

# SAFETY DATA SHEET

## THE DOW CHEMICAL COMPANY\*

Product name: RHOPLEX™ AC-2508 Acrylic Emulsion

Issue Date: 05/22/2019 Print Date: 12/26/2019

THE DOW CHEMICAL COMPANY\* encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## 1. IDENTIFICATION

Product name: RHOPLEX™ AC-2508 Acrylic Emulsion

Recommended use of the chemical and restrictions on use

**Identified uses:** This product is used in coatings, textiles, binders and adhesives.

**COMPANY IDENTIFICATION** 

THE DOW CHEMICAL COMPANY\*
Agent for Rohm and Haas Chemicals LLC
400 ARCOLA ROAD
COLLEGEVILLE PA 19426-2914
UNITED STATES

Customer Information Number: 800-258-2436

SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER** 

**24-Hour Emergency Contact:** 1 800 424 9300 **Local Emergency Contact:** 800-424-9300

# 2. HAZARDS IDENTIFICATION

#### Hazard classification

GHS classification in accordance with 29 CFR 1910.1200 Not a hazardous substance or mixture.

## Other hazards

No data available

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component CASRN Concentration

Acrylic polymer(s) Not hazardous  $\Rightarrow$  46.0 -  $\Rightarrow$  47.0 %

Residual monomers Not required < 500.0 PPM

Aqua ammonia 1336-21-6 <= 0.2 %

Water 7732-18-5 >= 53.0 - <= 54.0 %

Note

Polymeric description(s) presented in this section are the U.S. Toxic Substances Control Act (TSCA) definitions.

# 4. FIRST AID MEASURES

## Description of first aid measures

Inhalation: Move to fresh air.

Skin contact: Wash with water and soap as a precaution. If skin irritation persists, call a physician.

Eye contact: Rinse with plenty of water. If eye irritation persists, consult a specialist.

**Ingestion:** Drink 1 or 2 glasses of water. Consult a physician if necessary. Never give anything by mouth to an unconscious person.

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

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

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

**Notes to physician:** Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

# 5. FIREFIGHTING MEASURES

## **Extinguishing media**

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire...

Unsuitable extinguishing media: No data available

# Special hazards arising from the substance or mixture

Hazardous combustion products: No data available

**Unusual Fire and Explosion Hazards:** Material can splatter above 100C/212F.. Dried product can burn..

# Advice for firefighters

Fire Fighting Procedures: No data available

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**Special protective equipment for firefighters:** Wear self-contained breathing apparatus and protective suit..

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Keep people away from and upwind of spill/leak. Material can create slippery conditions.

**Environmental precautions:** CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**Methods and materials for containment and cleaning up:** Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container tightly closed. Do not breathe vapors, mist or gas.

**Conditions for safe storage:** Keep from freezing - product stability may be affected. STIR WELL BEFORE USE.

#### Storage stability

Storage temperature: 1 - 49 °C (34 - 120 °F)

Other data: Monomer vapors can be evolved when material is heated during processing operations. See SECTION 8, for types of ventilation required.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value/Notation
Aqua ammonia	Dow IHG	TWA	10 ppm, As Ammonia
	ACGIH	TWA	25 ppm, Ammonia
	ACGIH	STEL	35 ppm, Ammonia
	OSHA Z-1	TWA	35 mg/m3 50 ppm

#### **Exposure controls**

**Engineering controls:** Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

**Protective measures:** Facilities storing or utilizing this material should be equipped with an eyewash facility.

## Individual protection measures

**Eye/face protection:** Safety glasses with side-shields Eye protection worn must be compatible with respiratory protection system employed.

**Skin protection** 

**Hand protection:** The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Neoprene gloves

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Respiratory protection: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. For airborne concentrations up to 10 times the exposure limit, wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) ammonia/methylamine cartridges and N95 filters. If oil mist is present, use R95 or P95 filters.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

Physical state liquid
Color white milky
Odor Ammonia odor
Odor Threshold No data available

**pH** 8.5 - 9.2

Melting point/range 0.00 °C (32.00 °F) Water

Freezing point No data available

**Boiling point (760 mmHg)** 100.00 °C (212.00 °F) Water

Flash point Noncombustible Evaporation Rate (Butyl Acetate <1.00 Water

= 1)

Flammability (solid, gas)

Lower explosion limit

Not Applicable

Upper explosion limit

Not Applicable

Vapor Pressure 17.0000000 mmHg at 20.00 °C (68.00 °F) Water

Relative Vapor Density (air = 1) <1.0000 Water

Relative Density (water = 1) 1.0500

Water solubility partly miscible
Partition coefficient: n- No data available

octanol/water

Auto-ignition temperatureNot ApplicableDecomposition temperatureNo data available

**Dynamic Viscosity** 400.000 - 1,400.000 mPa.s

Kinematic ViscosityNo data availableExplosive propertiesNo data availableOxidizing propertiesNo data availableMolecular weightNo data available

Percent volatility 53.000 - 55.000 % Water

NOTE: The physical data presented above are typical values and should not be construed as a specification.

# 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable

Possibility of hazardous reactions: None known.

Product will not undergo polymerization.

Conditions to avoid: No data available

**Incompatible materials:** There are no known materials which are incompatible with this product.

Hazardous decomposition products: Thermal decomposition may yield acrylic monomers...

## 11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

#### **Acute toxicity**

## **Acute oral toxicity**

LD50, Rat, > 5,000 mg/kg

## Acute dermal toxicity

LD50, Rabbit, > 5,000 mg/kg

## Acute inhalation toxicity

Product test data not available. Refer to component data.

## Skin corrosion/irritation

May cause transient irritation.

## Serious eye damage/eye irritation

No eye irritation

## Sensitization

Product test data not available. Refer to component data.

## **Specific Target Organ Systemic Toxicity (Single Exposure)**

Product test data not available. Refer to component data.

## Specific Target Organ Systemic Toxicity (Repeated Exposure)

Product test data not available. Refer to component data.

# Carcinogenicity

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Product test data not available. Refer to component data.

# **Teratogenicity**

Product test data not available. Refer to component data.

# Reproductive toxicity

Product test data not available. Refer to component data.

# Mutagenicity

Product test data not available. Refer to component data.

## **Aspiration Hazard**

Product test data not available. Refer to component data.

#### Additional information

No data are available for this material. The information shown is based on profiles of compositionally similar materials.

# **COMPONENTS INFLUENCING TOXICOLOGY:**

## Acrylic polymer(s)

## Acute inhalation toxicity

The LC50 has not been determined.

#### Sensitization

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

# **Specific Target Organ Systemic Toxicity (Single Exposure)**

The substance or mixture is not classified as specific target organ toxicant, single exposure.

## **Specific Target Organ Systemic Toxicity (Repeated Exposure)**

No relevant data found.

## Carcinogenicity

No relevant data found.

## **Teratogenicity**

No relevant data found.

## Reproductive toxicity

No relevant data found.

#### Mutagenicity

No relevant data found.

#### **Aspiration Hazard**

No aspiration toxicity classification

# Residual monomers

Acute inhalation toxicity

The LC50 has not been determined.

### Aqua ammonia

## Acute inhalation toxicity

The LC50 has not been determined.

#### Sensitization

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

## **Specific Target Organ Systemic Toxicity (Single Exposure)**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

## **Specific Target Organ Systemic Toxicity (Repeated Exposure)**

No relevant data found.

## Carcinogenicity

Did not cause cancer in laboratory animals.

## **Teratogenicity**

No relevant data found.

## Reproductive toxicity

No relevant data found.

## Mutagenicity

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

# **Aspiration Hazard**

Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

# 12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

#### **General Information**

No data are available for this material. The information shown is based on profiles of compositionally similar materials.

# **Toxicity**

## Acute toxicity to fish

LC50, Rainbow trout (Oncorhynchus mykiss), 96 Hour, > 100 mg/l, OECD Test Guideline 203

# Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, > 100 mg/l, OECD Test Guideline 202 or Equivalent

## Acute toxicity to algae/aquatic plants

EC50, Algae (Selenastrum capricornutum), 72 Hour, Growth rate, > 100 mg/l, OECD Test Guideline 201 or Equivalent

## Toxicity to bacteria

Microtox, 15 Minute EC50: >300 ppm

## Persistence and degradability

**Biodegradability:** No data are available for this material. The information shown is based on profiles of compositionally similar materials. Inherent Biodegradability (OECD 302 B): This type of product is not biodegradable but readily bioeliminable. Emulsion polymer biodegradation is generally considered limited and dependant on polymer size and origin of treatment sludge. However, most of these polymers readily absorb onto water treatment sludge and therefore would be bioeliminable from effluents. Activated Sludge Respiratory Inhibition (OECD 209): >100 mg/l (non- inhibiting)

Biodegradation: 37 % Exposure time: 28 d

Method: OECD Test Guideline 302

### Bioaccumulative potential

Bioaccumulation: No applicable data.

# Mobility in soil

## Acrylic polymer(s)

No relevant data found.

## **Residual monomers**

No relevant data found.

#### Aqua ammonia

Potential for mobility in soil is very high (Koc between 0 and 50).

# 13. DISPOSAL CONSIDERATIONS

**Disposal methods:** Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

DOT

Not regulated for transport

# Classification for SEA transport (IMO-IMDG):

Not regulated for transport

Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code

Consult IMO regulations before transporting ocean bulk

# Classification for AIR transport (IATA/ICAO):

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## 15. REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

No SARA Hazards

# Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

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.

# Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

Calculated RQ exceeds reasonably attainable upper limit.

ComponentsCASRNRQ (RCRA Code)Aqua ammonia1336-21-61000 lbs RQ

# Pennsylvania

Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

## California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **United States TSCA Inventory (TSCA)**

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

## 16. OTHER INFORMATION

Hazard Rating System HMIS

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Health	Flammability	Physical Hazard
1	0	0

#### Revision

Identification Number: 10078880 / 1001 / Issue Date: 05/22/2019 / Version: 2.5

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this

document.

# Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
Dow IHG	Dow Industrial Hygiene Guideline
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air
	Contaminants
STEL	Short-term exposure limit
TWA	Time weighted average

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials: bw - Body weight: CERCLA - Comprehensive Environmental Response. Compensation. and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada): ECx - Concentration associated with x% response: EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response: ERG - Emergency Response Guide: GHS - Globally Harmonized System: GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA -Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA -Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

#### Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

THE DOW CHEMICAL COMPANY\* urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.