



**WesBond Corporation  
Safety Data Sheet**

**Wesol C12**

Revision Date: 04/28/2020	Supersedes: 08/01//2018	First Issued: 01/01/1999
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**Section 1. Product and Company Identification**

<b>1.1 Product Identifier</b>	
Trade Name	<b>Wesol C12</b>
Product Description and Use	Liquid Alumina Sol
<b>1.2 Relevant identified uses of the substance and restrictions on use</b>	
Use of the substance	Binder for Refractory Bonding
<b>1.3 Details of the supplier of the safety data sheet</b>	
Company	Wesbond Corporation 1135 East 7 <sup>th</sup> St Wilmington, DE 19801
Telephone	302-655-7917
Fax	302-656-7885
E-mail address	<a href="mailto:sales@wesbond.com">sales@wesbond.com</a>
Web site	<a href="http://www.wesbond.com">www.wesbond.com</a>
Contact	Wes M Jones
Approved by	Wes M Jones
<b>1.4 Emergency telephone number</b>	
US – CHEMTREC (24 hrs)	800-424-9300
CANADA – CANUTEC (24 hrs)	613-996-6666
MSDS and Product Information (0800 – 1630 EST)	302-655-7917



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<b>Section 2. Hazard Identification</b>	
<b>2.1 Classification of the substance</b>	
	<b>Not Classified.</b>
<b>2.2 Label elements</b>	
<b>Signal Word</b>	<b>Not a hazardous substance or mixture.</b>
<b>Pictogram</b>	<b>Not a hazardous substance or mixture.</b>
<b>Hazard statements</b>	
	<b>Not a hazardous substance or mixture.</b>
<b>Precautionary Statements</b>	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents /container in accordance with local/regional/national/international regulations.
<b>2.3 Other hazards</b>	

<b>Section 3. Composition / Information on Ingredients</b>		
<b>3.1 Substance</b>		
Not applicable, this product is a mixture		
<b>3.2 For Mixtures</b>		
<b>Component</b>	<b>CAS Number</b>	<b>Concentration (wt %)</b>
Aluminum Oxide Hydroxide	24623-77-6	10 - 15%
Proprietary Mineral Acid		<1%
Water	7732-18-5	balance
The specific chemical identity and/or exact percentage (concentration) has been withheld as a trade secret.		

**Section 4. First Aid Measures**



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<b>4.1 Description of first aid measures</b>	
<b>General Advice</b>	<ul style="list-style-type: none"> <li>Show this safety datasheet to the doctor in attendance.</li> <li>First responders need to protect themselves.</li> </ul>
<b>INHALATION</b>	<ul style="list-style-type: none"> <li>This product is not considered an inhalation hazard. However, if the product dries, it may form a dust which when breathed may irritate upper respiratory tract upon repeated or prolonged contact. When dried, this material is a nuisance dust and as such, does not produce significant organic disease or toxic effect with reasonable exposures.</li> </ul>
<b>SKIN</b>	<ul style="list-style-type: none"> <li>Wash with water, use skin cream if necessary.</li> <li>Remove all contaminated clothing, and launder before reuse.</li> <li>Repeated or prolonged contact can cause redness, irritation, and scaling of the skin (dermatitis). Normal care and personal hygiene should prevent skin effects.</li> </ul>
<b>EYES</b>	<ul style="list-style-type: none"> <li>Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.</li> <li>Seek medical advice.</li> </ul>
<b>INGESTION</b>	<ul style="list-style-type: none"> <li>Immediately rinse mouth with water. Finally drink water.</li> <li>If necessary seek medical attention.</li> <li>No hazard under normal circumstances. Ingestion of large quantities may lead to discomfort, nausea, and vomiting.</li> </ul>
<b>4.2 Most important symptoms and effects, both acute and delayed</b>	
Medical Conditions Possibly Aggravated By Exposure	<ul style="list-style-type: none"> <li>Skin contact may aggravate existing skin disease.</li> </ul>
<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	
Notes to physician	<ul style="list-style-type: none"> <li>All treatments should be based on observed signs and symptoms of distress in the patient.</li> <li>Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.</li> <li>Treat symptomatically. No specific antidote available.</li> </ul>

<b>Section 5. Fire Fighting Measures</b>	
<b>5.1 Extinguishing Media</b>	
Suitable extinguishing media	Any. Use media appropriate for surrounding fire.
Unsuitable extinguishing media	None.
<b>5.2 Special hazards arising from the substance or mixture</b>	
Specific hazards during firefighting/ Specific hazards arising from the chemical	Product will not burn, not explosive.
<b>5.3 Advice for firefighters</b>	
Special protective equipment for firefighters	Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.
Further information	None.



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<b>Section 6. Accidental Release Measures</b>	
<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	
Personal precautions, protective equipment and emergency procedures	<ul style="list-style-type: none"> <li>Wear appropriate protective gear for the situation.</li> <li>For further information see Personal Protection information in Section 8.</li> </ul>
<b>6.2 Environmental precautions</b>	
Environmental and Regulatory Reporting	<ul style="list-style-type: none"> <li>Do not flush to drain.</li> <li>Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.</li> </ul>
<b>6.3 Methods and materials for containment and cleaning up</b>	
Recovery	<ul style="list-style-type: none"> <li>Stop leak if safe to do so.</li> <li>Contain spillage, soak up with non-combustible absorbent material (e.g., sand, earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).</li> <li>Shovel or sweep up. Never return spills to original containers for re-use.</li> <li>Keep in properly labeled containers. Keep in suitable closed containers for disposal.</li> </ul>
Decontamination/cleaning	<ul style="list-style-type: none"> <li>Wash non-recoverable remainder with large amounts of water.</li> <li>Clean contaminated surface thoroughly.</li> <li>Recover the cleaning water for subsequent disposal.</li> <li>Decontaminate tools, equipment and personal protective equipment in a segregated area.</li> </ul>
Disposal	<ul style="list-style-type: none"> <li>Dispose of in accordance with local regulations.</li> </ul>
Additional advice	<ul style="list-style-type: none"> <li>Material can create slippery conditions.</li> <li>For personal protection see section 8</li> </ul>
<b>6.4 References to other sections</b>	
	7. Handling and Storage 8. Exposure Controls/Personal Protection 13. Disposal Considerations.

<b>Section 7. Handling and Storage</b>	
<b>7.1 Precautions for safe handling</b>	
Technical measures	<ul style="list-style-type: none"> <li>Provide adequate ventilation.</li> </ul>
Advice on safe handling and usage	<ul style="list-style-type: none"> <li>Handle in accordance with good industrial hygiene and safety practice.</li> <li>Avoid breathing vapors and mists.</li> <li>Avoid direct or prolonged contact with skin and eyes.</li> <li>In cold weather, this product may freeze. This could damage the product. If</li> </ul>



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	freezing occurs, thaw, remix and test before using. Mix thoroughly to assure homogeneity.
Hygiene measures	<p>Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:</p> <ol style="list-style-type: none"> <li>1) Do not store, use and /or consume food, beverages, tobacco products, or cosmetics in areas where this material is stored.</li> <li>2) Wash hand and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.</li> <li>3) Wash exposed skin promptly to remove accidental splashes or contact with material.</li> </ol>
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	
Requirement for storage areas and containers	Store in tightly closed containers. Store in an area that is dry, well-ventilated, away from compatible materials (see Section 10. Stability and Reactivity).
Minimum/Maximum Storage Temperatures	Ambient. Protect from freezing and temperatures above 150°F / 66°C.
Usual Shipping Containers	Pails, drums, totes, bulk.
Advice on common storage	No special restrictions on storage with other products
Storage and Handling Materials	Plastic or stainless steel. Do not store in light metal containers (aluminum).

**Section 8. Exposure Controls/Personal Protection**

Introductory Remarks	<p>These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.</p> <p>Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.</p>
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**8.1 Control Parameters**

Component	CAS Number	Value	Basis
Aluminum Oxide Hydroxide	24623-77-6	15 mg/m <sup>3</sup> , total dust 5 mg/m <sup>3</sup> , respirable dust	PEL-OSHA
Aluminum Oxide Hydroxide	24623-77-6	10 mg/m <sup>3</sup>	TLV-ACGIH
Proprietary Mineral Acid		2 mg/m <sup>3</sup>	PEL-OSHA
Proprietary Mineral Acid		2 ppm	TLV-ACGIH



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<b>8.2 Exposure controls</b>	
<b>Engineering Controls</b>	
	<p>Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures:</p> <p>No specific measures required.</p>
<b>8.3 Personal Protective Equipment</b>	
<b>Eyes</b>	<ul style="list-style-type: none"> <li>• Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.</li> <li>• Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.</li> </ul>
<b>Hand protection</b>	<ul style="list-style-type: none"> <li>• Recommended preventive skin protection: Gloves.</li> <li>• Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts and abrasion, and the contact time.</li> </ul>
<b>Skin</b>	<ul style="list-style-type: none"> <li>• Impervious clothing.</li> <li>• Footwear protecting against chemicals.</li> </ul>
<b>Respiratory Protection</b>	<ul style="list-style-type: none"> <li>• When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.</li> <li>• For reasonably foreseeable industrial end uses of this material, respiratory protection should not be necessary.</li> </ul>
<b>Personal Hygiene</b>	<p>Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:</p> <ol style="list-style-type: none"> <li>(1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.</li> <li>(2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.</li> <li>(3) Wash exposed skin promptly to remove accidental splashes or contact with this material.</li> </ol>
<b>Protective measures</b>	<ul style="list-style-type: none"> <li>• The protective equipment must be selected in accordance with current local standards and in cooperation with supplier of the protective equipment.</li> <li>• Ensure that eyewash stations and safety showers are close to the workstation location.</li> <li>• Emergency equipment immediately accessible, with instructions for use.</li> <li>• Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential</li> </ul>



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	hazards and/or risks that may occur during use.
<b>General Hygiene</b>	Equipment in contact with material should be rinsed with water prior to repair and maintenance.

<b>Section 9. Physical and Chemical Properties</b>	
<b>9.1 Information on basic physical and chemical properties</b>	
Appearance:	Milky liquid.
Odor:	Odorless.
Odor threshold:	Not Available
pH	3.0 – 6.0
Melting/Freezing point	0 °C (32 °F).
Initial boiling point and boiling range	> 100 °C (212 °F) at 760 mmHg (1013 hPa)
Flash point:	n/a
Evaporation Rate	no data available
Flammability (solid/gas)	Nonflammable.
Upper/lower flammability or explosive limits	Nonflammable.
Vapor pressure	Same as water
Vapor density	no data available
Relative density	1.05 to 1.10 at 25 °C (77 °F)
Solubilities	Water: Miscible. Other solvents: No data available.
Partition Coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Decomposition Temperature	no data available
Viscosity, Dynamic	no data available
Viscosity, Kinematic	no data available
Explosive Properties	no data available
Oxidizing Properties	Not classified as oxidizing.
<b>9.2 Other Information</b>	
This safety datasheet contains only information relating to safety and does not replace any product information or product specification.	

<b>Section 10. Stability and Reactivity</b>	
<b>10.1 Reactivity</b>	No data available
<b>10.2 Chemical Stability</b>	This material is stable under normal handling and storage conditions described in Section 7.
<b>10.3 Possibility Of Hazardous</b>	No dangerous reaction known under conditions of normal use.



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<b>Reactions</b>	
<b>10.4 Conditions To Avoid</b>	
Conditions to avoid	Freezing and temperatures above 150°F / 66°C.
<b>10.5 Incompatible Materials</b>	
Materials to avoid	None.
<b>10.6 Hazardous Decomposition Products</b>	
Hazardous decomposition products	None.
Thermal decomposition	Will not occur.

<b>Section 11. Toxicological Information</b>	
<b>11.1 Likely routes of exposure</b>	
Inhalation	Inhalation not likely.
Skin	Likely mode of exposure.
Eyes	Likely mode of exposure.
Ingestion	Ingestion not likely.
<b>11.2 Symptoms related to the physical, chemical and toxicological characteristics</b>	
Inhalation	None.
Skin	Irritant. Can cause redness, irritation, inflammation, on prolonged contact.
Eyes	Irritant. Can cause redness, irritation..
Ingestion	None.
<b>11.3 Immediate, delayed and chronic effects from short- and long-term exposure</b>	
Chronic effects	This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.
<b>11.4 Numerical measures of toxicity</b>	
Acute Oral Toxicity	No data available
Acute Inhalation Toxicity	No data available
Acute Dermal Toxicity	Not classified as harmful by contact with skin.
Acute Respiratory Irritation	No test data found for product
Acute Skin Irritation	No data available.
Acute Eye Irritation	No data available.
<b>11.5 Carcinogenicity</b>	
	This product does not contain any ingredient designated as probable or suspected human carcinogens by: NTP, IARC, OSHA, ACGIH

<b>Section 12. Ecological Information</b>	
<b>12.1 Ecotoxicity</b>	
Aquatic Compartment	No data available.





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Ecotoxicity assessment	No data available
<b>12.2 Persistence and degradability</b>	
Biodegradability	Not relevant, inorganic product.
<b>12.3 Bioaccumulative potential</b>	
Partition coefficient: n-octanol/water	No data available.
<b>12.4 Mobility in soil</b>	
Known distribution to environmental compartments	<ul style="list-style-type: none"> <li>• Ultimate destination of the material: water.</li> <li>• Ultimate destination of the material: sediment</li> </ul>
<b>12.5 Results of PBT and vPvB assessment</b>	
Results of PBT and vPvB assessment	No data available.
<b>12.6 Other Adverse Effects</b>	No data available

<b>Section 13. Disposal Considerations</b>	
<b>13.1 Waste Disposal Method</b>	
Advice on disposal	Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.
Waste Code	EPA: hazardous waste: NO
<b>13.2 Contaminated packaging</b>	
Advice	<ul style="list-style-type: none"> <li>• Any containers or equipment used should be decontaminated immediately after use.</li> <li>• Empty container should be taken to an approved waste handling site for recycling or disposal.</li> </ul>

<b>Section 14. Transport Information</b>	
<b>14.1 UN number</b>	Not applicable
<b>14.2 Proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class</b>	Not classified as dangerous for transport.
<b>14.4 Packing group</b>	Not applicable
<b>14.5 Environmental hazards</b>	Not applicable
<b>14.6 Special precautions for user</b>	Not applicable



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<b>Section 15. Regulatory Information</b>	
<b>15.1 Safety, health and environmental regulations/legislation specific for the substance.</b>	
U.S. TSCA	<ul style="list-style-type: none"> <li>y (positive listing)</li> <li>On TSCA Inventory</li> </ul>
Canadian Domestic substances List (DSL)	<ul style="list-style-type: none"> <li>y (positive listing)</li> <li>All components of this material are on the Canadian DSL</li> </ul>
<b>15.2 US Federal Regulations</b>	
SARA 302	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 311/312	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 311/312.
SARA 313	No information.
EPCRA – Emergency Planning and Community Right-To-Know	CERCLA
CERCLA Reportable Quantity	None.
SARA 302 Reportable Quantity	None.
SARA 304 Reportable Quantity	None.
<b>15.3 State Regulations</b>	
California Proposition 65	Not subject to California Proposition 65.

<b>Section 16. Other Information</b>	
<b>HMIS – National Paint &amp; Coating Hazardous Materials Identification System</b>	
<b>1</b>	Health Hazard Rating - Slight
<b>0</b>	Flammability Rating – Minimal
<b>0</b>	Reactivity Rating - Minimal
<b>B</b>	Personal Protection – Safety Glasses, Gloves
<b>NFPA – National Fire Protection Association Hazard Ratings</b>	
<b>1</b>	Health Hazard Rating - Slight
<b>0</b>	Flammability Rating – Minimal
<b>0</b>	Instability Rating - Minimal



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<b>Abbreviations</b>			
<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists	<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>CAS</b>	Chemical Abstract Service	<b>OSHA</b>	Occupational Safety and Health Administration
<b>HMIS</b>	National Paint & Coating Hazardous Materials Identification System	<b>SARA</b>	Superfund Amendment and Reauthorization Act
<b>IARC</b>	International Agency for Research on Cancer	<b>PEL</b>	Permissible Exposure Limit
<b>N/A</b>	Not Applicable	<b>TLV</b>	Threshold Limit Value
<b>NFPA</b>	National Fire Protection Association Hazard Ratings	<b>TWA</b>	Time Weighted Average

**The information on this safety data sheet is believed to be accurate and it is the best information available to WesBond Corporation. This document is intended only as a guide to the appropriate precautions for handling a chemical by a person trained in chemical handling. WesBond Corporation makes no warranty of merchantability or any other warranty, express or implied with respect to such information of the product to which it relates, and we assume no liability resulting from the use or handling of the product to which this safety data sheet relates. Users and handlers of this product should make their own investigations to determine the suitability of the information provided herein for their own purposes. WesBond Corporation urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise to become aware of and understand the data contained in this SDS and any hazards associated with the product.**