

Material Name: QSOL™ 300 CLEANING SOLVENT

#### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

#### Material Name

QSOL<sup>™</sup> 300 CLEANING SOLVENT

#### Part Number

6660

#### Synonyms

Cyclic, branched, or linear, completely methylated siloxanes (VMS)

#### **Product Use**

Cleaning and degreasing metal parts. Cleaning printing equipment. QSOL 300<sup>™</sup> Cleaning Solvent consists of cyclic completely methylated siloxanes that do not participate in atmospheric photochemical reactions, and are therefore exempted from the definition of a regulated VOC (Volatile Organic Compound) under Federal and state regulations. This solvent is qualified under U.S. Military Detail Specification MIL-PRF-32295 as a non-aqueous, low VOC, HAP-free cleaner and is included on the U.S. Military Qualified Products List (QPL). If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

#### **Restrictions on Use**

None known.

#### MANUFACTURER

Safety-Kleen Systems, Inc. 42 Longwater Drive Norwell, MA 02061-9149 U.S.A.

#### SUPPLIER (Canada)

Safety-Kleen Canada, Inc. 25 Regan Road Brampton, Ontario L7A 1B2 Canada

www.safety-kleen.com Phone: 1-800-669-5740 Emergency Phone #: 1-800-468-1760

#### **Issue Date**

June 1, 2021 Supersedes Issue Date January 11, 2021 Original Issue Date December 1, 1989

#### Section 2 - HAZARDS IDENTIFICATION

## Classification in accordance with Schedule 1 of Canada's Hazardous Products Regulations (HPR) (SOR/2015-17) and paragraph (d) of 29 CFR 1910.1200 in the United States

Flammable Liquids - Category 4

Specific target organ toxicity - Repeated exposure - Category 2 GHS Label Elements

#### Symbol(s)



Warning

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#### Hazard Statement(s)

Combustible liquid.

May cause damage to organs through prolonged or repeated exposure (lungs)

#### **Precautionary Statement(s)**

#### Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray.

#### Response

In case of fire: Use carbon dioxide, regular foam, dry chemical, water spray, or water fog. Get medical attention if you feel unwell.

#### Storage

Store in a well-ventilated place. Keep cool. Do not store above 170°F (76.7°C).

#### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Other hazards

None known.

#### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
541-02-6	Decamethylcyclopentasiloxane	97.5-100
69430-24-6	Cyclosiloxanes, dimethyl-	0-3

#### Section 4 - FIRST AID MEASURES

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention.

#### Skin

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Remove contaminated clothing and wash before use.

#### Eyes

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.

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

#### Most Important Symptoms/Effects

#### Acute

No information on significant adverse effects.

#### Delayed

May cause lung damage.

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

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

#### Section 5 - FIRE FIGHTING MEASURES

#### **Extinguishing Media**

#### Suitable Extinguishing Media

Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

#### **Unsuitable Extinguishing Media**

Do not use high-pressure water streams.

#### Special Hazards Arising from the Chemical

Combustible liquid and vapor. Avoid friction, static electricity and sparks. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Empty containers may contain product residue. Runoff to sewer may cause a fire or explosion hazard.

#### **Hazardous Combustion Products**

Decomposition and combustion materials may be toxic. Burning may produce formaldehyde, silicon dioxide, carbon monoxide and unidentified organic compounds.

#### **Fire Fighting Measures**

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Apply water from a protected location or from a safe distance. Dike for later disposal.

#### Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

#### Section 6 - ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

#### Methods and Materials for Containment and Cleaning Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

#### Section 7 - HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, shoes. Do not smoke while using this product.

#### Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep cool.

Keep container tightly closed when not in use and during transport. Store containers below 170°F (76.7°C). Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product

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containers may retain product residue and can be dangerous. See SECTION 14: TRANSPORTATION INFORMATION for Packing Group information.

#### **Incompatible Materials**

Avoid strong oxidizing materials.

#### Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Component Exposure Limits**

Canada, ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

#### ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

#### **Engineering Controls**

Provide adequate local exhaust ventilation. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls.

#### Individual Protection Measures, such as Personal Protective Equipment

#### **Eye/face protection**

Wear safety glasses. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of vapors or mists. Eye wash fountain and emergency showers are recommended. Contact lens use is not recommended.

#### **Respiratory Protection**

Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

#### **Glove Recommendations**

Where skin contact is likely, wear chemical impervious protective gloves; use of natural rubber (latex) or equivalent gloves is not recommended. To avoid prolonged or repeated contact with product where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits or other protective clothing.

#### **Protective Materials**

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses, Gloves, and Lab coat or apron.

#### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Physical State	Liquid
Odor	Slight lime odor.	Color	Clear, colorless
Odor Threshold	Not available	рН	Not available
Melting Point	-38 °C (-36 °F Approximate )	Boiling Point	210 °C (410 °F )
<b>Boiling Point Range</b>	Not available	Freezing point	Not available
<b>Evaporation Rate</b>	<1 (Butyl acetate = 1)	Flammability (solid, gas)	Not available

#### SDS ID: 82836

Autoignition Temperature	Not available	Flash Point	77 °C (170 °F Approximate )
Lower Explosive Limit	Not available	Decomposition temperature	Not available
Upper Explosive Limit	Not available	Vapor Pressure	0.1 mmHg @ 68 °F (20 °C Approximate )
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	0.95 (Water = 1)
Water Solubility	(Insoluble)	Partition coefficient: n- octanol/water	Not available
Viscosity	Not available	Kinematic viscosity	Not available
Solubility (Other)	Not available	Density	7.9 lb/gal (US)
Volatile Organic Compounds (As Regulated)	Vapor Pressure @ 20 QSOL 300 <sup>™</sup> Cleani do not participate in from the definition of and state regulations passed a chemical ar Management Distric (VOC) requirement with the exempted so District (BAAQMD)	US gal; 950 g/L As per 40 CFR Part 0°C = 0.1 mm Hg ; Non-photochem ng Solvent consists of cyclic compl atmospheric photochemical reaction of a regulated VOC (Volatile Organi . This product has been certified as nalysis performed by California's So t (SCAQMD) Laboratory. It comp of 1171 - Solvent Cleaning Operation blvent requirements of the Bay Area ) Regulation 8, Rule 16, because the or linear complement methylated sil	ically reactive etely methylated siloxanes that ns, and are therefore exempted c Compound) under Federal a Clean Air Solvent, having outh Coast Air Quality lies with the Volatile Organics ons. The product complies a Air Quality Management c cleaning solution is composed

#### Section 10 - STABILITY AND REACTIVITY

#### Reactivity

No reactivity hazard is expected.

#### **Chemical Stability**

Stable under normal temperatures and pressures.

#### **Possibility of Hazardous Reactions**

Will not polymerize under normal temperature and pressure conditions.

#### Conditions to Avoid

Heat, sparks, or flame and incompatible materials.

#### **Incompatible Materials**

Avoid strong oxidizing materials.

#### Hazardous decomposition products

None under normal temperatures and pressures. See also SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.

#### Section 11 - TOXICOLOGICAL INFORMATION

#### Information on Likely Routes of Exposure

#### Inhalation

This product contains a siloxane compound which may generate formaldehyde vapors when exposed to temperatures exceeding 302°F in the presence of air. Formaldehyde is a known cancer hazard, causes irritation and sensitization to the respiratory system, causes throat irritation, and is extremely toxic.

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#### **Skin Contact**

No information on significant adverse effects.

Eye Contact

No information on significant adverse effects.

#### Ingestion

No information on significant adverse effects.

#### Acute and Chronic Toxicity

#### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

#### Decamethylcyclopentasiloxane (541-02-6)

Oral LD50 Rat >24134 mg/kg

#### Cyclosiloxanes, dimethyl- (69430-24-6)

Oral LD50 Rat >16 mL/kg ; Dermal LD50 Rabbit >16 mL/kg

#### **Product Toxicity Data**

Acute Toxicity Estimate

Oral > 2000 mg/kg

#### **Immediate Effects**

No information on significant adverse effects.

#### **Delayed Effects**

May cause lung damage.

#### Irritation/Corrosivity Data

May cause irritation of the skin and eyes. May cause respiratory tract irritation.

#### **Respiratory Sensitization**

No information available for the product.

#### **Dermal Sensitization**

No information available for the product.

#### **Component Carcinogenicity**

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.

This product contains a siloxane compound which may generate formaldehyde vapors when exposed to temperatures exceeding 302°F in the presence of air. Formaldehyde is a known carcinogen.

#### Germ Cell Mutagenicity

Based on best current information, there is no known mutagenicity associated with this product.

#### **Tumorigenic Data**

Based on best current information, there is no known teratogenicity associated with this product.

#### **Reproductive Toxicity**

Based on best current information, there is no known reproductive toxicity associated with this product.

#### Specific Target Organ Toxicity - Single Exposure

No information on significant adverse effects.

#### Specific Target Organ Toxicity - Repeated Exposure

#### Lung damage.

#### Aspiration hazard

No information available for the product.

#### Medical Conditions Aggravated by Exposure

Medical conditions may include respiratory disorders.

#### **Additional Data**

No additional information is available.

#### Section 12 - ECOLOGICAL INFORMATION

#### Ecotoxicity

According to the California Code of Regulations, a toxicity to aquatic life is determined using an acute 96 hour bioassay. A material is non-hazardous if the LC50 is >500 mg/L. This product passed the bioassay and is considered non-hazardous.

#### **Component Analysis - Aquatic Toxicity**

No LOLI ecotoxicity data are available for this product's components.

#### Persistence and Degradability

This product is not expected to persist in the environment.

#### **Bioaccumulative Potential**

This material is believed not to bioaccumulate.

#### Mobility

Expected to have high mobility in soil.

#### Section 13 - DISPOSAL CONSIDERATIONS

#### **Disposal Methods**

Dispose of in accordance with all applicable federal, state and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

#### Section 14 - TRANSPORT INFORMATION

#### **US DOT Information:**

# DOT Non-Bulk Packages (less than or equal to 119 gallons) Shipping Name: Cleaning compounds (decamethylcyclopentasiloxane)(Not US DOT Regulated) Bulk Packages

Shipping Name: COMBUSTIBLE LIQUID, N.O.S., (Contains: Decamethylcyclopentasiloxane)
Hazard Class: Combustible liquid
UN/NA #: NA1993
Packing Group: III
Required Label(s): Combustible liquid

**IATA Information:** Not regulated for transport. **IMDG Information:** Not regulated for transport **TDG Information:** Not regulated for transport.

#### International Bulk Chemical Code

This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

#### Section 15 - REGULATORY INFORMATION

#### **Canada Regulations**

#### **CEPA - Priority Substances List**

None of this product's components are on the list.

#### **Ozone Depleting Substances**

None of this product's components are on the list.

#### Council of Ministers of the Environment - Soil Quality Guidelines

None of this product's components are on the list.

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#### Council of Ministers of the Environment - Water Quality Guidelines

None of this product's components are on the list.

#### **U.S. Federal Regulations**

None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

### SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories:

Flammable; Specific Target Organ Toxicity

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

Not listed under California Proposition 65.

#### **Component Analysis - Inventory**

#### Decamethylcyclopentasiloxane (541-02-6)

US	CA	AU	CN	EU		JP - ENCS	JP - ISHL		KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	E	IN	Yes Yes		Yes	No	
KR -	REACH CCA		X N	ЛX	NZ	PH	TH- TECI	TW	VN (Draft)	
No		Ŋ	es	Yes	Yes	Yes	Yes	Yes		

#### Cyclosiloxanes, dimethyl- (69430-24-6)

US	CA	AU	CN	E	U	JP - ENCS	JP - ISHL		KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Ye	s No		Yes	Yes		Yes	No
KR - REACH CCA		1	MX	NZ	РН	TH- TECI	TW	VN (Draft)		
No		Yes Yes Yes		Yes	No	Yes	Yes			

#### Section 16 - OTHER INFORMATION

#### **NFPA Ratings**

Health: 1 Fire: 2 Instability: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### **Summary of Changes**

9/22/21: Section 9.

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA -California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC -European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances);

EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F -Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization: IDL - Ingredient Disclosure List: IDLH - Immediately Dangerous to Life and Health: IMDG -International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID -International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL), KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; KR REACH CCA - Korea Registration and Evaluation of Chemical Substances Chemical Control Act; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts<sup>TM</sup> - ChemADVISOR's Regulatory Database; MAK -Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; Ne-Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL - Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc -Semi-quantitative; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG -Transportation of Dangerous Goods; TH-TECI - Thailand - FDA Existing Chemicals Inventory (TECI); TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

#### **Other Information**

#### Disclaimer:

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information or the product to which the information refers. The data contained on this sheet apply to the product as supplied to the user.