Section 1. Product and Company Identification

Product Name AC 7360
Application: **Flocculant, Friction Reducer**

Aspen Chemicals
23603 N Highway 288
Angleton TX 77515

Section 2. Hazards Identification

Classification of the substance or mixture
Classification according to paragraph (d) of Regulation 29 CFR 1910.1200: Not classified

GHS Label Elements
Pictograms: N/A
Signal word: N/A

Hazard and precautionary statements
H302 - Harmful if swallowed.
H304 - May be fatal if swallowed and enters airways.
H318 - Causes serious eye damage.

Other Hazards: Spills produce extremely slippery surfaces

Section 3. Composition / Information on Ingredients

Common Name Cationic Polyacrylamide

COMPONENT	CAS NUMBER	CONCENTRATION
Distillates (petroleum), hydrotreated light	64742-47-8	20 – 45%
Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched	69011-36-5	< 3%

Section 4. First Aid Measures

Description of first-aid measures
Inhalation: Move to fresh air. No Hazards which require special first aid measures.
Skin contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. In case of persistent skin irritation, consult a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get prompt medical attention immediately.
Ingestion: Rinse mouth with water. DO NOT induce vomiting. Call a physician or poison control center immediately.
Most important symptoms and effects, both acute and delayed: None under normal use.
Indications of any immediate medical attention and special treatment needed: Noneexpected.
Other information: None

Section 5. Firefighting Measures

Extinguishing media

Suitable extinguishing media: Water. Water spray. Foam. Carbon dioxide (CO_2). Dry powder.
Unsuitable extinguishing media: None

Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon oxides (COx). Nitrogen oxides (NOx). Hydrogen chloride. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

Advice for firefighter

Protective measures: Wear self-contained breathing apparatus and protective suit.
Other information: Spills produce extremely slippery surfaces.

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Personal precautions: DO NOT touch or walk through spilled material. Spills produce extremely slippery surfaces.
Protective equipment: Wear suitable personal protective clothing, gloves and eye/face protection.
Emergency procedures: Keep people away from spill/leak.

Environmental Precautions: DO NOT contaminate water.

Method and materials for containment and cleaning up

Small spills: DO NOT flush with water. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
Large spills: DO NOT flush with water. Dam up. Clean up promptly by scoop or vacuum.
Residues: Soak up with inert absorbent material. After cleaning, flush away traces with water.

Section 7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Renders surfaces extremely slippery when spilled. When handling **DO NOT** eat, drink or smoke.

Conditions for safe storage: Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material. Incompatible with oxidizing agents.

Section 8. Exposure Controls / Personal Protection

Control parameters

Occupational exposure limits: Distillates (petroleum), hydrotreated light
ACGIH: 200 mg / m3 (8-hour)

Appropriate engineering controls: Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists

Individual protection measures, such as personal protective equipment

Eye/face protection: Safety glasses with side-shields

Skin protection: Wear coveralls and/or chemical apron and rubber footwear where physical contact can occur.

Hand protection: PVC or other plastic material gloves

Respiratory protection: No personal respiratory protective equipment normally required.

Additional advice: Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practices. Wash hands and face before breaks and immediately after handling the product.

Environmental exposure controls: DO NOT allow uncontrolled discharge of product into the environment.

Section 9. Physical and Chemical Properties

Appearance: viscous liquid, milky
Odor: aliphatic
Odor threshold: no data available
pH: 5 - 8 (5 g/L)
Melting point/range: < 5°C
Initial boiling point and boiling range: > 100°C
Flash point: Does not flash
Evaporation rate: No data available
Flammability (solid, gas): Not applicable
Upper/lower flammable or explosive limits: not expected to create explosive atmospheres
Vapor pressure: 2.3 kPa @ 20°C
Vapor density: 0.804 g/liter @ 20°C
Relative density: 1.0 - 1.1
Solubility(ies): Completely miscible

Partition coefficient: Not applicable
Auto-ignition temperature: No data available
Decomposition temperature: > 150°C
Viscosity: > 20.5 mm^2/s (40°C)
Explosive properties: not expected to be explosive based on the chemical structure
Oxidizing properties: not expected to be oxidizing based on the chemical structure

Section 10. Stability and Reactivity

Reactivity: Stable under recommended storage conditions.
Chemical stability: Stable under recommended storage conditions
Possibility of hazardous reactions: None known.

Conditions to avoid: Protect from frost, heat and sunlight.
Incompatible materials: Incompatible with oxidizing agents
Hazardous decomposition products: Thermal decomposition may produce: nitrogen oxides (NOx), carbon oxides (COx) Ammonia. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

Section 11. Toxicological Information

Information on toxicological effects

Information on the product as supplied

Acute Oral: LD50 / oral / rat > 5000 mg/kg
Acute Dermal: LD50 / dermal / rat > 5000 mg / kg
Inhalation: The product is not expected to be toxic by inhalation.
Skin corrosion / irritation: Non-irritating to skin.
Serious eye damage / eye irritation: Not irritating. (OECD 437)
Respiratory / skin sensitization: Not sensitizing.
Mutagenicity: Not mutagenic.
Carcinogenicity: Not carcinogenic.
Reproduction toxicity: Not toxic for reproduction.
STOT - single exposure: No known effects.
STOT - repeated exposure: No known effects.
Aspiration hazard: Due to the viscosity, this product does not present an aspiration hazard.

Relevant information on the hazardous components

Distillates (petroleum), hydrotreated light

Acute oral toxicity: LD50 / oral / rat > 5000 mg / kg (OECD 401)
Acute dermal toxicity: LD50 / dermal / rabbit > 5000 mg / kg (OECD 402)
Acute inhalation toxicity: LC50 / inhalation / 4hr / rat = 4951 mg / m3 (OECD 403)
Skin corrosion/irritation: Not irritating. (OECD 404)
Repeated exposure may cause skin dryness or cracking.
Serious eye damage/eye irritation: Not irritating. (OECD 405)

Respiratory/skin sensitization: By analogy with similar products, this product is not expected to besensitizing.
(OECD 406)
Mutagenicity: Not mutagenic. (OECD 471, 473, 474, 476, 478, 479)
Carcinogenicity: Carcinogenicity study in rats (OECD 451): Negative
Reproductive toxicity: By analogy with similar substances, this substance is not expected to be toxic for reproduction. NOAEL / rat = 300 ppm (OECD 421)
STOT - single exposure: No known effects.
STOT - repeated exposure: NOAEL / oral / rat / 90 days ≥ 3000 mg/kg/day (OECD 408) (Based on results obtained from tests on analogous products).
Aspiration hazard: May be fatal if swallowed and enters airways.

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched
Acute oral toxicity: LD50 / oral / rat = 500 - 2000 mg / kg
Acute dermal toxicity: LD50 / dermal / rabbit > 2000 mg / kg
Acute inhalation toxicity: No data available.
Skin corrosion/irritation: Not irritating. (OECD 404)
Serious eye damage/eye irritation: Causes serious eye irritation.
Respiratory/skin sensitization: The results of testing on guinea pigs showed this material to be non-sensitizing.
Mutagenicity: Not mutagenic.
Carcinogenicity: Not carcinogenic.

Reproductive toxicity: Two-Generation Reproduction Toxicity (OECD 416)
NOAEL / rat > 250 mg / kg / day
Prenatal Development Toxicity Study (OECD 414)
NOAEL / Maternal toxicity / rat > 50 mg / kg / day
NOAEL / Developmental toxicity / rat > 50 mg / kg / day

STOT - single exposure: No known effects.
STOT - repeated exposure: NOAEL / oral / rat / 600 days = 50 mg/kg/day
Aspiration hazard: No known effects.

Section 12. Ecological Information

Toxicity
Information on the product as supplied:
Acute toxicity to fish: LC50 / Oncorhynchus mykiss/ 96 hours > 100 mg / L
Acute toxicity to invertebrates: EC50 / Daphnia / 48 hours > 100 mg / L
Acute toxicity to algae: IC50 / Algae / 72 hours > 100 mg / L
Chronic toxicity to fish: No data available.
Chronic toxicity to invertebrates: No data available.
Chronic toxicity to algae: No data available.
Effects on terrestrial organisms: No data available.
Sediment toxicity: No data available.

Relevant information on the hazardous components

Distillates (petroleum), hydrotreated light

Acute toxicity to fish: LC0 / Oncorhynchus mykiss / 96 hours > 1000 mg / L (OECD 203)
Acute toxicity to invertebrates: EC0 / Daphnia magna / 48 hours > 1000 mg / L (OECD 202)
Acute toxicity to algae: IC0 / Pseudokirchneriella subcapitata / 72 hours > 1000 mg / L (OECD 201)
Chronic toxicity to fish: NOEC / Oncorhynchus mykiss / 28 days > 1000 mg / L
Chronic toxicity to invertebrates: NOEC / Daphnia magna / 21 days > 1000 mg / L
Toxicity to microorganisms: EC50 / Tetrahymena puriformis / 48 h > 1000 mg / L
Effects on terrestrial organisms: No data available.
Sediment toxicity: No data available. Readily biodegradable, exposure to sediment is unlikely

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-,branched

Acute toxicity to fish: LC50/Cyprinus carpio/96 hours = 1 - 10 mg / L (OECD 203)
Acute toxicity to invertebrates: EC50 / Daphnia/48 hours = 1 - 10 mg / L (OECD 202)
Acute toxicity to algae: IC50/Desmodesmus subspicatus/72 hours = 1 - 10 mg /L (OECD 201)
Chronic toxicity to fish: No data available.
Chronic toxicity to invertebrates: No data available.
Toxicityto microorganisms: EC10 / activated sludge / 17 h > 10000 mg / L (DIN 38412-8)
Effects on terrestrial organisms: No data available.
Sediment toxicity: No data available.

Persistence and degradability

Information on the product as supplied:
Degradation: Not readily biodegradable.
Hydrolysis: Does not hydrolyze.
Photolysis: No data available.

Relevant information on the hazardous components

Distillates (petroleum), hydrotreated light

Degradation: Readily biodegradable.
Hydrolysis: Does not hydrolyze.
Photolysis: No data available

Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

Degradation: Readily biodegradable. > 60% / 28 days (OECD 301 B)
Hydrolysis: Does not hydrolyze.
Photolysis: No data available

Bioaccumulation

Information on the product as supplied:

This product is not expected to bioaccumulate.
Partition coefficient (Log Pow): Not applicable.
Bioconcentration factor (BCF): No data available.

Relevant information on the hazardous components
Distillates (petroleum), hydrotreated light
Partition coefficient (Log Pow): 3 - 6
Bioconcentration factor (BCF): No data available.
Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-,branched
Partition coefficient (Log Pow): > 3
Bioconcentration factor (BCF): No data available.

Mobility in soil
Information on the product as supplied
No data available.

Relevant information on the hazardous components
Distillates (petroleum), hydrotreated light
KOC: No data available.
Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-,branched
KOC: > 5000

Other adverse effects: None

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

Land transport (DOT): Not classified.
Sea transport (IMDG): Not classified.
Air transport (IATA): Not classified.

Section 15. Regulatory Information

Safety, health, and environmental regulations/legislation specific for the substance or mixture
Information on the product as supplied:
TSCA Chemical Substances Inventory: All components of this product are either listed on the inventory or are exempt from listing.
US SARA Reporting Requirements
SARA Section 311 / 312 Hazard Class: Not concerned.
RCRA Status: Not RCRA hazardous.
California Proposition 65 Information: WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm, Acrylamide.

HMIS Rating
Health: 0
Flammability: 1
Reactivity: 0
Personal Protection:B

NFPA Rating
Health: 0
Flammability: 1
Reactivity: 0

Section 16. Other Information

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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