

**IDEAL INDUSTRIES, INC.****MATERIAL SAFETY DATA SHEET****GENERAL INFORMATION**

PRODUCT NAME OR NUMBER (as it appears on label) Aqua Gel (Gel and Liquid)		CATALOG NUMBER All "31" Series
MANUFACTURER'S NAME Ideal Industries, Inc.		EMERGENCY TELEPHONE NO. (815) 895-5181
ADDRESS (Number, Street, City, State and Zip Code) Becker Place, Sycamore, Ill. 60178		
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101) None		
CHEMICAL DESCRIPTION Water-based Mixture	FORMULA Proprietary	

SECTION I - INGREDIENTS

CAS REGISTRY NO.	%W	CHEMICAL NAME(S) *	Listed as a Carcinogen in NTP, IARC or OSHA 1910(z) (specify)
67-56-1	< 9.0	Methanol (methyl alcohol)	No
		Is considered hazardous because of flash point and toxicological data under Federal Hazards Communications Standard 29 CFR (1910.1200).	
	< 90.0	Water	No
	< 6.5	Polyacrylic Polymer	No
	< 1.0	Polyether	No
	< 1.0	Sodium Hydroxide	No
	< 0.01	Blue Dye	No

SECTION II - PHYSICAL DATA

BOILING POINT 212°F — °C	SPECIFIC GRAVITY (H ₂ O = 1) 0.98	PERCENT VOLATILE BY VOLUME (%) ~ 90.0
SOLUBILITY IN WATER Infinite	pH = 7.0 - 8.1	PERCENT SOLID BY WEIGHT (%) ~ 10.0
APPEARANCE AND ODOR Light blue gel/liquid with mild odor		IS MATERIAL: <u>LIQUID</u> SOLID GAS PASTE POWDER

SECTION III - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT — °F — °C	method used None	FLAMMABLE LIMITS	LEL N.A.	UEL N.A.
EXTINGUISHING MEDIA Use carbon dioxide or foam for surrounding media.				
SPECIAL FIRE FIGHTING PROCEDURES None				
UNUSUAL FIRE AND EXPLOSION HAZARDS None				

*None of the chemical raw materials contained in this formulation are considered hazardous under the Federal Hazards Communication Standard 29 C.F.R. 1910.1200.

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SECTION IV - HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE - Conditions to Avoid		Prolonged exposure to fumes could cause nausea or headaches. Mild skin irritation could occur.
THRESHOLD LIMIT VALUE Methanol has T.L.V. of 200 p.p.m.		
PRIMARY ROUTES OF ENTRY Inhalation ☒ Skin Contact ☒ Other (specify)		
EMERGENCY AND FIRST AID PROCEDURES		
SKIN CONTACT:		Flush with water for 15 minutes.
EYE CONTACT:		Flush with water for 15 minutes.
INGESTION: Contact local poison control center immediately.		

SECTION V - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID	None
	STABLE	X		
INCOMPATIBILITY (materials to avoid) Avoid strong oxidizers				
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon				
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID	None
	WILL NOT OCCUR	X		

SECTION VI - SPILL AND LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED		Clean up spills with absorbent media.
WASTE DISPOSAL METHOD Dispose of as solid landfill in accordance with local regulations.		
CERCLA (Superfund) REPORTABLE QUANTITY (in lbs) N/A		
RCRA HAZARDOUS WASTE NO. (40 CFR 261.33) N/A		
VOLATILE ORGANIC COMPOUND (VOC) (as packaged, minus water) N/A		
☐ Theoretical _____ lb/gal N/A ☐ Analytical _____ lb/gal N/A		

SECTION VII - PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type) If T.L.V. is exceeded, use NIOSH respirator.			
VENTILATION	LOCAL EXHAUST (Specify Rate)	May be necessary	SPECIAL None
	MECHANICAL (General) (Specify Rate)		OTHER None
PROTECTIVE GLOVES (specify type) Neoprene		EYE PROTECTION (specify type) Safety Goggles	
OTHER PROTECTIVE EQUIPMENT None			

SECTION VIII - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING		Store at temperatures between 25 and 125°F.
OTHER PRECAUTIONS		Keep away from infants, children and pets.

SECTION IX - ADDITIONAL INFORMATION

Clean up spills as they can be slippery and hazardous.

THIS MATERIAL SAFETY DATA SHEET PREPARED BY:

Name	Robert L. Trivett	SIGNATURE <i>Robert L. Trivett</i>
Title	Sr. Product Development Chemist	
Date	1/22/87	

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MATERIAL SAFETY DATA SHEET



7 ST. PAUL STREET
BALTIMORE, MARYLAND 21202
(301) 783-1120
EMERGENCY (216) 997-5501

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I. PRODUCT IDENTIFICATION

MSDS NO. 76.1

TRADE NAME: Aqueous Titanium Tetrachloride

SYNONYMS: Titanium Oxychlorides

II. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	CAS. NO.	%	PEL	TLV
Titanium Oxychlorides (as Titanium Oxydichloride)	13780-39-7	approx. 32		Not Established
Hydrochloric Acid (Muriatic acid)	7647-01-0	approx. 17	5 ppm (ceiling for hydrogen chloride)	5 ppm
None of the chemical substances listed herein are considered a potential carcinogen in either the NTP Annual Report on Carcinogens, the IARC Monographs, or by OSHA.				

III. PHYSICAL DATA

BOILING POINT, 760mm HG: 85°C at 50%	MELTING POINT: N. A.
SPECIFIC GRAVITY (H ₂ O = 1): 1.48 ± 0.02	VAPOR PRESSURE: 32.5 mm @ 25°C
VAPOR DENSITY (AIR = 1): ~ 1.15	SOL. IN H ₂ O % BY WT: Miscible
% VOLATILES BY WT: approx. 75%	EVAPORATION RATE (Butyl Acetate = 1): Reported as 1ml/100ml/24 hrs; .01ml/cm ² /m
APPEARANCE/ODOR: Yellow viscous liquid with slight to moderate penetrating odor	pH (AS IS): > 1.0

IV. FIRE AND EXPLOSION DATA

FLASH POINT: N. A. (non-flammable gas)	AUTOIGNITION TEMPERATURE: N. A.
FLAMMABLE LIMITS IN AIR, % BY VOL.:	LOWER: N. A. UPPER: N. A.
EXTINGUISHING MEDIA: None required.	
SPECIAL FIRE FIGHTING PROCEDURES: Not flammable. If product is present during fire of combustible material, water can be used but it may evolve hydrochloric acid vapors.	
UNUSUAL FIRE AND EXPLOSION HAZARD: N. A.	

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V. HEALTH HAZARD INFORMATION

ROUTES OF EXPOSURE
INHALATION:

Highly irritating and corrosive to mucous membranes in the respiratory tract.

SKIN CONTACT: Liquid and fumes are highly corrosive to skin resulting in skin burns or at least skin irritation.

SKIN ABSORPTION: N. A.

EYE CONTACT: Liquid and fumes are highly corrosive to eyes, resulting in severe eye irritation or corneal burns.

INGESTION: Highly corrosive to mouth, throat, and G.I. tract.

EMERGENCY AND FIRST AID PROCEDURES

EYES: Wash eyes with large amounts of water from fountain, lifting lower and upper lids. Do not use chemical neutralizers. Obtain immediate treatment from ophthalmologist.

SKIN: Wipe off spilled liquid from skin with dry cloth. Quickly flood skin with water for 15 minutes. Direct water stream under clothing while removing clothes. No neutralizing chemicals.

INHALATION: Remove person to fresh air. Perform CPR if required. Maintain airway with body reclined and feet elevated. Keep body warm with blankets. Get medical help.

INGESTION: Give large quantities of water, but do not use gastric lavage or emesis. Do not induce vomiting, but give fluids repeatedly, if vomiting persists.

NOTES TO PHYSICIAN: Treat for exposure to an acid corrosive. Treat for circulatory failures, shock, pulmonary edema, nervous system, depression and pain.

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VI. REACTIVITY INFORMATION

Heating may produce the evolution of hydrochloric acid. Incompatible with steam, heat, alcohol, organics, aluminum, fluorine, hexallithium disilicate, metal acetylides, metal carbides, potassium permanganate, sodium, sulfuric acid, tetraselenium tetranitride.

VII. SPILL AND LEAK PROCEDURES

Contain the spill. Neutralize the spill with lime or caustic and flush away with large amounts of water. Wear mask, gloves and eye protection (glasses and face shield). The HCl is a powerful irritant via inhalation. A strong irritant to skin, eyes, and mucous membrane on contact.

VIII. SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: Should be handled outdoors or in areas equipped with local exhaust.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: NIOSH-approved respirator with combination acid-gas cartridge and high efficiency filter. For high level ruptures or spills, use self-contained breathing apparatus with full face-piece and helmet or hood.

EYE: Face shield or vented goggles.
Do not wear contact lenses when working with this product.

GLOVES: Rubber, Viton, Saranex or Polyurethane gloves.

OTHER: To prevent any possibility of skin contact wear full protective impervious clothing, including gloves and face-shield. An eye-wash fountain and quick drench facility should be available in the immediate work area where personnel may be exposed to this material.

IX. SPECIAL PRECAUTIONS

None.

X. HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS)

HEALTH HAZARD:	3
FLAMMABILITY HAZARD:	0
REACTIVITY HAZARD:	1
MAXIMUM PERSONAL PROTECTION:	J

XI. ENVIRONMENTAL INFORMATION

WASTE DISPOSAL METHOD:

This product when spilled can be disposed of into sanitary landfill or industrial waste disposal landfill. Please review appropriate state industrial waste disposal regulations.

August 1, 1987

PREPARED BY: Mr. J.H. Blacker

TITLE: Manager-Industrial Hygiene & Health

COMPANY: SCM Chemicals, Inc.

ADDRESS: 3901 Glidden Road, Baltimore, Maryland 21226

TELEPHONE: (301) 355-3600

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**UNIROYAL
CHEMICAL**

Material Safety Data Sheet

Uniroyal Chemical Company, Inc.
World Headquarters
Middlebury, CT 06749

UNIROYAL Emergency Phone: (203) 723-3670
CHEMTREC Transportation Emergency Phone: 1-800-424-9300
SAFETY DATA Information (203) 573-3303

MSDS No. C208001

Date Issued: 8/5/85

IDENTIFICATION

Date Revised: 11/20/87

R.

Trade Name: **ARANOX®**

CAS Number: **100-93-6**

Chemical Name: **p-(p-toluene sulfonyl amido)-
diphenylamine**

Chemical Family: **Diphenylamine**

SPECIAL REGULATORY HAZARDS

<u>Ingredient</u>	<u>CAS No.</u>	<u>Exposure Limit</u>	<u>OSHA (1910.1200)</u>	<u>EEC*</u>
Product	100-93-6	ND	Not hazardous	Not hazardous

Hazard assessment based on available data.

Transportation: **NA**

PHYSICAL DATA

Appearance and Odor: **Grey powder, characteristic odor**

Solubility: **Insoluble in water**

Melting Point: **294°F (146°C)**

Boiling Point: **NA**

Other Data: **NA**

Specific Gravity (H₂O = 1): **1.32**

Vapor Pressure @ 20°C: **ND**

Vapor Density (Air = 1): **ND**

Volatility @ 70°F: **Low**

FIRE AND EXPLOSION HAZARD DATA

Flash Point: **520°F (271°C) TCC**

Extinguishing Media: **Water spray, dry chemical**

Special Fire Fighting Procedures: **Protect against inhalation of combustion products.**

Unusual Hazards: **May form explosive dust-air mixtures.**

Autoignition Temp: **ND**

Flammable Limits: **ND**

REACTIVITY DATA

Stability: **Stable at ambient temperatures and pressures.**

Incompatibility: **Strong oxidizing agents.**

Decomposition Products: **Oxides of sulfur and nitrogen under burning conditions.**

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NA = Not Applicable

ND = Not Determined

*European Economic Community

Uniroyal makes no representation or warranty with respect to the information in this Material Safety Data Sheet. The information is however, as of this date provided, true and accurate to the best of Uniroyal's knowledge. This list of information is not intended to be all inclusive. Actual conditions of use and handling may require considerations of information other than, or in addition to, that which is provided herein.

SPECIAL PROTECTION INFORMATION

Engineering Controls: Sufficient ventilation to minimize exposure to dust. Protect closed dust handling systems against possible dust explosions. Avoid dust accumulations on building or equipment surfaces.

Personal Protection Equipment: Avoid all personal contact. Observe good personal hygiene. Impervious gloves and goggles should be worn when handling. In the absence of adequate ventilation, use NIOSH-certified dust cartridge respirator.

STORAGE, SPILLS AND DISPOSAL INFORMATION

Storage: Store away from sources of direct heat, in a dry area. Keep containers closed.

Spills: Vacuum up to avoid creating dust. Transfer into secure containers for proper disposal. Use personal protective equipment as outlined above.

Disposal: In accordance with any applicable local, state, or federal regulations.

Environmental Information: Environmental effects have not been determined.

HEALTH RELATED DATA

Specific Hazard(s): No acute or chronic health hazards have been identified. There are no known medical conditions that are aggravated by exposure to this material.

Primary Route(s) of Entry: Inhalation, skin absorption.

First Aid Procedures: **Eye contact:** Flush with water for 15 minutes.

Skin contact: Wash thoroughly with soap and water

Inhalation: Remove to fresh air.

Toxicology Information: **Oral toxicity:** LD50 (rats) - >5 g/kg

Carcinogenic per NTP _____ IARC _____ OSHA _____ None X

ARANOX®

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MATERIAL SAFETY DATA

ARIZONA CHEMICAL COMPANY
1001 EAST BUSINESS HWY 98
PANAMA CITY, FLORIDA 32401

MSDS NO.: 558-03
DATE: 4/1/88
EMERGENCY PHONE: (904)785-8521
INFORMATION PHONE: (904)785-6700

PRODUCT IDENTIFICATION

TRADE NAME: ARIZONA 208

TSCA CAS NO.: 68333-78-8

SYNONYMS: NONE

CHEMICAL FAMILY: FATTY ACIDS ESTER

MOLECULAR WEIGHT: MIXTURE

MOLECULAR FORMULA: MIXTURE

HAZARDOUS COMPONENT

<u>COMPONENT</u>	<u>%</u>	<u>CAS NO.</u>	<u>TLV</u>	<u>STEL</u>
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NO PERMISSABLE EXPOSURE LIMITS HAVE BEEN ESTABLISHED BY OSHA

REFERENCE: ACGIH

WARNING: SEE SPECIAL PRECAUTIONS

PHYSICAL CHARACTERISTICS

MELTING POINT: N/A

BOILING POINT: OVER 500F VOLATILES: NEG

WATER SOLUBILITY: NEG

SPECIFIC GRAVITY (WATER = 1): 0.9

VAPOR PRESSURE, 20C NEG mm Hg; VAPOR DENSITY (AIR = 1): NOT AVAILABLE

APPEARANCE AND ODOR: Light yellow colored oil; bland odor

FIRE AND EXPLOSION

FLASH POINT (CLOSED CUP) 400 F; FLAMMABLE LIMITS, LEL N/A% UEL N/A%

NFPA RATING: HEALTH 0 : FIRE 1 : REACTIVITY 0

FIRE FIGHTING: Use water spray, carbon dioxide or dry chemical to extinguish fires. Wear self-contained, positive pressure breathing apparatus and full firefighting protective clothing. Use water to keep containers cool.

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REACTIVITY

STABILITY - Stable : CONDITIONS TO AVOID - None Known

POLYMERIZATION - Will Not Occur : CONDITIONS TO AVOID - None Known

HAZARDOUS DECOMPOSITION PRODUCTS: None other than normal products of combustion

HEALTH HAZARDS

EFFECTS OF OVEREXPOSURE: Acute oral (rat) LD50 values for pale tall oil rosin and tall oil fatty acids are 7,600 mg/kg and greater than 10,000 mg/kg, respectively. Aspiration of liquid may cause pneumonitis. Repeated dermal contact may cause skin sensitization.

FIRST AID: If tall oil is swallowed, do not induce vomiting. In case of skin contact, wash affected areas of skin with soap and water. Do not reuse clothing without laundering.

CARCINOGENICITY LISTING: None

SAFE HANDLING AND USE

SPILL OR LEAK PROCEDURES: Spills of this material are very slippery. Cover spills with some inert absorbent material and scoop into a container. Wash area thoroughly with water. Repeat if slipperiness remains.

SPECIAL PRECAUTIONS: As with all unsaturated fats and oils, some porous materials such as rags, paper, insulation or clay when wetted with this product may undergo spontaneous combustion. Keep such wetted materials well ventilated to prevent possible heat build-up.

WASTE DISPOSAL: Disposal must be made in accordance with applicable governmental regulation.

CONTROL MEASURES

EXPOSURE CONTROL: Engineering controls are usually not necessary if good hygiene practices are strictly followed. Respiratory protection is generally not required during normal operations. Wear the following to prevent skin contact: work pants, long sleeve work shirt and work gloves. Where there is danger of eye contact, wear splash proof goggles

THE INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET IS BASED ON THE BEST DATA OF WHICH WE ARE AWARE AND IS BELIEVED CORRECT AS OF THE DATE HEREOF. SINCE THE USE OF THIS INFORMATION AND THE CONDITIONS OF USE OF THIS PRODUCT ARE NOT WITHIN OUR CONTROL, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS FOR SAFE USE OF THIS PRODUCT.