

SDS Number SA201
Revision Date 02/10/2022

1. Product and Company Identification

Product identifier	Solution A2
Other means of identification	Not available
Recommended use	Sanitizer
Recommended restrictions	None known.
Manufacturer	HOW 2 Platforms 5451 203 rd Street W Farmington, MN 55024 Phone 952 237 5480 Emergency Phone: 952 237 5480

2. Hazards Identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
Signal word		
Hazard statement	Danger Harmful if swallowed. Causes severe skin burns and eye damage. Toxic if inhaled. May cause damage to organs.	
Precautionary statement		
Prevention	Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.	
Response	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If swallowed: Call a poison center/doctor if you feel unwell. If swallowed: Rinse mouth. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing.	
Storage	Store locked up.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazard(s) not otherwise classified (HNOC)	None known.	
Supplemental information	Not applicable.	

3. Composition/Information on Ingredients

Mixture			
Chemical name	Common name and synonyms	CAS number	%
Benzyl-C12-18-alkyldimethyl ammonium chlorides		68391-01-5	7 - 13
Quaternary ammonium compounds,		85409-23-0	7 - 13

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C12-14-alkyl[(ethylphenyl)methyl]di
methyl, chlorides

Composition comments

The remaining components are trade secret

US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

4. First Aid Measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Wash off with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.
General information	Keep victim warm. Keep victim under observation. Symptoms may be delayed. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wear rubber gloves and chemical splash goggles.

5. Fire Fighting Measures

Suitable extinguishing media	Dry chemical. Foam. Carbon dioxide. Water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	May include and are not limited to: Hydrogen chloride. Oxides of carbon. Oxides of nitrogen. Ammonia.
Explosion data	
Sensitivity to mechanical impact	Not available.
Sensitivity to static discharge	Not available.

6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk.

Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Precautions for safe handling

Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Do not get this material on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Use care in handling/storage.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure Controls/Personal Protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) 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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Not applicable.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Wash hands after handling and before eating.

9. Physical and Chemical Properties

Appearance

Clear

Physical state

Liquid.

Form

Liquid.

Color

Amber

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Odor	Characteristic
Odor threshold	Not available.
pH	7.8
Melting point/freezing point	Not available.
Initial boiling point and boiling range	212 °F (100 °C)
Pour point	Not available.
Specific gravity	8.26
Partition coefficient (n-octanol/water)	Not available.
Flash point	> 201.0 °F (> 93.9 °C) Pensky-Martens Closed Cup
Evaporation rate	< 1 (ethyl ether=1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits.	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	< 1 (air=1)
Relative density	Not available.
Solubility(ies)	Not available.

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Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity Not available.

10. Stability and Reactivity

Reactivity None known.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
Chemical stability Material is stable under normal conditions.
Conditions to avoid Contact with incompatible materials.
Incompatible materials Strong oxidizing agents. Reducing agents.
Hazardous decomposition products May include and are not limited to: Hydrogen chloride. Oxides of carbon. Oxides of nitrogen. Ammonia.

11. Toxicological Information

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Information on likely routes of exposure

Ingestion Causes digestive tract burns. Harmful if swallowed.
Inhalation May cause irritation to the respiratory system.
Skin contact Causes severe skin burns.
Eye contact Causes serious eye damage.

Symptoms related to the chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Components	Species	Test Results
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Benzyl-C12-18-alkyldimethyl ammonium chlorides (CAS 68391-01-5)

Acute

Dermal

LD50	Rat	2000 mg/kg
		1420 mg/kg

Inhalation

LC50	Not available	
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Oral

LD50	Mouse	150 mg/kg
	Rat	240 mg/kg

Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (CAS 85409-23-0)

Acute

Dermal

LD50	Not available	
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Inhalation

LC50	Not available	
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Oral

LD50	Rat	300 - 2000 mg/kg
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Skin corrosion/irritation Causes severe skin burns and eye damage.

Exposure minutes Not available.

Erythema value Not available.

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Oedema value	Not available.
Serious eye damage/eye irritation	Causes serious eye damage.
Corneal opacity value	Not available.
Iris lesion value	Not available.
Conjunctival reddening value	Not available.
Conjunctival oedema value	Not available.
Recover days	Not available.

Respiratory or skin sensitization

Respiratory sensitization	Not classified.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Teratogenicity	Not classified.
Specific target organ toxicity single exposure	Not classified.
Specific target organ toxicity repeated exposure	Not classified.
Aspiration hazard	Not available.
Chronic effects	Not classified.
Further information	Not available.
Name of Toxicologically Synergistic Products	Not available.

12. Ecological Information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Mobility in general	Not available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

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Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

U.S. Department of Transportation (DOT)

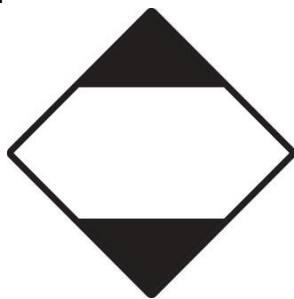
Basic shipping requirements:

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN1760
Proper shipping name	CORROSIVE LIQUID, N.O.S. (Benzyl-C12-18-alkyldimethyl ammonium chlorides)
Hazard class	8
Packing group	III
Special provisions	16

DOT



15. Regulatory information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

WHMIS status Controlled

WHMIS classification Class E - Corrosive Material

WHMIS labeling



Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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SARA 302 Extremely hazardous substance No **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)** Not regulated.

SARA 311/312 Hazardous chemical No **CERCLA Hazardous Substance List (40 CFR 302.4)** Not listed.

UN number UN1760 **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Proper shipping name Corrosive liquids, n.o.s. (Benzyl-C12-18-alkyldimethyl ammonium chlorides) Not regulated.

Hazard class 8

Packing group III

Special provisions IB3, T7, TP1, TP28

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Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Safe Drinking Water Act (SDWA)

Not regulated.

Food and Drug Administration (FDA)

Not regulated.

US state regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US - Texas Effects Screening Levels: Listed substance

Benzyl-C12-18-alkyldimethyl ammonium chlorides (CAS 68391-01-5) Listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

Inventory status

Country(s) or region

Inventory name

On inventory (yes/no)*

Canada Domestic Substances List (DSL) Yes Canada Non-Domestic Substances List (NDSL) No

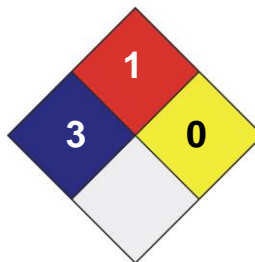
United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	* 3
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



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**Prepared by
Phone**

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