

# Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: 01/20/2017

Revision: 01/20/2017

## 1 Identification

- **Product identifier**
- **Trade name:** Liquid Shotblast
- **Article number:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Concrete Cleaning & Etching
- **Restrictions on use:** See Sections 8 and 10 for further information.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Real Solution Group, LLC  
P.O. Box 1546  
Boerne, TX 78006  
(714) 788-9192  
info@liquidshotblast.com
- **Emergency telephone number:** (714) 788-9192

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
Skin Corr. 1C H314 Causes severe skin burns and eye damage.
- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS05

- **Signal word:** Danger
- **Hazard statements:**  
H314 Causes severe skin burns and eye damage.
- **Precautionary statements:**

P260	Do not breathe mist/vapors/spray.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye 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.
P310	Immediately call a POISON CENTER/doctor.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P363	Wash contaminated clothing before reuse.
P301+P330+P331	If swallowed: Rinse mouth. Do NOT induce vomiting.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

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· **NFPA ratings (scale 0 - 4)**

Health = 3  
Fire = 0  
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 3  
Fire = 0  
Reactivity = 0

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**· **Components:**

506-89-8	Urea Hydrochloride ⚠ Skin Corr. 1B, H314 ⚠ Acute Tox. 4, H302	30-40%
68439-57-6	Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts ⚠ Eye Dam. 1, H318 ⚠ Skin Irrit. 2, H315	1-5%
34398-01-1	Undecan-1-ol, ethoxylated ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	1-5%

· **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.  
For the wording of the listed Hazard Statements refer to section 16.

## 4 First-aid measures

· **Description of first aid measures**· **After inhalation:**

Supply fresh air; consult doctor in case of complaints.  
Provide oxygen treatment if affected person has difficulty breathing.

· **After skin contact:**

Immediately remove any clothing soiled by the product.  
Immediately rinse with water.  
If skin irritation continues, consult a doctor.  
Seek immediate medical help for blistering or open wounds.

· **After eye contact:**

Protect unharmed eye.  
Remove contact lenses if worn.  
Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

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Do not induce vomiting; immediately call for medical help.

· **Most important symptoms and effects, both acute and delayed:**

Breathing difficulty

Coughing

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

Caustic effect on skin and mucous membranes.

Strong irritant with the danger of severe eye injury.

· **Danger:** Danger of gastric perforation.

· **Indication of any immediate medical attention and special treatment needed:**

No relevant information available.

## 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

The product is not flammable.

Use fire fighting measures that suit the environment.

· **For safety reasons unsuitable extinguishing agents:** None.

· **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

For large spills, wear protective clothing.

Particular danger of slipping on leaked/spilled product.

· **Environmental precautions** Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up**

Dilute with plenty of water.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable receptacles.

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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## 7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:**
  - Store away from foodstuffs.
  - Do not store together with acids.
- **Further information about storage conditions:** Keep containers tightly sealed.
- **Specific end use(s)** No relevant information available.

## 8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - The usual precautionary measures for handling chemicals should be followed.
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing.
  - Wash hands before breaks and at the end of work.
  - Do not inhale gases / fumes / aerosols.
  - Avoid contact with the eyes and skin.
- **Engineering controls:** No relevant information available.
- **Breathing equipment:**
  - Not required under normal conditions of use.
  - Use suitable respiratory protective device in case of insufficient ventilation.
  - For large spills, respiratory protection may be advisable.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Eye protection:**



Safety glasses

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- **Body protection:** Alkaline resistant protective clothing
- **Limitation and supervision of exposure into the environment**  
Avoid release to the environment.
- **Risk management measures** No relevant information available.

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · Appearance:

Form:	Liquid
Color:	Clear
Odor:	Pleasant
Odor threshold:	Not determined.

· pH-value:	1.75
· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	> 100 °C (> 212 °F)

· Flash point:	Not applicable.
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· Flammability (solid, gaseous):	Not applicable.
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· Auto-ignition temperature:	Not determined.
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· Decomposition temperature:	Not determined.
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· Danger of explosion:	Product does not present an explosion hazard.
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#### · Explosion limits

Lower:	Not determined.
Upper:	Not determined.

· Vapor pressure:	Not determined.
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#### · Density:

Relative density:	1.08
Vapor density:	Not determined.
Evaporation rate:	Not determined.

#### · Solubility in / Miscibility with

Water:	Fully miscible.
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· Partition coefficient (n-octanol/water):	Not determined.
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#### · Viscosity

Dynamic:	Not determined.
Kinematic:	Not determined.
VOC content:	35 g/L (theoretical)

· Other information	No relevant information available.
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## 10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**  
Reacts with alkali (lyes).  
Reacts with various metals.
- **Conditions to avoid**  
Avoid acids.  
Store away from oxidizing agents.
- **Incompatible materials**  
Alkalis  
Oxidizers
- **Hazardous decomposition products**  
Carbon monoxide and carbon dioxide  
Chlorine compounds

## 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
  - **LD/LC50 values that are relevant for classification:**
- |   |      |                   |
|---|------|-------------------|
| <b>Liquid Shotblast</b>                     |      |                   |
| Oral  | LD50 | >2000 mg/kg (rat) |
| <b>506-89-8 Urea Hydrochloride</b>          |      |                   |
| Oral  | LD50 | 1100 mg/kg (rat)  |
| <b>34398-01-1 Undecan-1-ol, ethoxylated</b> |      |                   |
| Oral  | LD50 | >1400 mg/kg (rat) |
- **Primary irritant effect:**
  - **On the skin:** Caustic effect on skin and mucous membranes.
  - **On the eye:** Strong caustic effect.
  - **Sensitization:** No sensitizing effects known.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

- **NTP (National Toxicology Program):**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

- **Probable route(s) of exposure:**

Ingestion.

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Inhalation.

Eye contact.

Skin contact.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

## 12 Ecological information

### · Toxicity

#### · Aquatic toxicity

##### **506-89-8 Urea Hydrochloride**

EC50 | 70-100 mg/kg (daphnia)

##### **34398-01-1 Undecan-1-ol, ethoxylated**

EC50 | 1-10 mg/kg (daphnia) (48hr)

LC50 | 1-10 mg/l (pimephales promelas) (96hr)

- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Ecotoxicological effects:**
- **Remark:** After neutralization a reduction of the harming action may be recognized
- **Additional ecological information**
- **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.  
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. If the dilution of the use-level pH-value is considerably increased after use, the aqueous waste, emptied into drains, is only low water-dangerous.
- **Other adverse effects** No relevant information available.

## 13 Disposal considerations

### · Waste treatment methods

#### · Recommendation:

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

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- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

· <b>UN-Number</b>	UN3265
· <b>DOT, ADR, IMDG, IATA</b>	
· <b>UN proper shipping name</b>	Corrosive liquid, acidic, organic, n.o.s. (Urea Hydrochloride)
· <b>DOT, IATA</b>	
· <b>ADR, IMDG</b>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Urea Hydrochloride)
· <b>Transport hazard class(es)</b>	
· <b>DOT</b>	
	
· <b>Class</b>	8 Corrosive substances
· <b>Label</b>	8
· <b>ADR</b>	
	
· <b>Class</b>	8 (C3) Corrosive substances
· <b>Label</b>	8
· <b>IMDG, IATA</b>	
	
· <b>Class</b>	8 Corrosive substances
· <b>Label</b>	8
· <b>Packing group</b>	
· <b>DOT, ADR, IMDG, IATA</b>	III
· <b>Environmental hazards</b>	
· <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	Warning: Corrosive substances
· <b>Danger code (Kemler):</b>	80
· <b>EMS Number:</b>	F-A,S-B

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<ul style="list-style-type: none"> <li>· <b>Segregation groups</b></li> </ul>	<p>Acids</p>
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<ul style="list-style-type: none"> <li>· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b></li> </ul>	<p>Not applicable.</p>
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- **Transport/Additional information:**

- **DOT**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

- **ADR**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

- **IMDG**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

- **IATA**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 0.5 L each / 1 L net.

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

<ul style="list-style-type: none"> <li>· <b>Section 302 (extremely hazardous substances):</b></li> </ul>
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None of the ingredients are listed.
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<ul style="list-style-type: none"> <li>· <b>Section 304 (emergency release notification):</b></li> </ul>
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None of the ingredients are listed.
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<ul style="list-style-type: none"> <li>· <b>Section 355 (extremely hazardous substances):</b></li> </ul>
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None of the ingredients are listed.
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<ul style="list-style-type: none"> <li>· <b>Section 313 (Specific toxic chemical listings):</b></li> </ul>
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None of the ingredients are listed.
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<ul style="list-style-type: none"> <li>· <b>TSCA (Toxic Substances Control Act)</b></li> </ul>
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All ingredients are listed.
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- **Proposition 65 (California)**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 01/20/2017 / -

- **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety &amp; Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

LDLo: Lowest Lethal Dose Observed

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

- **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

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Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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