



NORSOCRYL (R) 401

Material Safety Data Sheet

Arkema Inc.

1 PRODUCT AND COMPANY IDENTIFICATION

Acrylic Monomers

Arkema Inc.
2000 Market Street
Philadelphia, PA 19103

EMERGENCY PHONE NUMBERS:

Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 767-5089 (24Hrs)

Information Telephone Numbers	Phone Number	Available Hrs
Customer Service	800-338-1015	8:00 to 6:00 EST

Product Name NORSOCRYL (R) 401

Product Synonym(s)

Chemical Family

Chemical Formula

Chemical Name

EPA Reg Num

Product Use Solvent for cements, mortars and concretes.

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
Inhibitor	NJTSN 03365400-5021P	.1%	Y
Methacrylic acid	79-41-4	< 9 %	Y
Methoxypolyethylene glycol monomethacrylate	26915-72-0	>60%	Y

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

This material is classified as hazardous under Federal OSHA regulation.

The components of this product are all on the TSCA Inventory list.

3 HAZARDS IDENTIFICATION

Emergency Overview

Clear liquid with a slightly acrylic odor.

DANGER!

CAUSES EYE AND SKIN BURNS. MAY CAUSE BLINDNESS.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on its composition, it is anticipated to be no more than slightly toxic if swallowed, no more than moderately toxic if absorbed through skin and corrosive to eyes and skin. Exposure to vapor may cause severe respiratory tract irritation.

4 FIRST AID MEASURES

IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention immediately.

IF ON SKIN, immediately flush with plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Destroy contaminated shoes.

IF SWALLOWED, do NOT induce vomiting. Give water to drink. Get medical attention immediately. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

5 FIRE FIGHTING MEASURES**Fire and Explosive Properties**

Auto-Ignition Temperature	NE	
Flash Point	>109 C	Flash Point Method
Flammable Limits- Upper	NE	
Lower	NE	

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

A large amount of heat can be generated when monomers are exposed to a fire. Heated sealed containers can explode.

6 ACCIDENTAL RELEASE MEASURES**In Case of Spill or Leak**

Contain spill. Stop leak at source if this can be done safely. Ventilate area. Nonessential personnel should leave the area until cleanup is completed. Pump liquid into DOT-approved drums for disposal. Absorb remaining liquid onto inert absorbent and place in DOT approved drums for disposal. Wash area with water. Keep concentrate and wash water from entering sewers or waterways. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

7 HANDLING AND STORAGE**Handling**

Do not get in eyes, on skin or on clothing. Avoid breathing vapor. Do not taste or swallow. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat and flame.

Storage

This product should be stored in a closed container, away from direct sunlight, at ambient temperatures.



7 HANDLING AND STORAGE

Storage of this product at elevated temperatures (>30 C or >85 F) reduces the shelf-life. The typical shelf-life for this product is 12 months. An air space is required above the liquid in all containers; avoid storage under an oxygen-free atmosphere.

The stability of this product should be checked periodically; typically every 90 days for bulk containers. Materials recommended for packaging include: stainless steel, aluminum, glass, HDPE, PP or PTFE.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Eye / Face Protection

Where there is potential for eye contact, wear a face shield, chemical goggles, and have eye flushing equipment immediately available.

Skin Protection

Gloves should be worn when handling this material. Wear chemical goggles, a face shield, and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if skin is contaminated. Remove contaminated clothing promptly and wash before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash skin thoroughly after handling.

Respiratory Protection

Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Airborne Exposure Guidelines for Ingredients

Exposure Limit		Value
Inhibitor		
ACGIH TWA	Vapor or mist, inhalable fraction	2 mg/m3
Methacrylic acid		
ACGIH TWA	-	20 ppm 70 mg/m3

- Only those components with exposure limits are printed in this section.
- Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
- ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.
- WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Clear liquid with a slightly acrylic odor.
pH	NE
Specific Gravity	(24 C) : 1.097 kg/m ³
Vapor Pressure	NE
Vapor Density	NE
Melting Point	NE
Freezing Point	21 C
Boiling Point	NE
Solubility In Water	Complete
Viscosity	(23 C) : 59 cP(mPa.s)
Other Physical Data	Henry's constant : 0.126 Pa m ³ /mole Refractive index (30 C) = 1.431

10 STABILITY AND REACTIVITY**Stability**

This material is chemically stable under normal and anticipated storage and handling conditions. However, this material can undergo hazardous polymerization. See Hazardous Polymerization below for conditions to avoid.

Hazardous Polymerization

An uncontrolled polymerization may produce a rapid release of energy with the potential for an explosion of unvented closed containers or inadequately vented containers.

Incompatibility

This material polymerizes exothermically in the presence of heat, contamination, oxygen free atmosphere, free radicals, peroxides, and inhibitor depletion liberating heat.

Hazardous Decomposition Products

Methacrylic acid: product of hydrolysis.

11 TOXICOLOGICAL INFORMATION**Toxicological Information**

Data on this material and/or its components are summarized below.

Methoxypolyethylene glycol monomethacrylate

Single exposure (acute) studies indicate that this material is severely irritating to rabbit eyes and slightly irritating to rabbit skin. No skin allergy was observed in guinea pigs following repeated exposure.

Methacrylic acid

Single exposure (acute) studies indicate that this material is no more than slightly toxic if swallowed (rat LD₅₀ 1,060-9,400 mg/kg), no more than moderately toxic if absorbed through skin (rabbit LD₅₀ between 500 and 2,000 mg/kg), practically non-toxic if inhaled (rat 4-hr LC₅₀ 7.1 mg/l) and corrosive to rabbit eyes and skin (24-hr exposure). No skin allergy was observed in guinea pigs following repeated exposure. Adverse effects noted in rats following repeated inhalation include eye and nose irritation with weight loss and kidney congestion. Repeated inhalation exposure produced nasal injury in rats and mice and kidney effects in mice. Repeated oral administration in rats produced changes in the liver and lung. No genetic changes were observed in tests using bacteria.

12 ECOLOGICAL INFORMATION

Ecotoxicological Information

Data on this material and/or its components are summarized below.

Methacrylic acid

This material is highly toxic to algae (96-hr EC50 0.59 mg/l), slightly toxic to rainbow trout (96-hr LC50 85 mg/l), and practically non-toxic to Daphnia magna (48-hr EC50 >130 mg/l).

Chemical Fate Information

Data on this material and/or its components are summarized below.

Methacrylic acid

This material is readily biodegradable (86% after 28-days) and practically not bioaccumulable (log Pow 0.93). It is slightly adsorptive in soil and sediment (log Koc 1.88), has a half-life in air of 6.12 hours and has an evaporation half-life of 27.5 days (river) to 298 days (pond). It is not expected to bioconcentrate (BCF 3.0).

13 DISPOSAL CONSIDERATIONS

Waste Disposal

Incineration is the recommended method for disposal observing all local, state and federal regulations. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14 TRANSPORT INFORMATION

DOT Name	Methacrylic Acid, Stabilized
DOT Technical Name	
DOT Hazard Class	8
UN Number	UN 2531
DOT Packing Group	PG II
RQ	No
DOT Special Information	Primary Hazard - Corrosive

15 REGULATORY INFORMATION

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute) Health	Y	Fire	N
Delayed (Chronic) Health	N	Reactive	Y
		Sudden Release of Pressure	N

The components of this product are all on the TSCA Inventory list.

Ingredient Related Regulatory Information:
SARA Reportable Quantities

	CERCLA RQ	SARA TPQ
Inhibitor	NE	
Methacrylic acid	NE	



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Arkema Inc.

SARA Reportable Quantities

Methoxypolyethylene glycol monomethacrylate

CERCLA RQ

SARA TPQ

NE

NE

Massachusetts Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Massachusetts Right to Know Substance List.

Inhibitor

Methacrylic acid

New Jersey Right to Know

This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right-to-Know Substances List.

Inhibitor

Methacrylic acid

Pennsylvania Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List.

Inhibitor

Methacrylic acid

16 OTHER INFORMATION

Revision Information

Revision Date 19 AUG 2005

Revision Number 3

Supersedes Revision Dated 11-OCT-2004

Revision Summary

sec 14

Key

NE= Not Established NA= Not Applicable (R) = Registered Trademark

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