



Cationic Dry Solve 6255A

Material Safety Data Sheet

Date Issued: 06/13/2016

Date Revised: 03/04/2016

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **SOLVE 6255A**
COMPANY: WaterSolve, LLC, 5031 68th Street, Caledonia, Michigan 49316, USA
For Product information call 616-575-8693.
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

User of the Substance/Mixture: Water treatment chemical

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard's (29CFR 1910.1200) implementation of the Globally Harmonized System (GHS), i.e., material is not dangerous substance or mixture requiring GHS classification according to the US GHS regulations.

GHS-Labeling

Product is not hazardous under US GHS.

Other hazards which do not result in classification

Advice: Spills are very slippery when wet.

Skin: Repeated or prolonged exposure may cause: May cause slight irritation.

Eyes: Dust contact with the eyes can lead to mechanical irritation.

Chronic exposure: No known carcinogenic or other chronic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Mixtures

Chemical nature Cationic polyacrylamide.

Hazardous ingredients

CHEMICAL NAME	CAS-No.	CONCENTRATION
Adipic acid	124-04-9	0-5%

Further information

While product does not meet US GHS hazardous classification requirement, components shown in the Hazardous components table have a workplace exposure limit (ACHIH, NIOSH or OSHA) which are required to be listed regardless of GHS classification status. See Section 8 for workplace limits.

4. **FIRST AID MEASURES**

Description of first aid measures

General advice: Show this safety data sheet to the doctor in attendance.

Ingestion: Material is not expected to be harmful by ingestion. No hazards which require special first aid measures.

Skin contact: Wash off immediately with plenty of water and soap.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Inhalation: Remove to fresh air. If breathing is difficult medical advice is required.

Most important symptoms and effects, both acute and delayed

5. **FIRE FIGHTING MEASURES**

Suitable Extinguishing Media:

Use water spray, water mist, carbon dioxide (CO₂) or dry chemical.

Unsuitable extinguishing media:

none

Special hazards arising from the substance or mixture

Dust may be explosive if mixed with air in critical proportions and in the presence of a source of ignition.

Special protective actions for fire-fighters:

In the event of fire, wear self-contained breathing apparatus. Use NIOSH/MSHA approved respiratory protection.

Further information

In the event of fire, cool tanks with water spray.

6. **ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

For personal protection see section 8.

Environmental precautions

Try to prevent the material from entering drains or water courses.

Methods and materials for containment and cleaning up

Product becomes slippery when it is wet. Sweep up and shovel into suitable containers for disposal. Flush with water. Prevent product from entering drains.

7. **HANDLING AND STORAGE**

Conditions for safe storage, including any incompatibilities

Store in at room temperature in the original container.

Materials for packaging

Unsuitable materials: To avoid product degradation and equipment corrosion, do not use iron, copper or aluminum containers or equipment.

Materials to avoid: Strong oxidizing agents

Storage stability:

Storage temperature: 41 – 80.6 °F

Other data: Stable under recommended storage conditions.

Reason: Integrity

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Form of exposure	Control Parameters	Update	Basis
Adipic acid	124-04-9	TWA		5 mg/m ³	2007-01-01	ACGIH

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Do not breathe dust. Avoid contact with skin, eyes and clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Respiratory protection:

When there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

Hand protection

Glove material; impervious gloves. Permeability tests are not available for this product. 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, abrasion, and the contact time.

Skin/Body protection:

Productive clothing. Wear suitable protective clothing (long sleeves and legs) if there is a possibility of direct contact with or splashes from the product.

Eye protection:

Safety goggles

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: solid, crystalline, powder

Colour: off-white

Odour: odourless

pH: 3-5 (0.5%)
(as aqueous solution)

Melting point/range: No data available

Initial Boiling Point/Range: Not applicable

Flash point: Not applicable

Evaporation rate: Not applicable

Explosive properties:

Lower explosion limit: No data available

Upper explosion limit: No data available

Vapor Pressure: Not applicable

Relative vapour density: Not applicable

Bulk density: 750 kg/m³

Solubility in Water: Limited by viscosity

Partition coefficient (n-octanol/water)	Not available
Decomposition temp:	>302°F
Oxidizing potential:	The substance or mixture is not classified as oxidizing
Volatile organic content (VOC):	Not applicable
Surface tension:	Not applicable

10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability:

Possibility of hazardous reactions

Hazardous reactions: Hazardous polymerization does not occur

Conditions to avoid: Avoid contact with alkaline materials which will degrade the polymer.

Incompatible Materials: Strong oxidizing agents.

Hazardous decomposition products:

Hazardous Decomposition Products:
Nitrogen oxides (NO_x)
Carbon oxides (CO_x)
Hydrogen chloride (HCl)
Ammonia

Thermal decomposition: >302 °F

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute oral toxicity

Conclusion: The acute toxicological results displayed may not be the results of actual testing of this material but based on a similar tested material.

LD50 /Rat/5,000 mg/kg

Remarks: estimated

Acute oral toxicity:

Adipic acid:

OECD Test Guideline 401/LD50/rat/>5,000 mg/kg

Acute inhalation toxicity:

LC50/rat/4h/>20 mg/l

Remarks: estimated

Acute dermal toxicity:

LD50/Rabbit/>2,000 mg/kg

Remarks: estimated

Acute dermal toxicity:

Adipic acid:

LD50/Rabbit/>5,000 mg/kg/No information available.

Skin corrosion/irritation:

Conclusion: No skin irritation

Skin corrosion/irritation:

Adipic acid:

Rabbit

Result: No skin irritation

/No information available.

Serious eye damage/eye irritation:

Conclusion: No eye irritation

Serious eye damage/eye irritation:	Adipic acid:
	Rabbit
	Result: Irritating to eyes. /OECD Test Guideline 405
Respiratory or skin sensitization:	
Skin sensitization	Conclusion: Not sensitizing
Germ cell mutagenicity	
Genotoxicity in vivo	Conclusion: Based on available data, the classification criteria are not met.
Carcinogenicity:	
Carcinogenicity:	Based on available data, the classification criteria are not met.
Reproductive toxicity	
Toxicity for reproduction	Conclusion: Based on available data, the classification criteria are not met.
Toxicity for reproduction	Adipic acid:
	Conclusion: No known effect.
Aspiration hazard	
Aspiration toxicity	No aspiration toxicity classification

12. ECOLOGICAL INFORMATION LC50

Ecotoxicity effects

Aquatic toxicity:

Ecotoxicological information provided is based on a structurally or compositionally similar product. This material is not classified as dangerous for the environment. The effects on aquatic organisms are due to an external (non-systemic) mode of action and are significantly reduced (by a factor of 7-20) within 30 minutes due to the binding of the product to dissolved organic carbon and inorganic sorbents such as clays and silts.

LC50/96h/Branchydanio rerio (Zebra fish)/Acute toxicity/OECD Test Guideline 203: > 1 – 10 mg/l

EC50/48h/Daphnia magna (Water flea)/Immobilization/OECD Test Guideline 202: > 10 - 100 mg/l

IC50/Algae/Growth inhibition/OECD Test Guideline 201: Due to the cationicity of the polymer, test is not appropriate.

Adipic acid:

LC50/96h/Fish: > 100 mg/l

EC50/48h/Daphnia (Water flea): 85.6 mg/l

EC50/72h/Algae: 31.3 mg/l

Toxicity to other organisms

Persistence and degradability:

Biological degradability:

CO2 Evolution Test/OECD Test Guideline 301B/28d:

The polymeric ingredient is not readily biodegradable, but degradable by hydrolysis.

Biological degradability:

Adipic acid: Not readily biodegradable.

Bioaccumulative potential

Bioaccumulation is unlikely. Because of the high molecular weight of the polymer diffusion through biological membranes is very small.

Partition coefficient: n-octanol/water: Not applicable

Adipic acid: Does not bioaccumulate.

Partition coefficient: n-octanol/water: log Pow: 0.093

Mobility in soil

Water solubility: Limited by viscosity.

Surface tension: Not applicable

Other adverse effects:

No information available.

Additional ecological information: Ecotoxicological information provided is based on a structurally or compositionally similar product. This material is not classified as dangerous for the environment. The effects on aquatic organisms are due to an external (non-systemic) mode of action and are significantly reduced (by factor of 7-20) within 30 minutes due to the binding of the product to dissolved organic carbon and inorganic sorbents such as clays and silts.

13. **DISPOSAL CONSIDERATIONS**

Product

Recycling, recovery and reuse of materials is recommended if permitted by regulations. If recycling is not practicable, dispose of in compliance with local regulations.
EPA Hazardous Waste - NO.

Contaminated packaging

Must be disposed of in accordance with local and national regulations.

14. **TRANSPORT INFORMATION**

Land transport

Not classified as dangerous in the meaning of transport regulations.

Sea transport

Not classified as dangerous in the meaning of transport regulations.

Air transport

Not classified as dangerous in the meaning of transport regulations.

Special precautions for user: None known.

15. **REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Title III Section 311 Categories

Immediate (Acute) Health effects: No

Delayed (Chronic) Health effects: No

Fire Hazard: No

Sudden Release of Pressure Hazard: No
Reactivity Hazard: No

US. Environmental Protection Agency (EPA); Superfund Amendments and Reauthorization Act (SARA) Section 302 Extremely Hazardous Substances as amended by US Federal Register Final rules

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. None present.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

CERCLA Hazardous substance (Reportable Quantities)

None Present ()
0 kg

California Proposition 65

Acrylamide (79-06-1) < 0.1%

Remarks: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproduction harm.

Notification status:

USA : All components of this product are included on the United States TSCA Chemical Inventory or are not required to be listed on the United States TSCA Chemical Inventory.

Canada: All components of this product are included on the Canada Domestic Substances List (DSL) or are not required to be listed on the Canada Domestic Substance List (DSL).

European Union (EU): All components of this product are included on the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.

Australia: All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on the Australian Inventory of Chemical Substances (AICS).

China: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese Inventory.

Japan: All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese Inventory.

Korea: All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean (ECL) inventory

Philippines: All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine (PICCS) inventory.

Taiwan: All components of this product are included on the Taiwan Toxic Chemical Substances Control Act Inventory.

**16. OTHER INFORMATION
NFPA HAZARD RATING**

Health: 0

Fire: 1
Reactivity: 0

HMIS Rating:

Health: 0
Flammability: 0
Reactivity: 0

Training advice

Read the safety data sheet before using the product.

OTHER INFORMATION

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This information is for the specific material described only and may not be valid if the material is used in combination with any other materials or in any process. The user is responsible to determine the completeness of the information and suitability for the user's own particular use. The knowledge and belief of the company, the information is accurate and reliable as of the date indicated but the company makes no express or implied warranty of merchantability for the material or the information. The company makes no express or implied warranty of fitness for a purpose for the material or for the information. Users of any chemical should educate themselves on all aspects of its use by independent investigation of current scientific and medical knowledge that the material can be used safely.