



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 • Luxium Solutions
17900 Great Lakes Parkway
Hiram, OH 44234-9681
United States
www.luxiumsolutions.com

Telephone (General) • 440-834-5600

1.4 Emergency telephone number

Contract # 6493674

U.S. & Canada • 1-800-255-3924 – VelocityEHS

International • +1-813-248-0585 – VelocityEHS

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

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/m ³ 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/m ³ 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/m ³ TWA | 100 ppm TWA |
| | STELs | Not established | Not established | Not established | 125 ppm STEL; 543 mg/m ³ STEL | 125 ppm STEL |

| | | | | | | |
|--|-------------------------|----------------------------|---------------------------------------|--|--|--|
| Organic Binder (Proprietary) | STELs | 150 ppm STEL | 150 ppm STEL | 150 ppm STEL | 150 ppm STEL; 651 mg/m ³ STEL | 150 ppm STEL |
| | TWAs | 100 ppm TWA | 100 ppm TWA | 100 ppm TWA | 100 ppm TWA; 434 mg/m ³ 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/m ³ TWAEV | 100 ppm TWA; 375 mg/m ³ TWA |
| | STELs | Not established | 60 ppm STEL | Not established | Not established | 150 ppm STEL; 560 mg/m ³ STEL |
| Organic Binder (Proprietary) | TWAs | 20 ppm TWA | 100 ppm TWA | 20 ppm TWA | 100 ppm TWAEV; 434 mg/m ³ TWAEV | 100 ppm TWA; 435 mg/m ³ TWA |
| | STELs | Not established | 125 ppm STEL | Not established | 125 ppm STEV; 543 mg/m ³ STEV | 125 ppm STEL; 545 mg/m ³ STEL |
| Organic Binder (Proprietary) | STELs | 150 ppm STEL | 150 ppm STEL | 150 ppm STEL | 150 ppm STEV; 651 mg/m ³ STEV | 150 ppm STEL; 650 mg/m ³ STEL |
| | TWAs | 100 ppm TWA | 100 ppm TWA | 100 ppm TWA | 100 ppm TWAEV; 434 mg/m ³ TWAEV | 100 ppm TWA; 435 mg/m ³ TWA |
| Exposure Limits/Guidelines (Con't.) | | | | | | |
| | Result | China | Denmark | Europe | Finland | France |
| Organic Binder (Proprietary) | STELs | 100 mg/m ³ STEL | Not established | 100 ppm STEL; 384 mg/m ³ STEL | Not established | 100 ppm STEL [VLCT] (restrictive limit); 384 mg/m ³ STEL [VLCT] (restrictive limit) |
| | TWAs | 50 mg/m ³ TWA | 25 ppm TWA; 94 mg/m ³ TWA | 50 ppm TWA; 192 mg/m ³ TWA | 25 ppm TWA; 81 mg/m ³ TWA | 20 ppm TWA [VME] (restrictive limit); 76.8 mg/m ³ 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/m ³ STEL | Not established | Not established | Not established | 100 ppm STEL [VLCT] (restrictive limit); 442 mg/m ³ STEL [VLCT] (restrictive limit) |
| | TWAs | 100 mg/m ³ TWA | 50 ppm TWA; 217 mg/m ³ TWA | Not established | 50 ppm TWA; 220 mg/m ³ TWA | 20 ppm TWA [VME] (restrictive limit); 88.4 mg/m ³ 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/m ³ STEL | Not established | Not established | Not established | 100 ppm STEL [VLCT] (restrictive limit); 442 mg/m ³ |

| | | | | | | |
|--|-------------------------|-----------------------------------|---|------------------------------|--|--|
| Organic Binder (Proprietary) | TWAs | 50 mg/m3 TWA | 25 ppm TWA; 109 mg/m3 TWA | Not established | 50 ppm TWA; 220 mg/m3 TWA | STEL [VLCT] (restrictive limit) 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 |
|----------------|--------|--|---|--|
| Organic Binder | 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 |
| | | | 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 STELV; 884 mg/m3 Binding STELV |
| | 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 STELV; 442 mg/m3 Binding STELV |
| | 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
Environmental Exposure Controls

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

| | | |
|-------------------------|--------------------|---|
| Organic Binder (< 0.5%) | <i>Proprietary</i> | <p>Multi-dose Toxicity: Inhalation-Mouse TLo • 250 ppm 4 Day(s)-Continuous; <i>Behavioral:Convulsions or effect on seizure threshold; Behavioral:Abuse;</i> Inhalation-Mouse TLo • 50 ppm 12 Week(s)-Intermittent; <i>Brain and Coverings:Other degenerative changes;</i> Inhalation-Rat TLo • 10 ppm 6 Hour(s) 13 Week(s)-Intermittent; <i>Brain and Coverings:Other degenerative changes; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Multiple enzyme effects;</i></p> <p>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;</p> <p>Reproductive: Inhalation-Mouse TLo • 500 mg/m³ 24 Hour(s)(6-13D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus);</i> Inhalation-Mouse TLo • 200 ppm 7 Hour(s)(7-16D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Urogenital system</i></p> |
|-------------------------|--------------------|---|

| 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 | <i>Proprietary</i> | Yes |
| Lithium-6 fluoride | 14885-65-5 | No |
| Organic Binder | <i>Proprietary</i> | Yes |
| Organic Binder | <i>Proprietary</i> | Yes |

| Inventory | | | | | | |
|--------------------|--------------------|------------|-------------|-------|-----------|-----------|
| Component | CAS | Canada DSL | Canada NDSL | China | EU EINECS | EU ELNICS |
| Organic Binder | <i>Proprietary</i> | Yes | No | Yes | Yes | No |
| Lithium-6 fluoride | 14885-65-5 | No | Yes | No | Yes | No |
| Organic Binder | <i>Proprietary</i> | Yes | No | Yes | Yes | No |
| Organic Binder | <i>Proprietary</i> | Yes | No | Yes | Yes | No |

| Inventory (Con't.) | | | |
|--------------------|--------------------|------------|------|
| Component | CAS | Korea KECL | TSCA |
| Organic Binder | <i>Proprietary</i> | Yes | Yes |
| Lithium-6 fluoride | 14885-65-5 | Yes | Yes |
| Organic Binder | <i>Proprietary</i> | Yes | Yes |
| Organic Binder | <i>Proprietary</i> | Yes | Yes |

Canada

Labor

Canada - WHMIS 1988 - Classifications of Substances

- | | | |
|------------------|--------------------|--------------|
| • Organic Binder | <i>Proprietary</i> | B2, D2A, D2B |
| • Organic Binder | <i>Proprietary</i> | B2, D2A, D2B |
| • Organic Binder | <i>Proprietary</i> | 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 | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

Germany - Immission Control - Qualifying Quantities for Safety Reporting

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

Germany - TRGS 505 - Specific Lead Regulations

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

Environment**Germany - TA Luft - Types and Classes**

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

Germany - TA Luft - Emission Limits for Carcinogenic Substances

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

Germany - TA Luft - Emission Limits for Fibers

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

Germany - TA Luft - Emission Limits for Inorganic Dusts

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

Germany - TA Luft - Emission Limits for Inorganic Gases

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

Germany - TA Luft - Emission Limits for Organic Substances

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

Germany - Water Classification (VwVwS) - Annex 1

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

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

| | | |
|----------------------|--------------------|--|
| • Organic Binder | <i>Proprietary</i> | ID Number 99, hazard class 1 - low hazard to waters |
| • Organic Binder | <i>Proprietary</i> | ID Number 194, hazard class 2 - hazard to waters |
| • Organic Binder | <i>Proprietary</i> | 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 | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

United States

Labor

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

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

U.S. - OSHA - Specifically Regulated Chemicals

| | | |
|----------------------|--------------------|------------|
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

Environment

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

| | | |
|----------------------|--------------------|------------------------------|
| • Organic Binder | <i>Proprietary</i> | (listed under Ethyl benzene) |
| • Organic Binder | <i>Proprietary</i> | |
| • Organic Binder | <i>Proprietary</i> | (isomers and mixtures) |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |

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

| | | |
|----------------------|--------------------|-----------------------------------|
| • Organic Binder | <i>Proprietary</i> | 1000 lb final RQ; 454 kg final RQ |
| • Organic Binder | <i>Proprietary</i> | 1000 lb final RQ; 454 kg final RQ |
| • Organic Binder | <i>Proprietary</i> | 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 | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | 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 | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Male | | |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | 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 | <i>Proprietary</i> | |
| • Organic Binder | <i>Proprietary</i> | |
| • Organic Binder | <i>Proprietary</i> | |
| • Lithium-6 fluoride | 14885-65-5 | Not Listed |
| U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances | | |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | Not Listed |
| • Organic Binder | <i>Proprietary</i> | 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

- 15/March/2023

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