

# SAFETY DATA SHEET

**ROHM & HAAS CHEMICALS LLC** 

# Product name: RHOPLEX<sup>™</sup> B-85 Acrylic Emulsion

Issue Date: 03/09/2023 Print Date: 05/23/2023

ROHM & HAAS CHEMICALS LLC 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™ B-85 Acrylic Emulsion

Recommended use of the chemical and restrictions on use Identified uses: Architectural Binder Coatings.

# COMPANY IDENTIFICATION

ROHM & HAAS CHEMICALS LLC 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 the OSHA Hazard Communication Standard (29 CFR 1910.1200) Eye irritation - Category 2A

# Label elements Hazard pictograms



Signal word: WARNING!

#### Hazards

Causes serious eye irritation.

# **Precautionary statements**

# Prevention

Wash skin thoroughly after handling. Wear eye protection/ face protection.

### Response

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

# Other hazards

No data available

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

# Chemical nature: Acrylic Latex

This product is a mixture.

Component	CASRN	Concentration
Acrylic polymer(s)	Not hazardous	>= 37.0 - 39.0 %
Sodium lauryl sulfate	151-21-3	>= 1.0 - < 5.0 %
Residual monomers	Not required	< 0.04 %
Aqua ammonia	1336-21-6	<= 0.2 %
Water	7732-18-5	>= 61.0 - 63.0 %

# 4. FIRST AID MEASURES

# Description of first aid measures

# General advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air and keep comfortable for breathing; consult a physician.

**Skin contact:** Wash off with plenty of water. Suitable emergency safety shower facility should be available in work area.

**Eye contact:** Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay,

preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

Ingestion: Rinse mouth with water. No emergency medical treatment necessary.

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

Causes serious eye irritation.

# Indication of any immediate medical attention and special treatment needed

**Notes to physician:** If burn is present, treat as any thermal burn, after decontamination. No specific antidote. 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:** To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam..

Unsuitable extinguishing media: None known...

#### Special hazards arising from the substance or mixture

**Hazardous combustion products:** Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds.. Combustion products may include and are not limited to:. Carbon dioxide.. Carbon monoxide..

**Unusual Fire and Explosion Hazards:** Material can splatter above 100C/212F.. This material will not burn until the water has evaporated. Residue can burn..

# Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry.. Contain fire water run-off if possible..

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus and protective suit.. If protective equipment is not available or not used, fight fire from a protected location or safe distance..

# 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. Formaldehyde will be generated under acidic conditions. Maintain adequate ventilation under these conditions to prevent airborne levels of formaldehyde above established exposure limits in the workplace.

# 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	
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	
	Further information: (b): The value in mg/m3 is approximate.			

# Exposure controls

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

# Individual protection measures

Eye/face protection: Use chemical goggles.

#### Skin protection

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Neoprene. Avoid gloves made of: Polyvinyl alcohol ("PVA"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit

requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance		
Physical state	liquid	
Color	white milky	
Odor	Ammonia	
Odor Threshold	No data available	
рН	9.3 - 10.0	
Melting point/range	0 °C (32 °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)	Not Applicable	
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)	1.0000 - 1.2000	
Water solubility	partly miscible	
Partition coefficient: n- octanol/water	No data available	
Auto-ignition temperature	Not applicable	
Decomposition temperature	No data available	
Dynamic Viscosity	1 - 25 mPa.s	
Kinematic Viscosity	No data available	
Explosive properties	No data available	
Oxidizing properties	No data available	
Molecular weight	No data available	
Percent volatility	61.00 - 63.00 % Water	

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

# **10. STABILITY AND REACTIVITY**

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable

Possibility of hazardous reactions: 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 are available.

#### Information on likely routes of exposure

Ingestion, Inhalation, Skin contact, Eye contact.

# Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)

#### Acute Toxicity Endpoints:

Not classified based on available information.

# Acute oral toxicity

#### Information for the Product:

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Based on testing for product(s) in this family of materials: LD50, Rat, > 5,000 mg/kg

#### Information for components:

# Acrylic polymer(s)

Single dose oral LD50 has not been determined.

#### Sodium lauryl sulfate

LD50, Rat, male, 1,427 mg/kg OECD 401 or equivalent

LD50, Rat, female, 977 mg/kg OECD 401 or equivalent

#### Residual monomers

Single dose oral LD50 has not been determined.

# Aqua ammonia

Single dose oral LD50 has not been determined.

# Acute dermal toxicity

# Information for the Product:

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Based on testing for product(s) in this family of materials: LD50, Rabbit, > 2,000 mg/kg No deaths occurred at this concentration.

# Information for components:

# Acrylic polymer(s)

The dermal LD50 has not been determined.

#### Sodium lauryl sulfate

For similar material(s): LD50, Rabbit, male and female, > 2,000 mg/kg OECD 402 or equivalent No deaths occurred at this concentration.

# <u>Residual monomers</u> The dermal LD50 has not been determined.

<u>Aqua ammonia</u> The dermal LD50 has not been determined.

# Acute inhalation toxicity

#### Information for the Product:

Brief (minutes) exposure to vapor, mist or dust is not likely to cause adverse effects.

As product: The LC50 has not been determined.

# Information for components:

# Acrylic polymer(s)

The LC50 has not been determined.

Sodium lauryl sulfate

LC0, Rat, 4 Hour, dust/mist, > 0.975 mg/l No deaths occurred at this concentration.

# Residual monomers

The LC50 has not been determined.

# <u>Aqua ammonia</u>

The LC50 has not been determined.

# Skin corrosion/irritation

Not classified based on available information.

# Information for the Product:

Based on testing for product(s) in this family of materials:

Brief contact may cause skin irritation with local redness. Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage. May cause more severe response if skin is abraded (scratched or cut).

# Information for components:

#### Acrylic polymer(s)

Essentially nonirritating to skin.

#### Sodium lauryl sulfate

Brief contact may cause moderate skin irritation with local redness. Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage. May cause more severe response if skin is abraded (scratched or cut).

#### **Residual monomers**

Essentially nonirritating to skin.

#### Aqua ammonia

Brief contact may cause skin burns. Symptoms may include pain, severe local redness and tissue damage. Classified as corrosive to the skin according to DOT guidelines.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Information for the Product:

Based on testing for product(s) in this family of materials: May cause eye irritation. May cause corneal injury.

#### Information for components:

# Acrylic polymer(s)

Essentially nonirritating to eyes.

# Sodium lauryl sulfate

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

#### Residual monomers

Essentially nonirritating to eyes.

#### Aqua ammonia

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

# Sensitization

#### For skin sensitization:

Not classified based on available information.

### For respiratory sensitization:

Not classified based on available information.

#### Information for the Product:

For skin sensitization: No relevant data found.

For respiratory sensitization: No relevant data found.

#### Information for components:

#### Acrylic polymer(s)

For skin sensitization: No relevant data found.

For respiratory sensitization: No relevant data found.

# Sodium lauryl sulfate

For similar material(s): Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization: No relevant data found.

### **Residual monomers**

For skin sensitization: No relevant data found.

For respiratory sensitization: No relevant data found.

# Aqua ammonia

For skin sensitization: No relevant data found.

For respiratory sensitization: No relevant data found.

# Specific Target Organ Systemic Toxicity (Single Exposure)

Not classified based on available information.

#### Information for the Product:

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

#### Information for components:

# Acrylic polymer(s)

Available data are inadequate to determine single exposure specific target organ toxicity.

#### Sodium lauryl sulfate

Available data are inadequate to determine single exposure specific target organ toxicity.

#### Residual monomers

Available data are inadequate to determine single exposure specific target organ toxicity.

#### Aqua ammonia

May cause respiratory irritation. Route of Exposure: Inhalation Target Organs: Respiratory Tract

#### **Aspiration Hazard**

Not classified based on available information.

# Information for the Product:

Based on physical properties, not likely to be an aspiration hazard.

#### Information for components:

<u>Acrylic polymer(s)</u> Based on physical properties, not likely to be an aspiration hazard.

#### <u>Sodium lauryl sulfate</u> Based on physical properties, not likely to be an aspiration hazard.

<u>Residual monomers</u> Based on available information, aspiration hazard could not be determined.

# Aqua ammonia

Aspiration into the respiratory system may occur during ingestion or vomiting. Due to corrosivity, tissue damage or lung injury may occur.

# Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)

# Specific Target Organ Systemic Toxicity (Repeated Exposure)

Not classified based on available information.

# Information for the Product:

Product test data not available.

# Information for components:

Acrylic polymer(s) No relevant data found.

# Sodium lauryl sulfate

May cause abdominal discomfort or diarrhea.

# Residual monomers

No relevant data found.

# <u>Aqua ammonia</u>

No relevant data found.

# Carcinogenicity

Not classified based on available information.

# Information for the Product:

No relevant data found.

# Information for components:

Acrylic polymer(s) No relevant data found.

#### <u>Sodium lauryl sulfate</u> Did not cause cancer in laboratory animals.

<u>Residual monomers</u> No relevant data found.

<u>Aqua ammonia</u> Did not cause cancer in laboratory animals.

# Teratogenicity

Not classified based on available information.

# Information for the Product:

No relevant data found.

# Information for components:

Acrylic polymer(s) No relevant data found.

# Sodium lauryl sulfate

For similar material(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

# **Residual monomers**

No relevant data found.

# Aqua ammonia

No relevant data found.

# **Reproductive toxicity**

Not classified based on available information.

# Information for the Product:

No relevant data found.

### Information for components:

Acrylic polymer(s) No relevant data found.

**<u>Sodium lauryl sulfate</u>** For similar material(s): In animal studies, did not interfere with reproduction.

<u>Residual monomers</u> No relevant data found.

Aqua ammonia No relevant data found.

#### **Mutagenicity**

Not classified based on available information.

#### Information for the Product:

Based on testing for product(s) in this family of materials: In vitro genetic toxicity studies were negative.

# Information for components:

# Acrylic polymer(s)

No relevant data found.

### Sodium lauryl sulfate

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

#### **Residual monomers**

No relevant data found.

# Aqua ammonia

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

# **12. ECOLOGICAL INFORMATION**

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

# Toxicity

Acrylic polymer(s) Acute toxicity to fish No relevant data found.

# Sodium lauryl sulfate

# Acute toxicity to fish

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, 4.6 mg/l

LC50, Pimephales promelas (fathead minnow), 96 Hour, 29 mg/l, OECD Test Guideline 203 or Equivalent

### Acute toxicity to aquatic invertebrates

EC50, Ceriodaphnia dubia (water flea), 48 Hour, 5.55 mg/l, OECD Test Guideline 202 or Equivalent

EC50, Artemia salina (brine shrimp), 48 Hour, 3.15 mg/l

# Acute toxicity to algae/aquatic plants

ErC50, Desmodesmus subspicatus (green algae), 72 Hour, Growth rate, 120 mg/l, OECD Test Guideline 201 or Equivalent NOEC, Desmodesmus subspicatus (green algae), 72 Hour, Growth rate, 30 mg/l, OECD Test

Guideline 201 or Equivalent

## Toxicity to bacteria

EC50, activated sludge, 3 Hour, Respiration rates., 135 mg/l, OECD 209 Test

#### Chronic toxicity to fish

NOEC, Pimephales promelas (fathead minnow), 42 d, > 1.357 mg/l

#### Chronic toxicity to aquatic invertebrates

NOEC, Ceriodaphnia dubia (water flea), 7 d, 0.88 mg/l

# **Residual monomers**

Acute toxicity to fish No relevant data found.

# <u>Aqua ammonia</u>

#### Acute toxicity to fish

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested). May increase pH of aquatic systems to > pH 10 which may be toxic to aquatic organisms. LC50, Lepomis macrochirus (Bluegill sunfish), 96 Hour, 0.87 mg/l LC50, Pimephales promelas (fathead minnow), 96 Hour, 1.2 mg/l

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 0.66 mg/l

# Persistence and degradability

#### Acrylic polymer(s)

Biodegradability: No relevant data found.

# Sodium lauryl sulfate

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
10-day Window: Pass
Biodegradation: 95 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent

# Theoretical Oxygen Demand: 2.00 mg/mg

# Chemical Oxygen Demand: 0.68 mg/g

# **Biological oxygen demand (BOD)**

Incubation Time	BOD
5 d	57 - 97 %

#### **Residual monomers**

Biodegradability: No relevant data found.

#### Aqua ammonia

**Biodegradability:** Biodegradation may occur under aerobic conditions (in the presence of oxygen). Biodegradation rate may increase in soil and/or water with acclimation.

Theoretical Oxygen Demand: 0.76 mg/mg

#### **Bioaccumulative potential**

#### Acrylic polymer(s)

Bioaccumulation: No relevant data found.

#### Sodium lauryl sulfate

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). **Partition coefficient:** n-octanol/water(log Pow): -2.03 OECD Test Guideline 107 or Equivalent

#### **Residual monomers**

Bioaccumulation: No relevant data found.

#### Aqua ammonia

**Bioaccumulation:** No bioconcentration is expected because of the relatively high water solubility.

# Mobility in soil

# Acrylic polymer(s)

No relevant data found.

#### Sodium lauryl sulfate

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process. **Partition coefficient (Koc):** > 5000 Estimated.

Partition coefficient (Koc): > 5000 Estim

# 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 chemicalsewer. For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations.

**Contaminated packaging:** Empty containers retain product residues. Follow label warnings even after container is emptied. Improper disposal or reuse of this container may be dangerous and illegal. Refer to applicable federal, state and local regulations.

# 14. TRANSPORT INFORMATION

DOT

Not regulated for transport

# Classification for SEA transport (IMO-IMDG):

Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code Not regulated for transport 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 Serious eye damage or eye irritation

# 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.

## 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.

The following chemicals are listed because of the additional requirements of Pennsylvania law:

### Components

Ethyl acrylate

#### **CASRN** 140-88-5

# California Prop. 65

WARNING: This product can expose you to chemicals including Ethyl acrylate, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

# 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

#### Revision

Identification Number: 10077907 / 1001 / Issue Date: 03/09/2023 / Version: 4.1 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

AIIC - Australian Inventory of Industrial Chemicals; 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: TECI - Thailand Existing Chemicals 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.

ROHM & HAAS CHEMICALS LLC 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.