



# MATERIAL SAFETY DATA SHEET

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Effective Date: 01/01/08 Supercedes: 05/01/07

Emergency #: 800-424-9300

## SECTION I. PRODUCT IDENTIFICATION

IDENTITY: **SW-244-40 VOC**

MANUFACTURER'S NAME: Chemical Products Industries, Inc.  
7649 S.W. 34<sup>th</sup> Street  
Oklahoma City, OK 73179  
Tel: (405) 745-2070

## SECTION II. HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Hazardous Components: Specific Chemical Identity; Common Name(s)

<u>INGREDIENTS</u>	<u>CAS NUMBER</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>OTHER LIMITS</u>
- Alkylalkoxysilane	confidential	NE	NE	NE
- Isopropanol	67-63-0	400 ppm	400 ppm	NE
- Methanol	67-56-1	200 ppm	200 ppm	NE

## SECTION III. - PHYSICAL AND CHEMICAL CHARACTERISTICS

PHYSICAL STATE: Liquid  
APPEARANCE: Clear, colorless  
ODOR: Alcohol odor  
AVERAGE MOLECULAR WEIGHT: 90  
BOILING POINT, 760 mm Hg: > 180 °F  
VAPOR PRESSURE, at 100 F: 46.5 mm Hg  
LIQUID DENSITY: 0.794 g/cc  
SOLUBILITY IN WATER, by wt.: High  
PERCENT VOLATILE BY VOLUME: 64 %  
PERCENT VOLATILE BY WEIGHT: 60 %  
VISCOSITY: Similar to Water

## SECTION IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT, Tag Closed Cup: > 70 °F (est.)  
FLAMMABILITY: NFPA 3  
FLAMMABLE LIMITS: LEL: NE, UEL: NE  
EXTINGUISHING MEDIA: Dry Chemical, Polymer Foam, Carbon Dioxide  
SPECIAL FIRE FIGHTING PROCEDURES: Self Contained Breathing Apparatus (SCBA) and protective clothing should be worn with fires involving chemicals.  
UNUSUAL FIRE AND EXPLOSION: None Known  
HAZARDS

This product is considered a flammable liquid and is a fire hazard. It supports combustion and decomposes under fire conditions to give off toxic materials. Do not pour, spill or store near heat, spark sources, or open flames.

Flammable vapors may accumulate in the container headspace.

Vapors are heavier than air and may travel along the ground, be moved by ventilation systems, settle in pits or low areas, and be ignited by ignition sources distant from the handling point. To prevent fire or explosion from static accumulation and discharge, effectively ground the material transfer system.

As in any fire, prevent human exposure to fire, smoke, fumes, or products of combustion. Evacuate non-essential personnel from the fire area. Fire fighters should wear full-face, self-contained breathing apparatus and impervious protective clothing.

Use water spray to cool non-involved containers.

## SECTION V. STABILITY AND REACTIVITY

STABILITY:	Stable at ambient temperatures and atmospheric pressure.
INCOMPATIBILITY:	Material reacts with Water, Strong Oxidizers and Reducers
HAZARDOUS DECOMPOSITION: OR BYPRODUCTS	Silicon Dioxide, Carbon Dioxide, and other Hydrocarbons
HAZARDOUS POLYMERIZATION:	Will Not Occur
CONDITIONS TO AVOID:	NA
VOC CONTENT:	As Applied, <600 g/L (Method 24, ASTM D-5095)

Non corrosive to materials commonly used in the construction of process equipment, storage and shipping containers.

## SECTION VI. HEALTH HAZARD DATA

NFPA 704 CODES: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious and 4=Severe

<u>HEALTH (BLUE)</u>	<u>FLAMMABILITY (RED)</u>	<u>REACTIVITY (YELLOW)</u>	<u>CLOTHING</u>
NFPA: 2	NFPA: 3	NFPA: 0	NFPA: G
HMIS: 3	HMIS:	HMIS: 0	HMIS: G

### HEALTH HAZARDS

LUNGS:	Inhalation may cause nausea.
EYES:	Irritation, Reddening, Burns.
SKIN:	Irritation, Dryness.
INGESTION:	Harmful or fatal if swallowed.

CARCINOGENICITY:	NE
NTP?:	NE
IARC MONOGRAPHS:	NO
OSHA REGULATED:	NO

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

LUNGS:	Aggravating to Upper Respiratory System
EYES:	Irritation, Reddening, Burns.
SKIN:	Irritation, Dryness.
INGESTION:	Harmful or fatal if swallowed.
INTERNAL:	See Physician
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:	None Known
ACUTE EFFECTS OF EXPOSURE:	Refer to routes of exposure above.
CHRONIC EFFECTS OF EXPOSURE:	None known.

**EMERGENCY AND FIRST AID PROCEDURES**

LUNGS:	Move to Fresh Air
EYES:	Flush with Water for 15 Minutes.
SKIN:	Wash with Plenty of Water.
INGESTION:	See Physician.

This material does not contain any ingredients listed by IARC, NTP or OSHA as carcinogens, teratogens or mutagens in amounts exceeding 0.1%.

This material releases methyl alcohol upon hydrolysis. Methyl alcohol causes optic neuropathy, metabolic acidosis and respiratory depression. Signs and symptoms of overexposure include headache, blurred vision, constricted visual fields, shortness of breath, dizziness and vertigo. Ingestion of methyl alcohol may lead to blindness or death.

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**SECTION VII. SPILL, LEAK & DISPOSAL PROCEDURES**

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Eliminate all ignition sources. Control the source of the spill if it is safe to do so. Dike area to contain spill and to prevent entry into sewers or waterways.

Absorb spill with sand or Fuller's earth. Sweep up and place in an appropriate chemical waste container. Flush spill area with water. Observe all local, state, and federal laws and regulations regarding disposal, spill, cleanup, removal, or discharge.

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**SECTION VIII. HANDLING AND STORAGE**

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Store in a cool, dry, well ventilated area. Keep away from heat, sparks and open flame. Never use welding or cutting torch on or near any container (even empty) as an explosion can occur. Care should be taken to prevent moisture condensation in the container. Keep container closed and store away from water or moisture.

Open container with care. Flammable vapors may be present in the container headspace.

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**SECTION IX. PERSONAL PROTECTION**

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Appropriate personal protective equipment necessary to prevent contact should be worn. Ventilation that keeps the organic vapor concentration below 400 ppm is recommended. For concentrations up to 1,000 ppm, wear a NIOSH/MSHA approved respirator in accordance with OSHA standard 29 CFR 1910, 134 for organic vapors. Up to 5,000 ppm, wear a full-face organic vapor respirator or full face supplied air respirator. Greater than 5,000 ppm, fire fighting or unknown concentrations, wear self-contained breathing apparatus with positive pressure. Eye protection, resistant clothing and resistant boots should be worn where spills or splashing can occur. Chemical proof goggles are recommended. Gloves of impervious materials (Silver Shield (R), 4H (R), nitrile, neoprene or other material resistant to alcohol) are recommended. Wash contaminated clothing before reuse. An eye wash station should be available.

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**SECTION X. TOXICOLOGICAL INFORMATION**

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The alcohols are flammable, and have acute and chronic health hazards. The OSHA PEL and ACGIH TLV is 1000 ppm for the ethyl alcohol. The solvent vapors are harmful if inhaled and may cause delayed lung injury. In a confined area, the high vapor pressure of the solvent can generate harmful concentrations. Inhalation can cause nervous system depression. The solvent is an aspiration hazard if swallowed - it can enter the lungs and cause damage. The active ingredients, silanes, are known to be a mild eye and upper respiratory irritant. The OSHA PEL and ACGIH TLV has not been established for silanes; however, the low vapor pressure of silane containing materials in SW 244-40™ VOC should produce air concentrations below expected exposure limits. The LD50 for the silanes has not been determined, but should be relatively high based upon typical silicone toxicity. Do not take internally, avoid breathing mist and minimize eye and skin contact.

**HEALTH HAZARD CATEGORIES:** None of the product's ingredients are found on any lists of carcinogenic or banned chemical agents or materials generated by them.

**INDUSTRIAL HYGIENE:** The recommendations described in this section are provided as general guidance for minimizing exposure when handling this product. Because use conditions will vary depending upon customer applications, specific safe handling procedures should be developed by a person knowledgeable of the intended use conditions and equipment. During the development of safe handling procedures, consideration should be given to the need for cleaning of equipment and piping systems to render them non-hazardous before maintenance and repair activities are performed.

**ENGINEERING CONTROLS:** When the need for engineering controls is indicated by the conditions under which the product is used, one or more of the following techniques may be selected to limit employee exposure: general ventilation, local exhaust ventilation, enclosure of confinement of the operation, and/or process isolation with remote control operation.

**INGESTION:** Open containers of food and beverages should be kept away from areas where the product is used or stored. Eating, drinking, smoking, and application of cosmetics should be prohibited in areas where the product is being used. Before eating, hands and face should be washed to remove residual contamination.

**SKIN CONTACT:** Skin contact should be minimized through the use of gloves and suitable long-sleeved clothing selected with regard for use condition exposure potential.

**EYE CONTACT:** Eye contact should be avoided through the use of chemical safety glasses, goggles, or a full face respiratory shield selected with regard for use condition exposure potential.

**INHALATION:** If the product is used under conditions which generate airborne contamination, these processing operations should be carried out in open, well-ventilated areas, or in enclosed areas equipped with local exhaust ventilation. If adequate ventilation is not available, employees should be provided with appropriate, approved, air-purifying or supplied-air respirators selected in accordance with NIOSH guidelines.

**EXPOSURE LIMITS:** Exposure limits for its hazardous components, if any, are listed in Section 1A on page one.

**NOTE:** Respiratory protection is recommended in the event that ventilation or engineering controls are unable to maintain exposures below recommended levels, or in the event of a spill or other emergency situation. Hazardous Materials Identification System and HMIS are registered trademarks of the National Paint and Coating Association.

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## SECTION XI. ECOLOGICAL INFORMATION

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Do not allow SW 244-40 VOC to enter soil or drains.

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## SECTION XII. DISPOSAL CONSIDERATIONS

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Small quantities may be handled by evaporating the solvent in a hood and then the remaining material disposed in appropriate land fills. Disposal of large quantities should be through a licensed disposal company. Utilize a permitted hazardous waste disposal site or industrial waste disposal site as appropriate. Consider recycling or incineration.

Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with any applicable regulations under the Resource Conservation and Recovery Act (RCRA).

**NOTE:** State and local regulations may be more stringent than those under RCRA.

If this product becomes a waste, it is considered a hazardous waste due to its ignitability.

Dispose of empty containers according to any applicable regulations under the Resource Conservation and Recovery Act (RCRA). **NOTE:** State and local regulations may be more stringent than those under RCRA.

Empty containers may contain residual material. Do not reuse containers unless properly reconditioned.

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## SECTION XIII. TRANSPORT INFORMATION

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DOT:	PROPER SHIPPING NAME	FLAMMABLE LIQUID n.o.s. (ISOPROPANOL, METHANOL)
	UN#	1993
	CLASS	3
	PACKAGING GROUP	II
	PRIMARY LABEL	Flammable liquid
	PLACKARD	Yes
	HAZARD	Flammable

## SECTION XIV. REGULATORY INFORMATION

### STATUS ON SUBSTANCE LIST:

The concentrations shown are maximum or ceiling levels (weight %) to be used for calculations for regulations. Trade Secrets are indicated by "TS"

### FEDERAL EPA:

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

requires notification of the National Response Center of release of quantities of Hazardous Substance equal to or greater than the reportable quantities (RQs) in 40 CFR 302.4. Components present in this product at a level which could require reporting under the statute are:\*\*\*NONE\*\*\*

#### **Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III**

requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312).

Components present in this product at a level which could require reporting under the statute are:\*\*\*NONE\*\*\*

#### **Superfund Amendments an Reauthorization Act of 1986 (SARA) Title III**

requires submissions of annual report of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This information must be included in all MSDS's that are copied and distributed for this material.

HAZARDOUS SUBSTANCES ( => 1%)

CHEMICAL	CAS NUMBER	UPPER BOUND CONCENTRATION %
Isopropanol	67-63-0	100

This product does not contain toxic chemicals at levels which require reporting under the statute.

#### **Toxic Substances Control Act (TSCA) STATUS**

The ingredients of this product are on the TSCA inventory.

### STATE RIGHT -TO-KNOW:

#### **CALIFORNIA Proposition 65**

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

#### **MASSACHUSETTS Right-TO-Know, Substance List (MSL)**

Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. Components present in this product at a level which could require reporting under the statute are:

HAZARDOUS SUBSTANCES ( => 1%)

CHEMICAL	CAS NUMBER	UPPER BOUND CONCENTRATION %
Isopropanol	67-63-0	100

#### **PENNSYLVANIA Right-To-Know**

Hazardous Substance List Hazardous Substances and Special Hazardous

Substances on the List must be identified when present in products. Components present in this product at a level which could require reporting under the statute are:

HAZARDOUS SUBSTANCES ( => 1%)

CHEMICAL	CAS NUMBER	UPPER BOUND CONCENTRATION %
Isopropanol	67-63-0	100

OTHER REGULATORY INFORMATION: EPA Hazard Categories: Immediate Health, Delayed Health, and Fire.

NOTE:

The opinions expressed herein are those of qualified experts within Union Carbide. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the conditions of the use of the product are not under the control of Union Carbide, it is the user's obligation to determine conditions of safe use of the product.

REVISED SECTION

Section IV: FIRE AND EXPLOSION HAZARD DATA

Section V: HEALTH HAZARD DATA

Section IX: PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

PRODUCT: 43062

F NUMBER: C01101

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## SECTION XV. OTHER INFORMATION

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n.e. = Not established; n.a. = Not applicable/ not available; n.d. = Not determined; TLV = Threshold Limit Value; PEL = Permissible Exposure Limit; OSHA = Occupational Safety and Health Administration; ACGIH = American Conference of Governmental Industrial Hygienists; LEL = Lower Explosive Limit; UEL = Upper Explosive Limit; ppm = parts per million; TSCA = Toxic Substances Control Act; SARA = Superfund Amendments and Reauthorization Act; Dot = Department of Transportation.

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APPROVED BY: \_\_\_\_\_

DATE: 01/01/08

SUPERCEDES: 05/01/07

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