

Revision date 01-Jun-2021

Revision Number 4

**1. Identification****Product identifier****Product Name** WS-55**Other means of identification****Product Code(s)** 509**Synonyms** None**Recommended use of the chemical and restrictions on use****Recommended use** No information available**Restrictions on use** No information available None known**Details of the supplier of the safety data sheet****Address**

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

**Emergency telephone number**

Chemtrec 1-800-424-9300

**2. Hazard(s) identification****Classification**

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

**Hazards not otherwise classified (HNOC)**

Not applicable

**Label elements****Hazard statements**

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Appearance** Clear

**Physical state** Liquid

**Odor** Amine

#### Other information

Not applicable.

### 3. Composition/information on ingredients

#### Substance

**Synonyms** None.

Chemical name	CAS No	Weight-%	Trade secret
Polyquaternaryamine (Epichlorohydrin-DMA Copolymer)	42751-79-1	~ 50%	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret. While some components are claimed as trade secret in accordance with the provision of OSHA 29 CFR 1910.1200(i), all known hazards are clearly communicated within this document.

### 4. First-aid measures

#### Description of first aid measures

<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, (trained personnel should) give oxygen. Call physician immediately.
<b>Eye contact</b>	Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek medical attention if irritation should develop.
<b>Skin contact</b>	Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and footwear. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
<b>Ingestion</b>	Do NOT induce vomiting. If vomiting should occur spontaneously, keep airway clear. Never give anything by mouth to an unconscious person. Get medical attention.

#### Most important symptoms and effects, both acute and delayed

**Symptoms** May result in mild irritation of a short-term nature for the skin and eyes.

#### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	This material is not expected to burn unless heated to dryness. Use extinguishing agent suitable for type of surrounding fire. Water. Foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	No information available.
<b>Specific hazards arising from the chemical</b>	Thermal decomposition (as may be experienced in a fire) may produce hydrogen chloride gas and/or may liberate oxides of nitrogen and carbon. Spills produce slippery surfaces and could present a physical hazard for firemen. In a fire, this product may build up pressure and rupture a sealed container; cool exposed containers with water spray.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment for fire-fighters</b>	Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions**                      Wear suitable protective clothing and gloves.

### Methods and material for containment and cleaning up

**Methods for containment**                      Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills. Avoid runoff to waterways and streams.

**Methods for cleaning up**                      Clean up spill immediately using inert absorbent materials such as clays, sand, earth, or other commercially available dry sweeping compound. Spills of solution are extremely slippery so all residue must be removed promptly. If slippery conditions persist, apply additional dry sweeping compound. Following containment, large spills should be pumped into salvage tanks.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling**                      Keep container closed when not in use. Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, gloves, and protective clothing when handling. Wash thoroughly with soap and water after handling. Take off contaminated clothing and wash before reuse. Use only in well-ventilated areas. Use with adequate ventilation and employ respiratory protection where mist or spray may be generated. Ensure that eyewash stations and safety showers are close to the workstation location.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions**                      Keep container tightly closed when not in use. Store in a cool, well ventilated area. Store at 5 - 30° C (41 - 86° F) in original closed containers. Avoid storage temperatures below freezing, since product may stratify. Changes in temperature create air pressure changes inside drums. Use proper precaution in unscrewing plug and/or opening container.

## 8. Exposure controls/personal protection

### Control parameters

**Exposure Limits** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### **Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering controls** Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, 'Industrial Ventilation, A Manual of Recommended Practices', most recent edition, for details. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear chemical splash goggles and face shield (when eye and face contact is possible due to splashing or spraying of material).

**Hand protection** Rubber gloves.

**Skin and body protection** While there is a possibility of skin contact, rubber gloves and boots impervious to liquid material should be worn.

**Respiratory protection** Under most conditions, use adequate general ventilation and protective equipment since volatility and toxicity are very low. If significant vapors, mists or aerosols are present, use NIOSH approved respirator (ANSI Z882.1980) or equivalent, that is equipped with a dust/mist cartridge.

**Environmental exposure controls** Do not allow liquid to enter streams or waterways.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice. Ensure that eyewash stations and safety showers are close to the workstation location. Do not eat, drink or smoke when using this product.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear
<b>Color</b>	colorless to amber
<b>Odor</b>	Amine
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	5.0 - 6.5	No information available
<b>Melting point / freezing point</b>	< 0 °C (32 °F)	No information available
<b>Boiling point / boiling range</b>	> 100 °C (212 °F)	at 760 mm Hg
<b>Flash point</b>	> 100 °C (212 °F)	
<b>Evaporation rate</b>	Equal to water	No data available
<b>Flammability (solid, gas)</b>	Not applicable	No data available
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	

<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor pressure</b>	58 mm Hg @ 38 °C	No information available
<b>Relative vapor density</b>	> 60 mm Hg	No information available
<b>Relative density</b>	1.12 - 1.16	No information available
<b>Water solubility</b>	Completely 100%	No information available
<b>Solubility(ies)</b>	No information available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	Not applicable No data available	None known
<b>Decomposition temperature</b>	No information available -	None known
<b>Kinematic viscosity</b>	No data available	No information available
<b>Dynamic viscosity</b>	550 - 1,000 cps	Brookfield @ 25 °C
<b><u>Other information</u></b>		
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	
<b>Softening point</b>	No information available	
<b>Molecular weight</b>	No information available	
<b>VOC Content (%)</b>	No information available	
<b>Liquid Density</b>	9.34 - 9.67 lbs./gal.	
<b>Bulk density</b>	No information available	

## 10. Stability and reactivity

<b>Reactivity</b>	No data available.
<b>Chemical stability</b>	Stable under normal conditions of handling, use and transportation.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	Strong oxidizers. Contact with copper, copper alloys, aluminum, mild steel or iron may cause corrosion/degradation.
<b>Hazardous decomposition products</b>	Thermal decomposition (as may be experienced in a fire) may produce hydrogen chloride gas and/or oxides of nitrogen and carbon.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Not considered hazardous under normal conditions of use.
<b>Eye contact</b>	None expected, but prolonged or repeated eye contact may result in mild irritation and redness of a short-term nature.
<b>Skin contact</b>	None expected, but prolonged or repeated skin contact may result in irritation of a short-term nature.
<b>Ingestion</b>	Effects of ingesting small amounts are negligible; ingesting large amounts may injure person slightly.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	None known.
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### Acute toxicity

**Numerical measures of toxicity**

No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Testing conducted on rabbits using the Draize technique revealed the material to be mildly irritating to the skin.
<b>Serious eye damage/eye irritation</b>	Testing conducted using the Draize technique revealed that the material produces no corneal or iridial effects and only minor conjunctival effects.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	Negative in the Ames test. Negative in the mouse micronucleus test.
<b>Carcinogenicity</b>	This product does not contain any components in concentrations greater than or equal to 0.1% that are listed as known or suspected carcinogens by NTP, IARC, ACGIH, or OSHA.
<b>Reproductive toxicity</b>	No information available.
<b>Developmental toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.
<b>Other adverse effects</b>	No information available.
<b>Interactive effects</b>	No information available.

**12. Ecological information**

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

Method	Species	Endpoint type	Effective dose	Exposure time	Results
EPA-821-R-02-012	<i>Daphnia magna</i> / Water flea	LC50	4.05 mg/L	48 hr, static	

<b>Persistence and degradability</b>	Not determined. No information available.
<b>Bioaccumulation</b>	No information available.
<b>Mobility</b>	Not determined. No information available.
<b>Other adverse effects</b>	No information available.

**13. Disposal considerations****Waste treatment methods**

**Waste from residues/unused** Recycle, if possible. If not, dispose of the waste material in accordance with all applicable

<b>products</b>	federal, state and local laws and regulations regarding health and pollution.
<b>Contaminated packaging</b>	Since empty containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

**DOT** Chemical, NOI, Not Regulated by DOT

**TDG** Chemical, NOI, Not Regulated by DOT

**MEX** Chemical, NOI, Not Regulated by DOT

**Technical Name**

**IATA** Chemical, NOI, Not Regulated by DOT

**IMDG** Chemical, NOI, Not Regulated by DOT

## 15. Regulatory information

### International Inventories

**TSCA** All ingredients are on the inventory or exempt from listing.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Polyquaternaryamine (Epichlorohydrin-DMA Copolymer)	42751-79-1	Present	Active
Water	7732-18-5	Present	Active
Sodium Chloride	7647-14-5	Present	Active

**DSL/NDSL** All ingredients are on the DSL inventory or exempt from listing. None of the ingredients are on the NDSL inventory.

**EINECS/ELINCS** All ingredients are on the EINECS inventory or are exempt from listing. None of the ingredients are on the ELINCS inventory.

**ENCS** All ingredients are on the inventory or exempt from listing.

**IECSC** All ingredients are on the inventory or exempt from listing.

**KECL** All ingredients are on the inventory or exempt from listing.

**PICCS** All ingredients are on the inventory or exempt from listing.

**AICS** All ingredients are on the inventory or exempt from listing.

#### **Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations****California Proposition 65**

WARNING: This product can expose you to chemicals including epichlorohydrin, which is known to the State of California to cause cancer or reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Chemical name	California Proposition 65
Epichlorohydrin - 106-89-8	Carcinogen Male Reproductive

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated under applicable state right-to-know regulations

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Special hazards</b>
<b>HMIS</b>	<b>Health hazards</b> 1	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> B

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)



NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Revision date** 01-Jun-2021

**Revision Note** No information available.

**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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**