Acute (Immediate)

• Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible.

Chronic

• No data available.

(Delayed)

Skin

Acute

May cause mild irritation.

(Immediate)

No data available.

Chronic (Delayed)

Eye

Acute

• May cause mild eye irritation (dust).

(Immediate)

No data available.

Chronic (Delayed)

Ingestion

Acute

• No data available.

(Immediate) Chronic

No data available.

(Delayed)

No data available

Mutagenic

• No data available.

Effects

Carcinogenic Effects

• This product contains fibrous glass. Following a thorough review of all the medical-scientific data available at a meeting in October 2001, the IARC panel lowered the classification for fibrous glass from a Group 2B classification ("possibly carcinogenic to humans") to a Group 3 classification ("not classifiable as to carcinogenicity to humans"). According to IARC, there is "no evidence of increased risks of lung cancer from occupational exposures during manufacturing of these materials, and inadequate evidence overall of any cancer risk.

Reproductive Effects

Reproductive • No data available.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

12.1 Toxicity

Not expected to be harmful to aquatic life.

12.2 Persistence and degradability

· Material data lacking.

12.3 Bioaccumulative potential

· Material data lacking.

12.4 Mobility in Soil

• Material data lacking.

12.5 Results of PBT and vPvB assessment

• No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

• No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

• DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 3: Composition Information. For UNUSED & UNCONTAMINATED PRODUCT, the preferred disposal option includes sending to a licensed, permitted waste handler and disposing with incinerator or other thermal destruction device.

waste

Packaging • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NA	Not Regulated	NA	NA	NDA
TDG	NA	Not Regulated	NA	NA	NDA
IMO/IMDG	NA	Not Regulated	NA	NA	NDA
IATA/ICAO	NA	Not Regulated	NA	NA	NDA

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- · None specified.
- Material not supplied in bulk form.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

Chronic

	State Right To Know								
Component	CAS	MA	NJ	PA					
2-Butanone	78-93-3	Yes	Yes	Yes					
Dihydro, 2 (3H)- Furanone (GBL)	96-48-0	No	Yes	Yes					
2-Methoxy-1- methylethyl acetate	108-65-6	No	Yes	Yes					
Phenothiazine	92-84-2	Yes	Yes	Yes					
Glass, oxide, chemicals	65997-17- 3	Yes	No	Yes					

				Inventor	V				
Component	CAS	Canada	DSL	Canada NDSL	China		EU EINECS		EU ELNICS
2-Butanone	78-93-3	Yes		No	Yes	Ye	es		No
Dihydro, 2 (3H)- Furanone (GBL)	96-48-0	Yes		No	Yes	Ye	es		No
2-Methoxy-1- methylethyl acetate	108-65-6	S Yes		No	Yes	Ye	Yes		No
Phenothiazine	92-84-2	Yes		No	Yes	Ye	Yes		No
Glass, oxide, chemicals	65997-1 3	7- Yes		No	Yes	Ye	Yes		No
				Inventory (C	on't.)				
Componer	nt	CAS		Japan ENCS	Kor	ea KECL			TSCA
2-Butanone		78-93-3	Yes		Yes			Yes	
Dihydro, 2 (3H)-Fu (GBL)	ıranone	96-48-0	Yes		Yes			Yes	
2-Methoxy-1-meth	ylethyl	108-65-6	Yes		Yes			Yes	
Phenothiazine	•	92-84-2	Yes		Yes	•		Yes	
Glass, oxide, chem	nicals	65997-17-3	Yes		Yes	<u> </u>		Yes	

Australia

Labor

Australia - Work Health and Safety Regulations - Hazardous Substances Requiring	Health Monito	ring
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	illig
•2-Butanone	78-93-3	Not Listed
•2-Methoxy-1-methylethyl acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
Australia - High Volume Industrial Chemicals List		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•2-Butanone	78-93-3	
Propylene glycol monomethyl ether acetate	108-65-6	
•Phenothiazine	92-84-2	
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
Australia - List of Designated Hazardous Substances - Classification		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•2-Butanone	78-93-3	F, Xi R11, R36, R66, R67
Propylene glycol monomethyl ether acetate	108-65-6	
•Phenothiazine	92-84-2	
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
Environment		
Australia - National Pollutant Inventory (NPI) Substance List		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•2-Butanone	78-93-3	10 tonne/yr Threshold category 1
Propylene glycol monomethyl ether acetate	108-65-6	3 3
•Phenothiazine	92-84-2	
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
Australia - Ozone Protection Act - Scheduled Substances		

	•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0			
	•2-Butanone	78-93-3	Not Listed		
	Propylene glycol monomethyl ether acetate	108-65-6			
	•Phenothiazine	92-84-2			
	•Glass, oxide, chemicals	65997-17-3	Not Listed		
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed		
	Australia - Priority Existing Chemical Program				
	•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0			
	•2-Butanone	78-93-3	Candidate chemical		
	•Propylene glycol monomethyl ether acetate	108-65-6			
	•Phenothiazine	92-84-2			
	•Glass, oxide, chemicals	65997-17-3	Not Listed		
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed		
_					
C	anada				
L	abor				
	Canada - WHMIS - Classifications of Substances				
	•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	D2B		
	•2-Butanone	78-93-3	B2, D2B		
	•Propylene glycol monomethyl ether acetate	108-65-6	B3. D2A		
	Trappina giyaarmanamiyi amat daadaa		Uncontrolled product		
	•Phenothiazine	92-84-2	according to WHMIS		
			classification criteria		
	•Glass, oxide, chemicals	65997-17-3	Not Listed		
			Uncontrolled product		
			according to WHMIS		
	•Glass, oxide, chemicals as Glass wool fiber		classification criteria (listed		
	Glass, Oxide, Chemicals as Glass wool liber		under Glass wool); D2A		
			(listed under Mineral wool		
	Occasio MUMO Issue Park Blades and List		fiber)		
	Canada - WHMIS - Ingredient Disclosure List	00.40.0	NI-A I S-AI		
	•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed		
	•2-Butanone	78-93-3	1 %		
	Propylene glycol monomethyl ether acetate	108-65-6			
	•Phenothiazine	92-84-2			
	•Glass, oxide, chemicals	65997-17-3	Not Listed		
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed		
E	nvironment				
	Canada - CEPA - Priority Substances List				
	•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed		
	•2-Butanone	78-93-3	Not Listed		
	Propylene glycol monomethyl ether acetate	108-65-6	Not Elotod		
	•Phenothiazine	92-84-2			
	•Glass, oxide, chemicals	65997-17-3	Not Listed		
		03997-17-3	Not Listed		
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed		
Ε	urope				
0	Other				
U	EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification				
	•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Xn; R22, R41, R67		
	•2-Butanone	78-93-3	F; R11 Xi; R36 R66 R67		
			F, KTT XI, K30 K00 K07		
	Propylene glycol monomethyl ether acetate	108-65-6	V=. Vi. D00 D07 D00 D10		
	•Phenothiazine	92-84-2	Xn; Xi; R36, R37, R38, R43		
	•Glass, oxide, chemicals	65997-17-3	Not Listed		
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed		
	EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits	00.40.0	N		
	•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed		
	•2-Butanone	78-93-3	Not Listed		

 Propylene glycol monomethyl ether acetate Phenothiazine Glass, oxide, chemicals Glass, oxide, chemicals as Glass wool fiber EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling 	108-65-6 92-84-2 65997-17-3	Not Listed Not Listed
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Xn; R22, R41, R67 S: 26-39
•2-Butanone	78-93-3	F Xi R:11-36-66-67 S:(2)-9-
Propylene glycol monomethyl ether acetate	108-65-6	16
•Phenothiazine	92-84-2	
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations	96-48-0	Not Listed
•Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	140t Elotod
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases	00.40.0	0.00.00
•Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone	96-48-0 78-93-3	S: 26-39
•2-butanone •Propylene glycol monomethyl ether acetate	78-93-3 108-65-6	S:(2)-9-16
Phenothiazine	92-84-2	S: 26-37-39
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
Germany		
-		
Environment Commany TA Luft Types and Classes		
Germany - TA Luft - Types and Classes •Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
Germany - TA Luft - Emission Limits for Carcinogenic Substances	00.40.0	No. 412 de 1
•Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone	96-48-0 78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
Germany - TA Luft - Emission Limits for Fibers		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
Phenothiazine Glass, oxide, chemicals	92-84-2 65997-17-3	Not Listed Not Listed
•Glass, oxide, chemicals as Glass wool fiber	03997-17-3	Not Listed
Germany - TA Luft - Emission Limits for Inorganic Dusts		140t Elotod
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber Germany - TA Luft - Emission Limits for Inorganic Gases		Not Listed
Sermany - 17 East - Emission Emilia for morganic Gases		

	•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
	•2-Butanone	78-93-3	Not Listed
	Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
	•Phenothiazine	92-84-2	Not Listed
	•Glass, oxide, chemicals	65997-17-3	Not Listed
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed
	Germany - TA Luft - Emission Limits for Organic Substances		
	Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
	•2-Butanone	78-93-3	Not Listed
			Not Listed
	Propylene glycol monomethyl ether acetate	108-65-6	
	•Phenothiazine	92-84-2	
	•Glass, oxide, chemicals	65997-17-3	Not Listed
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed
	Germany - Water Classification (VwVwS) - Annex 1		. 101 2.010 4
		96-48-0	Not Listed
	•Dihydro, 2 (3H)-Furanone (GBL)		Not Listed
	•2-Butanone	78-93-3	Not Listed
	Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
	•Phenothiazine	92-84-2	Not Listed
	•Glass, oxide, chemicals	65997-17-3	Not Listed
		00001-11-0	
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed
	Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
,	•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	ID Number 1286, hazard class 1 - low hazard to waters
,	•2-Butanone	78-93-3	ID Number 150, hazard class 1 - low hazard to waters
	Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
	•Phenothiazine	92-84-2	
		65997-17-3	Not Listed
	•Glass, oxide, chemicals	00997-17-3	
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed
	Germany - Water Classification (VwVwS) - Annex 3		
	•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
	•2-Butanone	78-93-3	Not Listed
	Propylene glycol monomethyl ether acetate	108-65-6	
			Not Listed
	•Phenothiazine	92-84-2	Not Listed
	•Glass, oxide, chemicals	65997-17-3	Not Listed
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed
Un	ited States		
Lak	NO.		
Lab			
	U.S OSHA - Process Safety Management - Highly Hazardous Chemicals		
	Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
	•2-Butanone	78-93-3	Not Listed
	Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
	•Phenothiazine	92-84-2	Not Listed
	•Glass, oxide, chemicals	65997-17-3	Not Listed
		03991-11-3	
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed
	U.S OSHA - Specifically Regulated Chemicals		
	Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
	•2-Butanone	78-93-3	Not Listed
	Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
	•Phenothiazine	92-84-2	Not Listed
	•Glass, oxide, chemicals	65997-17-3	Not Listed
	•Glass, oxide, chemicals as Glass wool fiber		Not Listed
En	vironment		
Environment			
	J.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants	00.40.0	
•[Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed

•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine •Glass, oxide, chemicals	78-93-3 108-65-6 92-84-2 65997-17-3	Not Listed Not Listed Not Listed Not Listed (including mineral fiber emissions from facilities
•Glass, oxide, chemicals as Glass wool fiber		manufacturing or processing glass, rock, or slag fibers [or other mineral derived fibers] of average diameter 1 μm or less)
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	5000 lb final RQ; 2270 kg final RQ
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities •Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber	00007 17 0	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
Glass, oxide, chemicals Glass, oxide, chemicals as Glass wool fiber	65997-17-3	Not Listed Not Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		Not Listed
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber	· VII	Not Listed
 U.S RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix Dihydro, 2 (3H)-Furanone (GBL) 	96-48-0	
		Included in waste streams:
•2-Butanone	78-93-3	F005, F039
•Propylene glycol monomethyl ether acetate	108-65-6	

-Dhonothioring	02.04.2	
•Phenothiazine •Glass, oxide, chemicals	9 2-84-2 65997-17-3	Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - Constituents for Detection N		Not Listed
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•2-Butanone	78-93-3	
Propylene glycol monomethyl ether acetate	108-65-6	
•Phenothiazine	92-84-2	
•Glass, oxide, chemicals	65997-17-3	Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constitu		Not Listed
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•2-Butanone	78-93-3	
Propylene glycol monomethyl ether acetate	108-65-6	
•Phenothiazine	92-84-2	
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - University	al Treatment S	tandards
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•2-Butanone	78-93-3	0.28 mg/L (wastewater); 36
Z-Datarione	70-33-3	mg/kg (nonwastewater)
Propylene glycol monomethyl ether acetate	108-65-6	
•Phenothiazine	92-84-2	
•Glass, oxide, chemicals	65997-17-3	Not Listed
U.S RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water	_	
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•2-Butanone	78-93-3	
Propylene glycol monomethyl ether acetate	108-65-6	
•Phenothiazine	92-84-2	Not Listed
 Glass, oxide, chemicals U.S RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely T 	65997-17-3	Not Listed
Characteristics	UNIC WASIES &	Other Hazardous
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	waste number U159
•Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone	96-48-0 78-93-3	waste number U159 (Ignitable waste, Toxic
•2-Butanone	78-93-3	
Propylene glycol monomethyl ether acetate	78-93-3 108-65-6	(Ignitable waste, Toxic waste)
•2-Butanone	78-93-3	(Ignitable waste, Toxic
Propylene glycol monomethyl ether acetate	78-93-3 108-65-6	(Ignitable waste, Toxic waste)
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California	78-93-3 108-65-6	(Ignitable waste, Toxic waste)
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment	78-93-3 108-65-6	(Ignitable waste, Toxic waste)
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List	78-93-3 108-65-6 92-84-2	(Ignitable waste, Toxic waste)
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment	78-93-3 108-65-6 92-84-2	(Ignitable waste, Toxic waste) Not Listed
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List •Dihydro, 2 (3H)-Furanone (GBL)	78-93-3 108-65-6 92-84-2 96-48-0	(Ignitable waste, Toxic waste) Not Listed Not Listed
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List •Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3	(Ignitable waste, Toxic waste) Not Listed Not Listed Not Listed
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List •Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone •Propylene glycol monomethyl ether acetate	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6	(Ignitable waste, Toxic waste) Not Listed Not Listed Not Listed Not Listed Not Listed
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List •Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2	(Ignitable waste, Toxic waste) Not Listed carcinogen, initial date
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List •Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2	(Ignitable waste, Toxic waste) Not Listed oracinogen, initial date 7/1/90 (inhalable and
Propylene glycol monomethyl ether acetate Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List Dihydro, 2 (3H)-Furanone (GBL) -2-Butanone Propylene glycol monomethyl ether acetate Phenothiazine Glass, oxide, chemicals Glass, oxide, chemicals as Glass wool fiber	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2	(Ignitable waste, Toxic waste) Not Listed carcinogen, initial date
Propylene glycol monomethyl ether acetate Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List Dihydro, 2 (3H)-Furanone (GBL) -2-Butanone Propylene glycol monomethyl ether acetate Phenothiazine Glass, oxide, chemicals Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Developmental Toxicity	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3	(Ignitable waste, Toxic waste) Not Listed oracinogen, initial date 7/1/90 (inhalable and biopersistent)
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List •Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine •Glass, oxide, chemicals •Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Developmental Toxicity •Dihydro, 2 (3H)-Furanone (GBL)	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3	(Ignitable waste, Toxic waste) Not Listed oracinogen, initial date 7/1/90 (inhalable and biopersistent) Not Listed
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List •Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine •Glass, oxide, chemicals •Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Developmental Toxicity •Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3	(Ignitable waste, Toxic waste) Not Listed Carcinogen, initial date 7/1/90 (inhalable and biopersistent) Not Listed Not Listed Not Listed
•2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List •Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone •Propylene glycol monomethyl ether acetate •Phenothiazine •Glass, oxide, chemicals •Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Developmental Toxicity •Dihydro, 2 (3H)-Furanone (GBL) •2-Butanone •Propylene glycol monomethyl ether acetate	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3 96-48-0 78-93-3 108-65-6	(Ignitable waste, Toxic waste) Not Listed carcinogen, initial date 7/1/90 (inhalable and biopersistent) Not Listed Not Listed Not Listed Not Listed
Propylene glycol monomethyl ether acetate Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List Dihydro, 2 (3H)-Furanone (GBL) -2-Butanone Propylene glycol monomethyl ether acetate Phenothiazine Glass, oxide, chemicals Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Developmental Toxicity Dihydro, 2 (3H)-Furanone (GBL) -2-Butanone Propylene glycol monomethyl ether acetate Phenothiazine	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3 96-48-0 78-93-3 108-65-6 92-84-2	(Ignitable waste, Toxic waste) Not Listed carcinogen, initial date 7/1/90 (inhalable and biopersistent) Not Listed
Propylene glycol monomethyl ether acetate Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List Dihydro, 2 (3H)-Furanone (GBL) -2-Butanone Propylene glycol monomethyl ether acetate Phenothiazine Glass, oxide, chemicals Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Developmental Toxicity Dihydro, 2 (3H)-Furanone (GBL) -2-Butanone Propylene glycol monomethyl ether acetate Phenothiazine Glass, oxide, chemicals	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3 96-48-0 78-93-3 108-65-6	(Ignitable waste, Toxic waste) Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed Carcinogen, initial date 7/1/90 (inhalable and biopersistent) Not Listed
Propylene glycol monomethyl ether acetate Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List Dihydro, 2 (3H)-Furanone (GBL) -2-Butanone Propylene glycol monomethyl ether acetate Phenothiazine Glass, oxide, chemicals Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Developmental Toxicity Dihydro, 2 (3H)-Furanone (GBL) -2-Butanone Propylene glycol monomethyl ether acetate Phenothiazine Glass, oxide, chemicals Glass, oxide, chemicals Glass, oxide, chemicals	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3 96-48-0 78-93-3 108-65-6 92-84-2	(Ignitable waste, Toxic waste) Not Listed carcinogen, initial date 7/1/90 (inhalable and biopersistent) Not Listed
*2-Butanone *Propylene glycol monomethyl ether acetate *Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List *Dihydro, 2 (3H)-Furanone (GBL) *2-Butanone *Propylene glycol monomethyl ether acetate *Phenothiazine *Glass, oxide, chemicals *Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Developmental Toxicity *Dihydro, 2 (3H)-Furanone (GBL) *2-Butanone *Propylene glycol monomethyl ether acetate *Phenothiazine *Glass, oxide, chemicals *Glass, oxide, chemicals *Glass, oxide, chemicals *Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3	(Ignitable waste, Toxic waste) Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed carcinogen, initial date 7/1/90 (inhalable and biopersistent) Not Listed
Propylene glycol monomethyl ether acetate Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List Dihydro, 2 (3H)-Furanone (GBL) -2-Butanone Propylene glycol monomethyl ether acetate Phenothiazine Glass, oxide, chemicals Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Developmental Toxicity Dihydro, 2 (3H)-Furanone (GBL) -2-Butanone Propylene glycol monomethyl ether acetate Phenothiazine Glass, oxide, chemicals Glass, oxide, chemicals Glass, oxide, chemicals	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3 96-48-0 96-48-0 96-48-0	(Ignitable waste, Toxic waste) Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed carcinogen, initial date 7/1/90 (inhalable and biopersistent) Not Listed Not Listed
*2-Butanone *Propylene glycol monomethyl ether acetate *Phenothiazine United States - California Environment U.S California - Proposition 65 - Carcinogens List *Dihydro, 2 (3H)-Furanone (GBL) *2-Butanone *Propylene glycol monomethyl ether acetate *Phenothiazine *Glass, oxide, chemicals *Glass, oxide, chemicals *Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Developmental Toxicity *Dihydro, 2 (3H)-Furanone (GBL) *2-Butanone *Propylene glycol monomethyl ether acetate *Phenothiazine *Glass, oxide, chemicals *Glass, oxide, chemicals *Glass, oxide, chemicals as Glass wool fiber U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL) *Dihydro, 2 (3H)-Furanone (GBL)	78-93-3 108-65-6 92-84-2 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3 96-48-0 78-93-3 108-65-6 92-84-2 65997-17-3	(Ignitable waste, Toxic waste) Not Listed Not Listed Not Listed Not Listed Not Listed Not Listed carcinogen, initial date 7/1/90 (inhalable and biopersistent) Not Listed

•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	Not Listed
 Propylene glycol monomethyl ether acetate 	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	Not Listed
•2-Butanone	78-93-3	Not Listed
Propylene glycol monomethyl ether acetate	108-65-6	Not Listed
•Phenothiazine	92-84-2	Not Listed
•Glass, oxide, chemicals	65997-17-3	Not Listed
•Glass, oxide, chemicals as Glass wool fiber		Not Listed

United States - Pennsylvania

Labor

U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•2-Butanone	78-93-3	
•Propylene glycol monomethyl ether acetate	108-65-6	
•Phenothiazine	92-84-2	
•Glass, oxide, chemicals	65997-17-3	Not Listed
U.S Pennsylvania - RTK (Right to Know) - Special Hazardous Substances		
•Dihydro, 2 (3H)-Furanone (GBL)	96-48-0	
•2-Butanone	78-93-3	Not Listed
•Propylene glycol monomethyl ether acetate	108-65-6	
•Phenothiazine	92-84-2	
•Glass, oxide, chemicals	65997-17-3	Not Listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

15.3 Other Information

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

Section 16 - Other Information

Relevant Phrases (code & full text)

• H226 - Flammable liquid and vapour

H312 - Harmful in contact with skin

H332 - Harmful if inhaled

R10 - Flammable.

R20/21 - Harmful by inhalation and in contact with skin.

Revision Date: 3/November/2021

Page 19 of 19

Last Revision Date Preparation Date

Disclaimer/Statement of Liability

- 15/July/2021
- 11/August/2015
- The information and recommendations contained in this Safety Data Sheet (SDS) are supplied pursuant to the Occupational Safety and Health Administration's Hazard Communication Standard as promulgated under 29 CFR 1910.1200 and the United States Environmental Protection Agency's Supplier Notification Rule as promulgated under 40 CFR 372.45. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in the proper procedures of safe chemical handling. The information contained herein is provided in good faith with no representation as to its comprehensiveness or accuracy. No representations or warranties, either express or implied, of merchantability, or fitness for a particular purpose or of any nature are made with respect to the material described in this Safety Data Sheet. Chemical additions or processing or otherwise altering this material may make the safety information presented in this Safety Data Sheet incomplete, inaccurate or otherwise inappropriate. The information listed above does not include all state, federal, and international regulations. The regulatory information supplied may change from time to time. It is the user's responsibility to keep advised of all applicable regulatory requirements.

A Format: EU CLP/REACH, EU DSD/DPD, WHMIS, and OSHA HCS 2012
Original GHS Format Preparation Date: 11/August/2015
Revision Date: 3/November/2021