SAFETY DATA SHEET

Issuing Date 08-June-2016 **Revision Date** 08-June-2016 **Revision Number** 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product SDS Name **Silicone Sealant – Oxime - Blue**

J-B Weld FG SKU Part Numbers Covered

32326, 32926

J-B Weld Product Names Covered

Ultimate Blue™ (all sizes)

J-B Weld Product Type

Silicone – Oxime Grade

Recommended use of the chemical and restrictions on use

Recommended Use	Automotive Sealant & Gasket Maker
Uses advised against	No information available

Details of the supplier of the safety data sheet

Supplier Name	J-B WELD COMPANY,LLC
Supplier Address	1130 COMO ST SULPHUR SPRINGS, TX 75482 USA
Emergency Telephone Numbers	Transportation Emergencies: Chemtrec (24 hour transportation emergency response info): 800-424-9300 or 703-527-3887 Poison/Medical Emergencies: Poison Control Centers (24 hour emergency poison / medical response info): 800-222-1222
Supplier Email	info@jbweld.com
Supplier Phone Number	903-885-7696

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS classification in accordance with OSHA (29 CFR 1910.1200)	Sensitization, skin (chapter 3.4), Cat. 1 Specific target organ toxicity, repeated exposure (chapter 3.9), Cat. 2

GHS label elements, including precautionary statements

Pictogram

Signal Word	Warning
Hazard statement(s)	
H317	May cause an allergic skin reaction
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statement(s)	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P314	Get medical advice/attention if you feel unwell.
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents/container to
Other hazards which do not result in classification	None known

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances

Hazardous components

Calcium carbonate (Natural)

Concentration	>= 35 - <= 50 % (Weight)
Other names/synonyms	Agricultural limestone; limestone; Marble chips; Natural calcium carbonate
CAS no.	1317-65-3

2-Butanone, 2,2',2''-[O,O',O''-(ethenylsilylidyne)trioxime]

Concentration	>= 0.1 - < 4 % (Weight)
Other names/synonyms	Vinyl tris (methylethylketoxime)
CAS no.	2224-33-1

2-Butanone, 2,2',2''-[O,O',O''-(methylsilylidyne)trioxime]

Concentration	>= 0.1 - < 3 % (Weight)
Other names/synonyms	Methyl tris (methylethylketoxime)
CAS no.	22984-54-9

Silica

Concentration	>= 1 - < 10 % (Weight)
Other names/synonyms	Siliceous earth, purified
CAS no.	7632-86-9

3-AMINOPROPYLTRIETHOXYSILANE

Concentration	>= 0.1 - < 1 % (Weight)
Other names/synonyms	(3-Aminopropyl)triethoxysilane; 1-Propanamine, 3-(triethoxysilyl)-; 3-Triethoxysilylpropylamine; APTES
EC no.	213-048-4
CAS no.	919-30-2
Index no.	612-108-00-0

1-Propanamine, 3-(trimethoxysilyl)-

Concentration	>= 0.1 - < 1 % (Weight)
CAS no.	13822-56-5

4. FIRST AID MEASURES

Description of necessary first-aid measures

General advice	In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
If inhaled	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact	In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
In case of eye contact	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.
Personal protective equipment for first aid responders	First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

Most important symptoms/effects, acute and delayed

May cause an allergic skin reaction.
May cause damage to organs through prolonged or repeated exposure if swallowed.

Indication of immediate medical attention and special treatment needed, if necessary

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray
Alcohol-resistant foam
Dry chemical
Carbon dioxide (CO2)

Specific hazards arising from the chemical
Exposure to combustion products may be a hazard to health.

Special protective actions for fire-fighters
In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

Further information
Hazardous combustion products:
Carbon oxides
Metal oxides
Silicon oxides
Formaldehyde
Nitrogen oxides (NOx)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.
Environmental precautions:	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods for cleaning up:	Soak up with inert absorbent material. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

Reference to other sections
Section 13 and 15 of this SDS provide information regarding certain local or national requirements.

7. HANDLING AND STORAGE

Precautions for safe handling	Technical measures : See Engineering measures under EXPOSURE CONTROLS / PERSONAL PROTECTION section. Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling :
Do not get on skin or clothing.
Do not swallow.
Avoid contact with eyes.
Handle in accordance with good industrial hygiene and safety practice.
Keep away from water.
Protect from moisture.
Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage, including any incompatibilities

Keep in properly labeled containers.
Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types: Strong oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

1. Calcium Carbonate (CAS: 1317-65-3)
PEL (Inhalation): see PNOR (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov
2. Calcium Carbonate, Total dust (CAS: 1317-65-3)
PEL (Inhalation): 15 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov
3. Calcium Carbonate, Total dust (CAS: 1317-65-3)
PEL (Inhalation): 10 mg/m3 (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov
4. Calcium Carbonate, Total dust (CAS: 1317-65-3)
REL (Inhalation): 10 mg/m3 (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov
5. Calcium Carbonate, Respirable fraction (CAS: 1317-65-3)
PEL (Inhalation): 5 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov
6. Calcium Carbonate, Respirable fraction (CAS: 1317-65-3)
PEL (Inhalation): 5 mg/m3 (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov
7. Calcium Carbonate, Respirable fraction (CAS: 1317-65-3)
REL (Inhalation): 5 mg/m3 (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov
8. Limestone (CAS: 1317-65-3)
PEL (Inhalation): see PNOR (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov
9. Limestone, Total dust (CAS: 1317-65-3)
PEL (Inhalation): 15 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov
10. Limestone, Total dust (CAS: 1317-65-3)
PEL (Inhalation): 10 mg/m3 (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov
11. Limestone, Total dust (CAS: 1317-65-3)
REL (Inhalation): 10 mg/m3 (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov
12. Limestone, Respirable fraction (CAS: 1317-65-3)
PEL (Inhalation): 5 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

13. Limestone, Respirable fraction (CAS: 1317-65-3)
PEL (Inhalation): 5 mg/m3 (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov
14. Limestone, Respirable fraction (CAS: 1317-65-3)
REL (Inhalation): 5 mg/m3 (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov
15. Marble (CAS: 1317-65-3)
PEL (Inhalation): See PNOR (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov
16. Marble, Total dust (CAS: 1317-65-3)
PEL (Inhalation): 15 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov
17. Marble, Total dust (CAS: 1317-65-3)
PEL (Inhalation): 10 mg/m3 (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov
18. Marble, Total dust (CAS: 1317-65-3)
REL (Inhalation): 10 mg/m3 (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov
19. Marble, Respirable fraction (CAS: 1317-65-3)
PEL (Inhalation): 5 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov
20. Marble, Respirable fraction (CAS: 1317-65-3)
PEL (Inhalation): 5 mg/m3 (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov
21. Marble, Respirable fraction (CAS: 1317-65-3)
REL (Inhalation): 5 mg/m3 (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

Appropriate engineering controls

Processing may form hazardous compounds (see section 10).
Ensure adequate ventilation, especially in confined areas.
Minimize workplace exposure concentrations.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear the following personal protective equipment: Safety goggles

Skin protection

Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Hygiene measures: Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

Body protection

Impervious gloves. Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Respiratory protection

General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn.
Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance/form	Paste
Odor	slight
Odor threshold	No data available
pH	Not available
Melting point/freezing point	No data available
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	Not classified as a flammability hazard
Upper/lower flammability limits	No data available
Upper/lower explosive limits	No data available
Vapor pressure	Not applicable
Vapor density	No data available
Relative density	1.41
Solubility(ies)	No data available
Partition coefficient: n-octanold/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	Not explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.

10. STABILITY AND REACTIVITY

Reactivity

Not classified as a reactivity hazard.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Use at elevated temperatures may form highly hazardous compounds.
Can react with strong oxidizing agents.
Hazardous decomposition products will be formed upon contact with water or humid air.
Hazardous decomposition products will be formed at elevated temperatures.

Conditions to avoid

Exposure to moisture.

Incompatible materials	Oxidizing agents Water
Hazardous decomposition products	Contact with water or humid air: Ethyl methyl ketoxime Thermal decomposition: Formaldehyde

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Not classified based on available information.

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Ingredients:
Calcium carbonate:
Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 420
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): > 3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Amorphous fumed silica:
Acute oral toxicity : LD50 (Rat): > 20,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Information taken from reference works and the literature.

Vinyltri (methylethylketoxime) silane:
Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Based on test data
Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on test data

Methyltri(ethylmethylketoxime)silane:
Acute oral toxicity : LD50 (Rat): > 2,520 mg/kg
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Based on test data

3-Aminopropyltriethoxysilane:
Acute oral toxicity : LD50 (Rat): 2,295 mg/kg
Remarks: Based on test data
Acute inhalation toxicity : LC50 (Rat): > 1.49 mg/l

	Exposure time: 4 h Test atmosphere: dust/mist Remarks: Based on test data Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity Remarks: Based on test data
Skin corrosion/irritation	Not classified based on available information.
Serious eye damage/irritation	Not classified based on available information.
Respiratory or skin sensitization	Skin sensitization: May cause an allergic skin reaction. Respiratory sensitization: Not classified based on available information.
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	Not classified based on available information.
Reproductive toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	May cause damage to organs (Blood) through prolonged or repeated exposure if swallowed. Methyltri(ethylmethylketoxime)silane: Routes of exposure: Ingestion Target Organs: Blood Assessment: Shown to produce significant health effects in animals at concentrations of >10 to 100 mg/kg bw. Vinyltri (methylethylketoxime) silane: Routes of exposure: Ingestion Target Organs: Blood Assessment: Shown to produce significant health effects in animals at concentrations of >10 to 100 mg/kg bw.
Aspiration hazard	Not classified based on available information.
Additional information	Information on likely routes of exposure Skin contact Ingestion Eye contact Product: Remarks: During use of the material, small amounts of methylethylketoxime (MEKO) will be released. Rodents exposed to chronic MEKO inhalation throughout their lifetimes showed significant increases in liver tumor rates.

12. ECOLOGICAL INFORMATION

Toxicity

Calcium carbonate:
Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Toxicity to algae : ErC50 (Desmodesmus subspicatus (green algae)): > 14 mg/l

Methyltri(ethylmethylketoxime)silane:
Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 120 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): > 120 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials
Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 94 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials
Ecotoxicology Assessment
Acute aquatic toxicity: This product has no known ecotoxicological effects.

3-Aminopropyltriethyoxysilane:
Toxicity to fish : LC50 (Danio rerio (zebra fish)): 597 mg/l
Exposure time: 96 h
Method: Directive 67/548/EEC, Annex V, C.1.
Toxicity to daphnia and other
aquatic invertebrates
: EC50 (Daphnia sp.): 81 mg/l
Exposure time: 48 h
Method: Directive 67/548/EEC, Annex V, C.2.
Toxicity to algae : ErC50 (Selenastrum capricornutum (green algae)): 8.8 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
NOEC (Selenastrum capricornutum (green algae)): 3.1 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Toxicity to daphnia and other
aquatic invertebrates
(Chronic toxicity): NOEC (Daphnia sp.): > 1 mg/l
Exposure time: 21 d
Toxicity to bacteria : EC50 (Pseudomonas putida): 67 mg/l
Exposure time: 16 h
Test Type: Growth inhibition
Method: DIN 38 412 Part 8

Persistence and degradability	Methyltri(ethylmethylketoxime)silane: Biodegradability : Result: Not readily biodegradable. Biodegradation: 14.5 % Exposure time: 21 d Method: OECD Test Guideline 302B Remarks: Based on data from similar materials 3-Aminopropyltriethyoxysilane: Biodegradability : Result: Not readily biodegradable. Biodegradation: 39 % Method: OECD Test Guideline 301A Stability in water : Degradation half life: 0.025 h (24.7 °C) pH: 7 Method: OECD Test Guideline 111 Vinyltri (methylethylketoxime) silane: Biodegradability : Result: Not readily biodegradable. Stability in water : Degradation half life: 1 s
Bioaccumulative potential	Methyltri(ethylmethylketoxime)silane: Partition coefficient: noctanol/water: log Pow: 11.2 3-Aminopropyltriethyoxysilane: Partition coefficient: n- octanol/water : log Pow: -0.3
Mobility in soil	No data available
Results of PBT and vPvB assessment	No data available
Other adverse effects	No data available

13. DISPOSAL CONSIDERATIONS

Disposal of the product	Resource Conservation and Recovery Act (RCRA): This product has been evaluated for RCRA characteristics and does not meet the criteria of hazardous waste if discarded in its purchased form. Waste from residues: Dispose of in accordance with local regulations.
Disposal of contaminated packaging	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Waste treatment	No data
Sewage disposal	No data

14. TRANSPORT INFORMATION

DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question

New Jersey Right To Know Components
Common name: CALCIUM CARBONATE
CAS number: 1317-65-3

Pennsylvania Right To Know Components
Chemical name: Limestone
CAS number: 1317-65-3

Pennsylvania Right To Know Components
Chemical name: Silica
CAS number: 7631-86-9

Chemical Safety Assessment

California Prop 65 WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm. Methanol 67-56-1

The ingredients of this product are reported in the following inventories:
KECI : All ingredients listed, exempt or notified.
REACH : All ingredients (pre-)registered or exempt.
TSCA : All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
AICS : All ingredients listed or exempt.

IECSC : All ingredients listed or exempt.
PICCS : All ingredients listed or exempt.
DSL : All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the
Canadian Domestic Substances List (DSL).

Inventories
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

HMIS Rating

Health hazard: 2
Flammability: 1
Physical hazard: 0
Personal Protection

NFPA Rating

16. OTHER INFORMATION

Full text of other abbreviations
ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits
OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3 : USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
US WEEL : USA. Workplace Environmental Exposure Levels (WEEL)
ACGIH / TWA : 8-hour, time-weighted average
DCC OEL / TWA : Time weighted average
NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA : 8-hour time weighted average
OSHA Z-3 / TWA : 8-hour time weighted average
US WEEL / TWA : 8-hr TWA
Sources of key data used to compile the Material Safety Data Sheet: Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

End of Safety Data Sheet