



Safety Data Sheet

Section 1: Identification

Product identifier

- Product Name** • **EC 50, 60, 100 Series**
- Chemical Name** • Cationic Polyacrylate Invert Emulsion Polymer.
- Synonyms** • Cationic Polyacrylate Invert Emulsion Polymer
- CAS Number** • 35429-19-7
- Product Description** • Cationic Polyacrylate Invert Emulsion Polymer.

Relevant identified uses of the substance or mixture and uses advised against

- Recommended use** • Cationic water treatment flocculant

Details of the supplier of the safety data sheet

- Supplier** • Zee Company, Inc.
4146 South Creek Road
Chattanooga, TN 37406
United States

Telephone (General) • 423-698-1401

Emergency telephone number

- CHEMTREC** • 800-424-9300

Section 2: Hazard Identification

UN GHS

According to Third Revised Edition

Classification of the substance or mixture

- UN GHS** • No data available

Label elements

UN GHS

Precautionary statements

- Response** • P337+P313 - If eye irritation persists: Get medical advice/attention.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Storage/Disposal** • PFF - Protect from freezing
P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

UN GHS

- No data available

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

- OSHA HCS 2012
- Eye Irritation 2A - H319

Label elements

OSHA HCS 2012

WARNING

- Hazard statements**
- Causes serious eye irritation - H319

Precautionary statements

- Response**
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
 - IF ON SKIN: Wash with plenty of soap and water. - P302+P352
- Storage/Disposal**
- Protect from freezing - PFF
 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

Other hazards

- OSHA HCS 2012
- No data available

Canada

According to WHMIS

Classification of the substance or mixture

- WHMIS
- No data available

Label elements

- WHMIS
- No data available

Other hazards

- WHMIS
- No data available

Section 3 - Composition/Information on Ingredients**Substances****Mixtures**

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Deionized Water		30% TO 35%		WHMIS: UN GHS: OSHA HCS 2012:	NDA

Distillates (petroleum), hydrotreated light		20% TO 25%		WHMIS: UN GHS: Asp. Tox. 1 OSHA HCS 2012:	NDA
Cationic Polyacrylamide		N/A		WHMIS: UN GHS: OSHA HCS 2012:	NDA

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- No data available

Skin

- IF ON SKIN: Wash with plenty of soap and water.

Eye

- If eye irritation persists: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion

- Get medical attention immediately. Give nothing to drink.

Most important symptoms and effects, both acute and delayed

- No data available

Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Product may turn to semi -solid upon addition of water or other liquids.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media

- SMALL FIRES: CO2 (except for Cyanides), dry chemical, dry sand, alcohol -resistant foam.

Unsuitable Extinguishing Media

- Water will produce extremely slick surfaces.

Firefighting Procedures

- LARGE FIRES: Dike fire-control water for later disposal. When material is not involved in fire: do not use water on material itself.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- No data available

Hazardous Combustion Products

- Under fire conditions oxides of carbon and nitrogen may be produced.

Advice for firefighters

- Water run-off from fire fighting will be very slippery and will pollute waterways.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Wear appropriate protective clothing.

Emergency Procedures

- Do not apply water to spills; produces extremely slick surfaces.

Environmental precautions

- Avoid run off to waterways and sewers. Runoff from fire control or dilution water may cause pollution.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Prevent runoff from entering drains, sewers, and streams.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Protect from freezing.

Conditions for safe storage, including any incompatibilities

Storage

- Protect from freezing.

Incompatible Materials or Ignition Sources

- Do not add water to product; may turn product to semi-solid material.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines		
	Result	Germany DFG
Distillates (petroleum), hydrotreated light (64742-47-8)	Ceilings	40 ppm Peak; 280 mg/m ³ Peak
	MAKs	20 ppm TWA MAK; 140 mg/m ³ TWA MAK

Exposure Control Notations

Germany DFG

•Distillates (petroleum), hydrotreated light (64742-47-8): **Carcinogens:** (Category 3B (could be carcinogenic for man, isomers in technical mixtures)) | **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)

Exposure controls

Engineering Measures/Controls

- No data available

Personal Protective Equipment

Pictograms

- 

Respiratory

- No data available

Eye/Face

- Wear safety glasses.

Hands

- Wear appropriate gloves.

Skin/Body

- Wear long sleeves and/or protective coveralls.

General Industrial Hygiene Considerations

- Wash with copious amounts of water.

Environmental Exposure Controls

- Do not apply water to spills; produces extremely slick surfaces.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	White to off-white emulsion.
Color	White to off-white emulsion.	Odor	Mild Hydrocarbon.
Taste	No data available.	Particulate Type	No data available
Particulate Size	No data available	Aerosol Type	No data available
Odor Threshold	No data available	Physical and Chemical Properties	No data available
General Properties			
Boiling Point	No data available	Melting Point	No data available
Decomposition Temperature	No data available	Heat of Decomposition	No data available
pH	4,5 to 5 @ 72 F(22.2222 C) 1% Aqueous Solution	Specific Gravity/Relative Density	1.02 to 1.04 Water=1 @ 72 F (22.2222 C)
Density	8,5 to 8.7 lbs/gal @ 72 F(22.2222 C)	Bulk Density	No data available
Water Solubility	Not relevant	Solvent Solubility	No data available
Viscosity	300 to 900 Centipoise (cPs, cP) or mPas @ 76 F(24.4444 C)	Explosive Properties	No data available
Oxidizing Properties:	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	VOC (Wt.)	20 to 25 %
VOC (Vol.)	No data available	Volatiles (Wt.)	No data available
Volatiles (Vol.)	No data available		
Flammability			
Flash Point	> 200 F(> 93.3333 C) TCC (Tagliabue Closed Cup)	UEL	No data available
LEL	No data available	Autoignition	No data available
Self-Accelerating Decomposition Temperature (SADT)	No data available	Heat of Combustion (ΔH_c)	No data available
Burning Time	No data available	Flame Height	No data available
Flame Extension	No data available	Ignition Distance	No data available
Flame Duration	No data available	Flammability (solid, gas)	Separated oil phase has a reported flashpoint of 174 F
Environmental			
Half-Life	No data available	Octanol/Water Partition coefficient	No data available
Coefficient of water/oil distribution	No data available	Bioaccumulation Factor	No data available
Bioconcentration Factor	No data available	Biochemical Oxygen Demand BOD/BOD5	No data available
Chemical Oxygen Demand	No data available	Persistence	No data available
Degradation	No data available		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Some phase separation may occur overtime. Vigorous mixing will re-establish emulsion.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Do not add water to product; solidification may occur.

Incompatible materials

- Store away from Oxidizers, Acids, and or Bases.

Hazardous decomposition products

- Under fire conditions oxides of carbon and nitrogen may be produced.

Section 11 - Toxicological Information**Information on toxicological effects**

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Aspiration Hazard	OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Carcinogenicity	OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Germ Cell Mutagenicity	OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Skin corrosion/Irritation	OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Skin sensitization	OSHA HCS 2012 • Data lacking UN GHS • Data lacking
STOT-RE	OSHA HCS 2012 • Data lacking UN GHS • Data lacking
STOT-SE	OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Toxicity for Reproduction	OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Respiratory sensitization	OSHA HCS 2012 • Data lacking UN GHS • Data lacking
Serious eye damage/Irritation	OSHA HCS 2012 • Data lacking UN GHS • Data lacking

Medical Conditions**Aggravated by Exposure**

- No data available.

Potential Health Effects**Inhalation****Acute (Immediate)**

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- Under normal conditions of use, no health effects are expected.

Skin**Acute (Immediate)**

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- Under normal conditions of use, no health effects are expected.

Eye**Acute (Immediate)**

- Causes serious eye irritation.

- Chronic (Delayed)**
 - Under normal conditions of use, no health effects are expected.
- Ingestion**
- Acute (Immediate)**
 - Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)**
 - Under normal conditions of use, no health effects are expected.
- Other**
- Acute (Immediate)**
 - Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)**
 - Under normal conditions of use, no health effects are expected.
- Mutagenic Effects**
 - No data available.
- Carcinogenic Effects**
 - No data available.
- Reproductive Effects**
 - No data available.

Section 12 - Ecological Information

- Toxicity**
 - Material data lacking.
- Persistence and degradability**
 - Material data lacking.
- Bioaccumulative potential**
 - Material data lacking.
- Mobility in Soil**
 - Material data lacking.
- Other adverse effects**
 - No studies have been found.
- Ecological Fate**
 - Material data lacking.
- Potential Environmental Effects**
 - Material data lacking.
- Other Information**
 - Material data lacking.

Section 13 - Disposal Considerations

- Waste treatment methods**
- Product waste**
 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Packaging waste**
 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	NDA	NDA	NDA	NDA	NDA

TDG	NDA	NDA	NDA	NDA	NDA
IATA/ICAO	NDA	NDA	NDA	NDA	NDA

Special precautions for user ● No special precautions.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code ● No data available

Other information

- Protect from freezing.

Section 15 - Regulatory Information

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

SARA Hazard Classifications ● No data available

Inventory				
Component	CAS	Canada DSL	EU EINECS	TSCA
Cationic Polyacrylamide	35429-19-7	Yes	No	Yes
Deionized Water	7732-18-5	Yes	Yes	Yes
Distillates (petroleum), hydrotreated light	64742-47-8	Yes	Yes	Yes

Australia

Labor

Australia - High Volume Industrial Chemicals List

- Distillates (petroleum), hydrotreated light 64742-47-8
- Deionized Water 7732-18-5
- Cationic Polyacrylamide 35429-19-7 Not Listed

Australia - List of Designated Hazardous Substances - Classification

- Distillates (petroleum), hydrotreated light 64742-47-8 Xn R65
- Deionized Water 7732-18-5 Not Listed
- Cationic Polyacrylamide 35429-19-7 Not Listed

Canada

Labor

Canada - WHMIS - Classifications of Substances

- Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
- Deionized Water 7732-18-5 Uncontrolled product according to WHMIS classification criteria
- Cationic Polyacrylamide 35429-19-7 Not Listed

Other

Canada - Accelerated Reduction/Elimination of Toxics (ARET)

- Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed
- Deionized Water 7732-18-5 Not Listed
- Cationic Polyacrylamide 35429-19-7 Not Listed

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• Distillates (petroleum), hydrotreated light	64742-47-8	Xn; R65
• Deionized Water	7732-18-5	Not Listed
• Cationic Polyacrylamide	35429-19-7	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Distillates (petroleum), hydrotreated light	64742-47-8	Xn R:65 S:(2)-23-24-62
• Deionized Water	7732-18-5	Not Listed
• Cationic Polyacrylamide	35429-19-7	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Distillates (petroleum), hydrotreated light	64742-47-8	S:(2)-23-24-62
• Deionized Water	7732-18-5	Not Listed
• Cationic Polyacrylamide	35429-19-7	Not Listed

Germany

Environment

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

• Distillates (petroleum), hydrotreated light	64742-47-8	ID Number 5350, hazard class 1 - low hazard to waters
• Deionized Water	7732-18-5	Not Listed
• Cationic Polyacrylamide	35429-19-7	ID Number 717, hazard class 1 - low hazard to waters (footnote 8, with cation strength <=15%); ID Number 812, hazard class 2 - hazard to waters (footnote 8, with cation strength >15%)

United States - Texas

Other

U.S. - Texas - Effects Screening Levels - Long Term

• Distillates (petroleum), hydrotreated light	64742-47-8	350 µg/m3 ESL
• Deionized Water	7732-18-5	Not Listed
• Cationic Polyacrylamide	35429-19-7	Not Listed

U.S. - Texas - Effects Screening Levels - Short Term

• Distillates (petroleum), hydrotreated light	64742-47-8	3500 µg/m3 ESL (additional numbers listed under this CAS)
• Deionized Water	7732-18-5	Not Listed
• Cationic Polyacrylamide	35429-19-7	Not Listed

Section 16 - Other Information

Relevant Phrases (code & full text)

- H319 - Causes serious eye irritation
- R36 - Irritating to eyes.

Preparation By

- Technical Department

Hygiene

Last Revision Date

- 26/February/2014

Preparation Date

- 26/February/2014

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