Safety Data Sheet

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

1.1 Product identifier

Product Name • **BC-704 Neutron Screen**

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

Relevant identified use(s) • Consult manufacturer for recommended product use.

1.3 Details of the supplier of the safety data sheet

Manufacturer • Saint-Gobain Crystals and Detectors

17900 Great Lakes Parkway
Hiram, OH 44234-9681
United States
www.crystals.saint-gobain.com

Telephone (General) • 440-834-5600

1.4 Emergency telephone number

Manufacturer • 1-800-424-9300 - ChemTrec

Manufacturer • 703-525-3887 - ChemTrec Outside U.S.

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

2.1 Classification of the substance or mixture

CLP • Not classified

2.2 Label Elements

CLP

Hazard statements • 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.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

- Not classified

2.2 Label elements

OSHA HCS 2012

Hazard statements

- No label element(s) required

2.3 Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200(c) - Hazard Communication Standard), the product(s) listed above are exempt as article(s) under stated normal conditions of use.

Canada

According to: WHMIS 2015

2.1 Classification of the substance or mixture

WHMIS 2015

- Not classified

2.2 Label elements

WHMIS 2015

Hazard statements

- No label element(s) required

Precautionary statements

2.3 Other hazards

WHMIS 2015

- In Canada, this product is considered a manufactured article under the Workplace Hazardous Materials Information System (WHMIS) and is exempt

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2.4 Other information

- This material, as an article, does not legally require an SDS.

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**	**%**	**LD50/LC50**	**Classifications According to Regulation/Directive**	**Comments**
Organic Binder	*Proprietary*	< 50%	Ingestion/Oral-Rat LD50 • 4300 mg/kg Inhalation-Rat LC50 • 5000 ppm 4 Hour(s) Skin-Rabbit LD50 • >1700 mg/kg	**EU CLP:** Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315 **OSHA HCS 2012:** Flam. Liq. 3; Acute Tox. 4 (Inhl); Skin Irrit. 2; Eye Irrit. 2; Repr. 1B (Inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit. **WHMIS 2015:** Flam. Liq. 3; Acute Tox. 4 (Inhl); Eye Irrit. 2; Skin Irrit. 2; Repr. 1B (inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit.; Asp. Tox. 1	NDA
IP019 Invisible Blue	NDA	20% TO 30%	NDA	**EU CLP:** Not Classified **OSHA HCS 2012:** Not Classified **WHMIS 2015:** Not Classified	NDA

Lithium-6 fluoride	**CAS:**14885-65-5 **EINECS:**238-958-9	5% TO 15%	NDA	**EU CLP:** Acute Tox. 3, H301; Repr. 2, H361; Lact., H362 **OSHA HCS 2012:** Acute Tox. 3 (orl); Repr. 2; Lact. **WHMIS 2015:** Acute Tox. 3 (orl); Repr. 2; Lact.	NDA
Organic Binder	*Proprietary*	< 5%	Ingestion/Oral-Rat LD50 • 3500 mg/kg Skin-Rabbit LD50 • 17800 µL/kg	**EU CLP:** Annex VI, Table 3.1: Flam. Liq. 2, H225; Acute Tox. 4, H332; STOT RE 2, H373 (Hearing Organs / Inhl); Asp. Tox. 1, H304 **OSHA HCS 2012:** Flam. Liq. 2; Acute Tox. 4 (Inhl); Eye Irrit. 2; Carc. 2 (Inhl); Repr. 2 (Inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit. (Inhl); STOT RE 2 (Ear / Inhl); Asp. Tox. 1 **WHMIS 2015:** Flam. Liq. 2; Acute Tox. 4 (Inhl); Eye Irrit. 2; Carc. 2 (Inhl); Repr. 2 (Inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit. (Inhl); STOT RE 2 (Ear / Inhl); Asp. Tox. 1	NDA
Organic Binder	*Proprietary*	< 0.5%	Ingestion/Oral-Rat LD50 • 636 mg/kg Skin-Rabbit LD50 • 14100 µL/kg Inhalation-Rat LC50 • 49 g/m³ 4 Hour(s)	**EU CLP:** Annex VI, Table 3.1: Flam. Liq. 2, H225; Skin Irrit. 2, H315; Repr. 2, H361d; STOT SE 3: Narc., H336; STOT RE 2, H373; Asp. Tox. 1, H304 **OSHA HCS 2012:** Flam. Liq. 2; Acute Tox. 4 (Orl); Skin Irrit. 2; Eye Irrit. 2; Muta. 1B; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (CNS/Inhl); Asp. Tox. 1 **WHMIS 2015:** Flam. Liq. 2; Acute Tox. 4 (Orl); Skin Irrit. 2; Eye Irrit. 2; Muta. 1B; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (CNS/Inhl); Asp. Tox. 1	NDA

See Section 16 for full text of H-statements.

Section 4 - First Aid Measures

4.1 Description of first aid measures

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

Skin
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Wash skin with soap and water. If signs/symptoms develop, get medical attention.

Eye
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If contact with material occurs flush eyes with water. If signs/symptoms develop, get medical attention.

Ingestion
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information. Under normal conditions of use, no health effects are expected.

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

Suitable Extinguishing Media
- Material is non-combustible. In case of fire use media as appropriate for surrounding fire.

Unsuitable Extinguishing
- No data available

Media

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Material is non-combustible and is not expected to pose a fire or explosion hazard.

Hazardous Combustion Products
- No data available

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions
- No special precautions expected to be necessary if material is used under ordinary conditions and as recommended.

Emergency Procedures
- No emergency procedures are expected to be necessary if material is used under ordinary conditions and as recommended. Use normal clean up procedures.

6.2 Environmental precautions

- No special precautions necessary.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up 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
- Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Storage
- Store at ambient conditions.

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**	**Canada British Columbia**	**Canada Manitoba**	**Canada New Brunswick**	**Canada Northwest Territories**
Organic Binder (Proprietary)	TWAs	20 ppm TWA	20 ppm TWA	20 ppm TWA	50 ppm TWA; 188 mg/m3 TWA	50 ppm TWA
	STELs	Not established	Not established	Not established	Not established	60 ppm STEL
Organic Binder (Proprietary)	TWAs	20 ppm TWA	20 ppm TWA	20 ppm TWA	100 ppm TWA; 434 mg/m3 TWA	100 ppm TWA
	STELs	Not established	Not established	Not established	125 ppm STEL; 543 mg/m3 STEL	125 ppm STEL

Organic Binder (Proprietary)	STELs	150 ppm STEL	150 ppm STEL	150 ppm STEL	150 ppm STEL; 651 mg/m3 STEL	150 ppm STEL
	TWAs	100 ppm TWA	100 ppm TWA	100 ppm TWA	100 ppm TWA; 434 mg/m3 TWA	100 ppm TWA

Exposure Limits/Guidelines (Con't.)

	Result	Canada Nova Scotia	Canada Nunavut	Canada Ontario	Canada Quebec	Canada Yukon
Organic Binder (Proprietary)	TWAs	20 ppm TWA	50 ppm TWA	20 ppm TWA	50 ppm TWAEV; 188 mg/m3 TWAEV	100 ppm TWA; 375 mg/m3 TWA
	STELs	Not established	60 ppm STEL	Not established	Not established	150 ppm STEL; 560 mg/m3 STEL
Organic Binder (Proprietary)	TWAs	20 ppm TWA	100 ppm TWA	20 ppm TWA	100 ppm TWAEV; 434 mg/m3 TWAEV	100 ppm TWA; 435 mg/m3 TWA
	STELs	Not established	125 ppm STEL	Not established	125 ppm STEV; 543 mg/m3 STEV	125 ppm STEL; 545 mg/m3 STEL
Organic Binder (Proprietary)	STELs	150 ppm STEL	150 ppm STEL	150 ppm STEL	150 ppm STEV; 651 mg/m3 STEV	150 ppm STEL; 650 mg/m3 STEL
	TWAs	100 ppm TWA	100 ppm TWA	100 ppm TWA	100 ppm TWAEV; 434 mg/m3 TWAEV	100 ppm TWA; 435 mg/m3 TWA

Exposure Limits/Guidelines (Con't.)

	Result	China	Denmark	Europe	Finland	France
Organic Binder (Proprietary)	STELs	100 mg/m3 STEL	Not established	100 ppm STEL; 384 mg/m3 STEL	Not established	100 ppm STEL [VLCT] (restrictive limit); 384 mg/m3 STEL [VLCT] (restrictive limit)
	TWAs	50 mg/m3 TWA	25 ppm TWA; 94 mg/m3 TWA	50 ppm TWA; 192 mg/m3 TWA	25 ppm TWA; 81 mg/m3 TWA	20 ppm TWA [VME] (restrictive limit); 76.8 mg/m3 TWA [VME] (restrictive limit)
	Biological Limit Values	Not established	Not established	Not established	500 nmol/L Medium: blood Time: morning after the shift Parameter: Toluene concentrated	Not established
Organic Binder (Proprietary)	STELs	150 mg/m3 STEL	Not established	Not established	Not established	100 ppm STEL [VLCT] (restrictive limit); 442 mg/m3 STEL [VLCT] (restrictive limit)
	TWAs	100 mg/m3 TWA	50 ppm TWA; 217 mg/m3 TWA	Not established	50 ppm TWA; 220 mg/m3 TWA	20 ppm TWA [VME] (restrictive limit); 88.4 mg/m3 TWA [VME] (restrictive limit)
	Biological Limit Values	Not established	Not established	Not established	5.2 mmol/L Medium: urine Time: end of shift at end of workweek or exposure period Parameter: Mandelic acid	Not established
	STELs	100 mg/m3 STEL	Not established	Not established	Not established	100 ppm STEL [VLCT] (restrictive limit); 442 mg/m3

						STEL [VLCT] (restrictive limit)
Organic Binder (Proprietary)	TWAs	50 mg/m3 TWA	25 ppm TWA; 109 mg/m3 TWA	Not established	50 ppm TWA; 220 mg/m3 TWA	50 ppm TWA [VME] (restrictive limit); 221 mg/m3 TWA [VME] (restrictive limit)
	Biological Limit Values	Not established	Not established	Not established	5.0 mmol/L Medium: urine Time: end of shift Parameter: Methylhippuric acid	Not established

Exposure Limits/Guidelines (Con't.)

	Result	Germany DFG	Germany TRGS	Greece	Hungary	Ireland
Organic Binder (Proprietary)	TWAs	Not established	50 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 4); 190 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 4)	50 ppm TWA; 192 mg/m3 TWA	190 mg/m3 TWA [AK]	50 ppm TWA; 192 mg/m3 TWA
	STELs	Not established	Not established	100 ppm STEL; 384 mg/m3 STEL	380 mg/m3 STEL [CK]	384 mg/m3 STEL (as Mn); 100 ppm STEL
	Ceilings	200 ppm Peak; 760 mg/m3 Peak	Not established	Not established	Not established	Not established
	MAKs	50 ppm TWA MAK; 190 mg/m3 TWA MAK	Not established	Not established	Not established	Not established
Organic Binder (Proprietary)	TWAs	Not established	20 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, exposure factor 2); 88 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 2)	100 ppm TWA; 435 mg/m3 TWA	442 mg/m3 TWA [AK]	100 ppm TWA; 442 mg/m3 TWA
	STELs	Not established	Not established	125 ppm STEL; 545 mg/m3 STEL	884 mg/m3 STEL [CK]	200 ppm STEL; 884 mg/m3 STEL
	Ceilings	40 ppm Peak; 176 mg/m3 Peak	Not established	Not established	Not established	Not established
	MAKs	20 ppm TWA MAK; 88 mg/m3 TWA MAK	Not established	Not established	Not established	Not established
			100 ppm TWA AGW			

Organic Binder (Proprietary)	TWAs	Not established	(all isomers, exposure factor 2); 440 mg/m3 TWA AGW (all isomers, exposure factor 2)	100 ppm TWA; 435 mg/m3 TWA	221 mg/m3 TWA [AK]	50 ppm TWA; 221 mg/m3 TWA
	STELs	Not established	Not established	150 ppm STEL; 650 mg/m3 STEL	442 mg/m3 STEL [CK]	100 ppm STEL; 442 mg/m3 STEL
	Ceilings	200 ppm Peak (all isomers); 880 mg/m3 Peak (all isomers)	Not established	Not established	Not established	Not established
	MAKs	100 ppm TWA MAK (all isomers); 440 mg/m3 TWA MAK (all isomers)	Not established	Not established	Not established	Not established

Exposure Limits/Guidelines (Con't.)

	Result	Italy	Netherlands	NIOSH	OSHA	Poland
Organic Binder (Proprietary)	TWAs	50 ppm TWA Media Ponderata nel Tempo; 192 mg/m3 TWA Media Ponderata nel Tempo	150 mg/m3 TWA	100 ppm TWA; 375 mg/m3 TWA	200 ppm TWA	100 mg/m3 TWA [NDS]
	STELs	Not established	384 mg/m3 STEL	150 ppm STEL; 560 mg/m3 STEL	Not established	200 mg/m3 STEL [NDSCh]
	Ceilings	Not established	Not established	Not established	300 ppm Ceiling	Not established
Organic Binder (Proprietary)	STELs	200 ppm STEL Breve termine; 884 mg/m3 STEL Breve termine	430 mg/m3 STEL	125 ppm STEL; 545 mg/m3 STEL	Not established	400 mg/m3 STEL [NDSCh]
	TWAs	100 ppm TWA Media Ponderata nel Tempo; 442 mg/m3 TWA Media Ponderata nel Tempo	215 mg/m3 TWA	100 ppm TWA; 435 mg/m3 TWA	100 ppm TWA; 435 mg/m3 TWA	200 mg/m3 TWA [NDS]
Organic Binder (Proprietary)	STELs	100 ppm STEL Breve termine (pure); 442 mg/m3 STEL Breve termine (pure)	442 mg/m3 STEL	Not established	Not established	Not established
	TWAs	50 ppm TWA Media Ponderata nel Tempo (pure); 221 mg/m3 TWA Media Ponderata nel Tempo (pure)	210 mg/m3 TWA	Not established	100 ppm TWA; 435 mg/m3 TWA	100 mg/m3 TWA [NDS]

Exposure Limits/Guidelines (Con't.)

	Result	Portugal	Spain	Sweden
	STELs	100 ppm STEL [VLE-CD] (indicative limit value); 384 mg/m3 STEL [VLE-CD] (indicative limit value)	100 ppm STEL [VLA-EC]; 384 mg/m3 STEL [VLA-EC]	100 ppm Binding STLV; 384 mg/m3 Binding STLV
Organic Binder			50 ppm TWA [VLA-ED] (indicative limit value; manufacturing,	

(Proprietary)	TWAs	50 ppm TWA [VLE-MP] (indicative limit value); 192 mg/m3 TWA [VLE-MP] (indicative limit value)	commercialization and use restrictions according to REACH); 192 mg/m3 TWA [VLA-ED] (indicative limit value; manufacturing, commercialization and use restrictions according to REACH)	50 ppm LLV; 192 mg/m3 LLV
Organic Binder (Proprietary)	STELs	200 ppm STEL [VLE-CD] (indicative limit value); 884 mg/m3 STEL [VLE-CD] (indicative limit value)	200 ppm STEL [VLA-EC]; 884 mg/m3 STEL [VLA-EC]	200 ppm Binding STLV; 884 mg/m3 Binding STLV
	TWAs	100 ppm TWA [VLE-MP] (indicative limit value); 442 mg/m3 TWA [VLE-MP] (indicative limit value)	100 ppm TWA [VLA-ED] (indicative limit value); 441 mg/m3 TWA [VLA-ED] (indicative limit value)	50 ppm LLV; 220 mg/m3 LLV
Organic Binder (Proprietary)	STELs	100 ppm STEL [VLE-CD] (indicative limit value); 442 mg/m3 STEL [VLE-CD] (indicative limit value)	100 ppm STEL [VLA-EC]; 442 mg/m3 STEL [VLA-EC]	100 ppm Binding STLV; 442 mg/m3 Binding STLV
	TWAs	50 ppm TWA [VLE-MP] (indicative limit value); 221 mg/m3 TWA [VLE-MP] (indicative limit value)	50 ppm TWA [VLA-ED] (indicative limit value); 221 mg/m3 TWA [VLA-ED] (indicative limit value)	50 ppm LLV; 221 mg/m3 LLV

Exposure Control Notations

Europe

- Organic Binder (Proprietary): **Skin:** (Possibility of significant uptake through the skin)

China

- Organic Binder (Proprietary): **Skin:** (Skin notation)

Denmark

- Organic Binder (Proprietary): **Skin Notations:** (Potential for cutaneous absorption (listed under Xylene, all isomers))
- Organic Binder (Proprietary): **Skin Notations:** (Potential for cutaneous absorption)
- Organic Binder (Proprietary): **Skin Notations:** (Potential for cutaneous absorption)

Portugal

- Organic Binder (Proprietary): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen) | **Skin:** (skin - potential for cutaneous exposure (indicative limit value))
- Organic Binder (Proprietary): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans) | **Skin:** (skin - potential for cutaneous exposure (indicative limit value))
- Organic Binder (Proprietary): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen) | **Skin:** (skin - potential for cutaneous exposure (indicative limit value))

Greece

- Organic Binder (Proprietary): **Skin:** (skin - potential for cutaneous absorption)
- Organic Binder (Proprietary): **Skin:** (skin - potential for cutaneous absorption)

Italy

- Organic Binder (Proprietary): **Skin:** (skin - potential for cutaneous absorption (pure))
- Organic Binder (Proprietary): **Skin:** (skin - potential for cutaneous absorption)
- Organic Binder (Proprietary): **Skin:** (skin - potential for cutaneous absorption)

Hungary

- Organic Binder (Proprietary): **Skin:** (potential for cutaneous absorption)
- Organic Binder (Proprietary): **Skin:** (potential for cutaneous absorption)
- Organic Binder (Proprietary): **Skin:** (potential for cutaneous absorption)

Netherlands

- Organic Binder (Proprietary): **Skin:** (skin notation)
- Organic Binder (Proprietary): **Skin:** (skin notation)

Finland

•Organic Binder (Proprietary): **Skin:** (Potential for cutaneous absorption)
•Organic Binder (Proprietary): **Skin:** (Potential for cutaneous absorption)
•Organic Binder (Proprietary): **Skin:** (Potential for cutaneous absorption)

France
•Organic Binder (Proprietary): **Reproductive Toxins:** (Reproductive Toxin category 2)

Ireland
•Organic Binder (Proprietary): **Skin:** (Potential for cutaneous absorption)
•Organic Binder (Proprietary): **Skin:** (Potential for cutaneous absorption)
•Organic Binder (Proprietary): **Skin:** (Potential for cutaneous absorption)

Spain
•Organic Binder (Proprietary): **Skin:** (skin - potential for cutaneous exposure)
•Organic Binder (Proprietary): **Skin:** (skin - potential for cutaneous exposure)
•Organic Binder (Proprietary): **Skin:** (skin - potential for cutaneous exposure)

Sweden
•Organic Binder (Proprietary): **Skin:** (Skin notation)
•Organic Binder (Proprietary): **Skin:** (Skin notation)
•Organic Binder (Proprietary): **Skin:** (Skin notation)

ACGIH
•Organic Binder (Proprietary): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
•Organic Binder (Proprietary): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans)
•Organic Binder (Proprietary): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

Germany TRGS
•Organic Binder (Proprietary): **Skin:** (skin notation (all isomers))
•Organic Binder (Proprietary): **Skin:** (skin notation)
•Organic Binder (Proprietary): **Skin:** (skin notation)

Germany DFG
•Organic Binder (Proprietary): **Pregnancy:** (classification not yet possible (all isomers)) | **Skin:** (skin notation (all isomers))
•Organic Binder (Proprietary): **Carcinogens:** (Category 4 (no significant contribution to human cancer)) | **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Skin:** (skin notation)
•Organic Binder (Proprietary): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to) | **Skin:** (skin notation)

Exposure Limits Supplemental

ACGIH
•Organic Binder (Proprietary): **BEIs:** (1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids) | **TLV Basis - Critical Effects:** (CNS impairment; eye and upper respiratory tract irritation)
•Organic Binder (Proprietary): **BEIs:** (0.15 g/g creatinine Medium: urine Time: end of shift Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific)) | **TLV Basis - Critical Effects:** (upper respiratory tract irritation; kidney damage (nephropathy); cochlear impairment)
•Organic Binder (Proprietary): **BEIs:** (0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene; 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene; 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)) | **TLV Basis - Critical Effects:** (female reproductive damage; pregnancy loss; visual impairment)

Germany TRGS
•Organic Binder (Proprietary): **BELs:** (1.5 mg/L Medium: whole blood Time: end of shift Parameter: Xylene (all isomers); 2000 mg/L Medium: urine Time: end of shift Parameter: Methylhippuric(tolur-)acid (all isomers))
•Organic Binder (Proprietary): **BELs:** (300 mg/g Medium: urine Time: end of shift Parameter: Mandelic acid plus Phenylglyoxylic acid)
•Organic Binder (Proprietary): **BELs:** (600 µg/L Medium: whole blood Time: end of shift Parameter: Toluene; 1.5 mg/L Medium: urine Time: end of several shifts Parameter: o-Cresol (after hydrolysis; for long-term exposures))

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.

Personal Protective Equipment

Respiratory
- In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face
- Wear safety glasses.

Skin/Body	• Wear appropriate gloves.
Environmental Exposure Controls	• 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
LLV = Limit Level Value is the exposure limit for 8-hour work day
MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration
NIOSH = National Institute of Occupational Safety and Health
OSHA = Occupational Safety and Health Administration
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 Basic Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Clear solid.
Color	Clear	Odor	Data lacking
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	Data lacking	Water Solubility	Data lacking
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Data lacking	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 polymerization will not occur.

10.4 Conditions to avoid

- No data available

10.5 Incompatible materials

- No data available

10.6 Hazardous decomposition products

- No data available

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Organic Binder (< 50%)	*Proprietary*	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 4300 mg/kg; *Liver*:**Other changes**; *Kidney, Ureter, and Bladder*:**Other changes**; Inhalation-Rat LC50 • 5000 ppm 4 Hour(s); Inhalation-Man LCLo • 10000 ppm 6 Hour(s); *Behavioral*:**General anesthetic**; *Lungs, Thorax, or Respiration*:**Cyanosis**; *Blood*:**Other changes**; Inhalation-Human TCLo • 200 ppm; *Sense Organs and Special Senses:Olfaction*:**Other changes**; *Sense Organs and Special Senses:Eye*:**Conjunctive irritation**; *Lungs, Thorax, or Respiration*:**Other changes**; Skin-Rabbit LD50 • >1700 mg/kg; **Irritation:** Eye-Rabbit • 5 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; **Reproductive:** Inhalation-Rabbit TCLo • 1 g/m³ 24 Hour(s)(7-20D preg); *Reproductive Effects:Effects on Fertility*:**Abortion**; Inhalation-Rat TCLo • 50 mg/m³ 6 Hour(s)(1-21D preg); *Reproductive Effects:Effects on Fertility*:**Post-implantation mortality**; *Reproductive Effects:Effects on Embryo or Fetus*:**Fetotoxicity (except death, e.g., stunted fetus)**; *Reproductive Effects:Specific Developmental Abnormalities*:**Craniofacial (including nose and tongue)**; Inhalation-Rat TDLo • 200 ppm 6 Hour(s)(4-20D preg); *Reproductive Effects:Specific Developmental Abnormalities*:**Musculoskeletal system**; *Reproductive Effects:Effects on Newborn*:**Behavioral**
Organic Binder (< 5%)	*Proprietary*	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 3500 mg/kg; Inhalation-Guinea Pig LCLo • 2500 ppm 8 Hour(s); *Behavioral*:**Coma**; Inhalation-Human TCLo • 21700 mg/m³; *Behavioral*:**Antipsychotic**; Inhalation-Mouse TCLo • 600 ppm 6 Minute(s); *Lungs, Thorax, or Respiration*:**Respiratory depression**; Skin-Rabbit LD50 • 17800 µL/kg; **Irritation:** Eye-Rabbit • 500 mg • Severe irritation; Skin-Rabbit • 15 mg 24 Hour(s)-Open • Mild irritation; **Multi-dose Toxicity:** Inhalation-Rat TCLo • 550 ppm 8 Hour(s) 5 Day(s)-Intermittent; *Sense Organs and Special Senses:Ear*:**Change in acuity**; *Sense Organs and Special Senses:Ear*:**Changes in cochlear structure or function**; Inhalation-Rat TDLo • 200 ppm 13 Week(s)-Intermittent; *Sense Organs and Special Senses:Ear*:**Changes in cochlear structure or function**; **Mutagen:** Specific locus test • Intraperitoneal-Mouse • 754 µmol/L; Micronucleus test • Unreported Route-Hamster • Embryo (Somatic cell) • 25 mg/L; Sister chromatid exchange • Unreported Route-Human • Lymphocyte (Somatic cell) • 10 mmol/L; Mutation in Mammalian Somatic Cells • Unreported Route-Mouse • Lymphocyte (Somatic cell) • 80 mg/L; **Reproductive:** Inhalation-Rabbit TCLo • 1 g/m³ 24 Hour(s)(7-20D preg); *Reproductive Effects:Effects on Fertility*:**Abortion**; Inhalation-Rat TCLo • 96 ppm 7 Hour(s)(1-19D preg); *Reproductive Effects:Specific Developmental Abnormalities*:**Musculoskeletal system**; Inhalation-Rat TCLo • 1000 ppm (6-20D preg); *Reproductive Effects:Effects on Embryo or Fetus*:**Fetotoxicity (except death, e.g., stunted fetus)**; Inhalation-Rat TCLo • 600 mg/m³ 24 Hour(s)(7-15D preg); *Reproductive Effects:Effects on Fertility*:**Post-implantation mortality**; *Reproductive Effects:Effects on Embryo or Fetus*:**Fetal death**; *Reproductive Effects:Specific Developmental Abnormalities*:**Musculoskeletal system**; **Tumorigen / Carcinogen:** Inhalation-Mouse TCLo • 750 ppm 6 Hour(s) 2 Year(s)-Intermittent; *Tumorigenic*:**Carcinogenic by RTECS criteria**; *Lungs, Thorax, or Respiration*:**Bronchiogenic carcinoma**; *Liver*:**Tumors**; Inhalation-Rat TCLo • 750 ppm 6 Hour(s) 2 Year(s)-Intermittent; *Tumorigenic*:**Carcinogenic by RTECS criteria**; *Kidney, Ureter, and Bladder*:**Tumors**; Inhalation-Rat TCLo • 23400 mg/kg 104 Week(s)-Intermittent; *Tumorigenic*:**Equivocal tumorigenic agent by RTECS criteria**; *Kidney, Ureter, and Bladder*:**Kidney tumors**; *Reproductive Effects:Tumorigenic Effects*:**Testicular tumors**
		Acute Toxicity: Ingestion/Oral-Rat LD50 • 636 mg/kg; Inhalation-Rat LC50 • 49 g/m³ 4 Hour(s); Inhalation-Human TCLo • 200 ppm; *Brain and Coverings*:**Recordings from specific areas of CNS**; *Behavioral*:**Antipsychotic**; *Blood*:**Changes in bone marrow not included above**; Inhalation-Human TCLo • 1500 mg/m³ 8 Hour(s); *Sense Organs and Special Senses:Eye*:**Lacrimation**; *Sense Organs and Special Senses:Eye*:**Conjunctive irritation**; *Behavioral*:**Ataxia**; Inhalation-Man TCLo • 50 ppm; *Kidney, Ureter, and Bladder*:**Other changes in urine composition**; Skin-Rabbit LD50 • 14100 µL/kg; **Irritation:** Eye-Rabbit • 2 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation;

Organic Binder (< 0.5%)	*Proprietary*	**Multi-dose Toxicity:** Inhalation-Mouse TCLo • 250 ppm 4 Day(s)-Continuous; *Behavioral*:**Convulsions or effect on seizure threshold**; *Behavioral*:**Abuse**; Inhalation-Mouse TCLo • 50 ppm 12 Week(s)-Intermittent; *Brain and Coverings*:**Other degenerative changes**; Inhalation-Rat TCLo • 10 ppm 6 Hour(s) 13 Week(s)-Intermittent; *Brain and Coverings*:**Other degenerative changes**; *Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels*:**Multiple enzyme effects**; **Mutagen:** Micronucleus test • Ingestion/Oral-Mouse • 200 mg/kg; Sister chromatid exchange • Inhalation-Human • 252 µg/L 19 Year(s); Cytogenetic analysis • Inhalation-Rat • 5400 µg/m³ 16 Week(s)-Intermittent; **Reproductive:** Inhalation-Mouse TCLo • 500 mg/m³ 24 Hour(s)(6-13D preg); *Reproductive Effects:Effects on Embryo or Fetus*:**Fetotoxicity (except death, e.g., stunted fetus)**; Inhalation-Mouse TCLo • 200 ppm 7 Hour(s)(7-16D preg); *Reproductive Effects:Specific Developmental Abnormalities*:**Urogenital system**

GHS Properties	Classification
Acute toxicity	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant
Skin corrosion/Irritation	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant
Serious eye damage/Irritation	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant
Skin sensitization	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant
Respiratory sensitization	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant
Aspiration Hazard	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant
Carcinogenicity	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant
Germ Cell Mutagenicity	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant
Toxicity for Reproduction	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant
STOT-SE	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant
STOT-RE	**EU/CLP** • Not relevant **OSHA HCS 2012** • Not relevant **WHMIS 2015** • Not relevant

Potential Health Effects

Inhalation

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)
- Under normal conditions of use, no health effects are expected.

Skin

Acute (Immediate)
- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)
- Under normal conditions of use, no health effects are expected.

Eye

Acute (Immediate)
- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)
- Under normal conditions of use, no health effects are expected.

Ingestion

Acute (Immediate)
- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)
- Under normal conditions of use, no health effects are expected.

Carcinogenic Effects
- Due to the product form, exposure to hazardous dusts or fumes is not expected to occur during regular use. Information on carcinogenicity is given for reference only. This product is not classifiable as a carcinogen.

Carcinogenic Effects		
	CAS	IARC
Organic Binder	Proprietary	Group 2B-Possible Carcinogen

Key to abbreviations

LC = Lethal Concentration
LD = Lethal Dose
TC = Toxic Concentration
TD = Toxic Dose

Section 12 - Ecological Information

12.1 Toxicity

- Material data lacking.

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

Packaging waste
- 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	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
TDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IMO/IMDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IATA/ICAO	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA

14.6 Special precautions for user
- None specified.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
- Data lacking.

Section 15 - Regulatory Information

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

SARA Hazard Classifications
- None

State Right To Know		
Component	**CAS**	**PA**
Organic Binder	*Proprietary*	Yes
Lithium-6 fluoride	14885-65-5	No
Organic Binder	*Proprietary*	Yes
Organic Binder	*Proprietary*	Yes

Inventory						
Component	**CAS**	**Canada DSL**	**Canada NDSL**	**China**	**EU EINECS**	**EU ELNICS**
Organic Binder	*Proprietary*	Yes	No	Yes	Yes	No
Lithium-6 fluoride	14885-65-5	No	Yes	No	Yes	No
Organic Binder	*Proprietary*	Yes	No	Yes	Yes	No
Organic Binder	*Proprietary*	Yes	No	Yes	Yes	No

Inventory (Con't.)			
Component	**CAS**	**Korea KECL**	**TSCA**
Organic Binder	*Proprietary*	Yes	Yes
Lithium-6 fluoride	14885-65-5	Yes	Yes
Organic Binder	*Proprietary*	Yes	Yes
Organic Binder	*Proprietary*	Yes	Yes

Canada

Labor

Canada - WHMIS 1988 - Classifications of Substances

• Organic Binder	*Proprietary*	B2, D2A, D2B
• Organic Binder	*Proprietary*	B2, D2A, D2B
• Organic Binder	*Proprietary*	B2, D2A, D2B

• Lithium-6 fluoride	14885-65-5	Not Listed

Canada - WHMIS 1988 - Ingredient Disclosure List

• Organic Binder	*Proprietary*	0.1 %
• Organic Binder	*Proprietary*	1 %
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Environment

Canada - CEPA - Priority Substances List

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Priority Substance List 1 (substance not considered toxic)
• Organic Binder	*Proprietary*	Priority Substance List 1 (substance not considered toxic)
• Lithium-6 fluoride	14885-65-5	Not Listed

China

Environment

China - Ozone Depleting Substances - First Schedule

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

China - Ozone Depleting Substances - Second Schedule

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

China - Ozone Depleting Substances - Third Schedule

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Other

China - Annex I & II - Controlled Chemicals Lists

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

China - Dangerous Goods List

• Organic Binder	*Proprietary*	
• Organic Binder	*Proprietary*	
• Organic Binder	*Proprietary*	
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany

Labor

Germany - Immission Control - Qualifying Quantities for Major Accident Prevention

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany - Immission Control - Qualifying Quantities for Safety Reporting

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany - TRGS 505 - Specific Lead Regulations

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Environment

Germany - TA Luft - Types and Classes

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany - TA Luft - Emission Limits for Carcinogenic Substances

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany - TA Luft - Emission Limits for Fibers

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Dusts

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany - TA Luft - Emission Limits for Inorganic Gases

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany - TA Luft - Emission Limits for Organic Substances

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany - Water Classification (VwVwS) - Annex 1

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

• Organic Binder	*Proprietary*	ID Number 99, hazard class 1 - low hazard to waters
• Organic Binder	*Proprietary*	ID Number 194, hazard class 2 - hazard to waters
• Organic Binder	*Proprietary*	ID Number 206, hazard class 2 - hazard to waters
• Lithium-6 fluoride	14885-65-5	Not Listed

Germany - Water Classification (VwVwS) - Annex 3

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Organic Binder	*Proprietary*	(listed under Ethyl benzene)
• Organic Binder	*Proprietary*	
• Organic Binder	*Proprietary*	(isomers and mixtures)
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Organic Binder	*Proprietary*	1000 lb final RQ; 454 kg final RQ
• Organic Binder	*Proprietary*	1000 lb final RQ; 454 kg final RQ
• Organic Binder	*Proprietary*	100 lb final RQ; 45.4 kg final RQ
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed

• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Organic Binder	*Proprietary*	0.1 % de minimis concentration
• Organic Binder	*Proprietary*	1.0 % de minimis concentration
• Organic Binder	*Proprietary*	1.0 % de minimis concentration
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Organic Binder	*Proprietary*	carcinogen, 6/11/2004
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	developmental toxicity, 1/1/1991
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	7000 µg/day MADL (level represents absorbed dose)
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Organic Binder	*Proprietary*	54 µg/day NSRL (inhalation); 41 µg/day NSRL (oral)
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed

• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• Organic Binder	*Proprietary*	
• Organic Binder	*Proprietary*	
• Organic Binder	*Proprietary*	
• Lithium-6 fluoride	14885-65-5	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Organic Binder	*Proprietary*	Not Listed
• Lithium-6 fluoride	14885-65-5	Not Listed

15.2 Chemical Safety Assessment

- Chemical Safety Assessment is not required.

15.3 Other Information

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

Section 16 - Other Information

Relevant Phrases (code & full text)

- H225 - Highly flammable liquid and vapour
  H226 - Flammable liquid and vapour
  H301 - Toxic if swallowed
  H312 - Harmful in contact with skin
  H315 - Causes skin irritation
  H332 - Harmful if inhaled
  H336 - May cause drowsiness or dizziness
  H361 - Suspected of damaging fertility or the unborn child.
  H361d - Suspected of damaging the unborn child.
  H362 - May cause harm to breast-fed children
  H373 - May cause damage to organs through prolonged or repeated exposure.

Revision Date
- 20/March/2017

Preparation Date
- 15/March/2017

Disclaimer/Statement of Liability
- Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to

determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Safety Data Sheet before handling product.

Key to abbreviations

NDA = No Data Available