

SS4004P

SAFETY DATA SHEET

1. Identification

Product identifier: SS4004P

Other means of identification

Synonyms: Silicone primer solution

Recommended use and restriction on use

Recommended use: Primer

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information : Momentive Performance Materials LLC
260 Hudson River Road
Waterford NY 12188

Contact person : commercial.services@momentive.com

Telephone : General information
+1-800-295-2392

Emergency telephone number
Supplier : CHEMTREC
1-800-424-9300

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 2

Health Hazards

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A
Specific Target Organ Toxicity - Single Exposure Category 3¹
Specific Target Organ Toxicity - Repeated Exposure Category 2²
Aspiration Hazard Category 1

Target Organs

1. Narcotic effect., Respiratory tract irritation.
2. Liver, Kidney, hearing

Label Elements

SS4004P

Hazard Symbol:



Signal Word: Danger

Hazard Statement: H225; Highly flammable liquid and vapor.
H315; Causes skin irritation.
H319; Causes serious eye irritation.
H335; May cause respiratory irritation.
H336; May cause drowsiness or dizziness.
H373; May cause damage to organs through prolonged or repeated exposure.
H304; May be fatal if swallowed and enters airways.

Precautionary Statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention. Get medical advice/attention if you feel unwell. In case of fire: Use alcohol resistant foam for extinction.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

SS4004P

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*	Notes
Acetone	67-64-1	20 - <50%	# This substance has workplace exposure limit(s).
2-Propanol	67-63-0	20 - <50%	# This substance has workplace exposure limit(s).
Xylene	1330-20-7	10 - <20%	# This substance has workplace exposure limit(s).
Ethylbenzene	100-41-4	5 - <10%	# This substance has workplace exposure limit(s).
Tetraethyl Silicate	78-10-4	1 - <5%	# This substance has workplace exposure limit(s).
n-BUTANOL	71-36-3	1 - <3%	# This substance has workplace exposure limit(s).

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a physician or poison control center immediately. If swallowed, do NOT induce vomiting. Give a glass of water.

Inhalation: Move to fresh air. Get medical attention if symptoms persist.

Skin Contact: Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Contact physician if irritation continues.

Eye contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. Consult a physician for specific advice.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

SS4004P

Indication of immediate medical attention and special treatment needed

Treatment: Treatment is symptomatic and supportive.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Move containers from fire area if you can do so without risk. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: All standard extinguishing agents are suitable.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: Vapors are heavier than air and may spread near ground to sources of ignition. Vapours may form explosive mixture with air. In case of fire, carbon monoxide and carbon dioxide may be formed. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Take precautionary measures against static discharges. Product may charge electrostatically during pouring or filling. All equipment used when handling the product must be grounded.

Special protective equipment for fire-fighters: Flammable Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use ground strap and appropriate precautions for dispensing flammable liquids. Use spark-proof tools and explosion-proof equipment. Avoid contact with eyes, skin, and clothing. Keep out of reach of children. Attention: Not for injection into humans.

Methods and material for containment and cleaning up: Remove sources of ignition. Warn other workers of spill. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal.

Environmental Precautions: Do not allow runoff to sewer, waterway or ground.

SS4004P

7. Handling and storage

Precautions for safe handling: Sensitivity to static discharge is expected; material has a flash point below 200 F. Keep away from sources of ignition - No smoking. Static electricity and formation of sparks must be prevented. All equipment used when handling the product must be grounded. Do not taste or swallow. Do not get in eyes, on skin, on clothing. See Section 8 of the SDS for Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities: Keep away from heat, sparks and open flame. Keep container tightly closed and in a well-ventilated place. Use original container or packaging of similar material of construction

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Acetone	TWA	250 ppm	US. ACGIH Threshold Limit Values, as amended (03 2015)
	STEL	500 ppm	US. ACGIH Threshold Limit Values, as amended (03 2015)
	REL	250 ppm 590 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	1,000 ppm 2,400 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	750 ppm 1,800 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	STEL	1,000 ppm 2,400 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	750 ppm 1,800 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
	Ceiling	3,000 ppm	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	STEL	750 ppm 1,780 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	TWA PEL	500 ppm 1,200 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	LEL	2.5 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	IDLH	2,500 ppm	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	STEL	1,000 ppm 2,400 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)
	ST ESL	3,300 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	AN ESL	4,800 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	ST ESL	7,800 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
AN ESL	2,000 ppb	US. Texas. Effects Screening Levels (Texas	

SS4004P

			Commission on Environmental Quality), as amended (06 2018)
2-Propanol	TWA	200 ppm	US. ACGIH Threshold Limit Values, as amended (03 2015)
	STEL	400 ppm	US. ACGIH Threshold Limit Values, as amended (03 2015)
	REL	400 ppm 980 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	STEL	500 ppm 1,225 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	400 ppm 980 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	400 ppm 980 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	STEL	500 ppm 1,225 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	400 ppm 980 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
	STEL	500 ppm 1,225 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	TWA PEL	400 ppm 980 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	IDLH	2,000 ppm	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	LEL	2.0 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	STEL	500 ppm 1,225 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)
	AN ESL	200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	ST ESL	4,920 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	ST ESL	2,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	AN ESL	492 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
Xylene	TWA	100 ppm	US. ACGIH Threshold Limit Values, as amended (03 2015)
	STEL	150 ppm	US. ACGIH Threshold Limit Values, as amended (03 2015)
	STEL	150 ppm 655 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2016)
	REL	100 ppm 435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2016)
	PEL	100 ppm 435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	100 ppm 435 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	STEL	150 ppm 655 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	100 ppm 435 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
	TWA PEL	100 ppm 435 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	Ceiling	300 ppm	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as

SS4004P

				amended (01 2015)
	STEL	150 ppm	655 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	STEL	150 ppm	655 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)
Ethylbenzene	TWA	20 ppm		US. ACGIH Threshold Limit Values, as amended (03 2015)
	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	STEL	125 ppm	545 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	100 ppm	435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	100 ppm	435 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	STEL	125 ppm	545 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	100 ppm	435 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
	STEL	30 ppm	130 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	TWA PEL	5 ppm	22 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	LEL		0.8 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	IDLH	800 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	STEL	125 ppm	545 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (01 2019)
	ST ESL		6,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	ST ESL		26,000 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	AN ESL		570 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	AN ESL		130 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
Tetraethyl Silicate	TWA	10 ppm		US. ACGIH Threshold Limit Values, as amended (03 2015)
	REL	10 ppm	85 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	100 ppm	850 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	10 ppm	85 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	10 ppm	85 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
	TWA PEL	10 ppm	85 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	IDLH	700 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	ST ESL		100 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	AN ESL		85 µg/m3	US. Texas. Effects Screening Levels (Texas

SS4004P

			Commission on Environmental Quality), as amended (06 2018)
	ST ESL	850 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	AN ESL	10 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
n-BUTANOL	TWA	20 ppm	US. ACGIH Threshold Limit Values, as amended (03 2015)
	Ceil_Time	50 ppm 150 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	100 ppm 300 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	Ceiling	50 ppm 150 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	Ceiling	50 ppm 150 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
	Ceiling	50 ppm 150 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
	IDLH	1,400 ppm	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	LEL	1.4 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
	AN ESL	20 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	ST ESL	200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	AN ESL	61 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	ST ESL	610 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Acetone (acetone: Sampling time: End of shift.)	25 mg/l (Urine)	ACGIH BEI (03 2015)
2-Propanol (acetone: Sampling time: End of shift at end of work week.)	40 mg/l (Urine)	ACGIH BEI (03 2015)
Xylene (Methylhippuric acids: Sampling time: End of shift.)	1.5 g/g (Creatinine in urine)	ACGIH BEI (03 2015)
Ethylbenzene (Sum of mandelic acid and phenylglyoxylic acid: Sampling time: End of shift.)	0.15 g/g (Creatinine in urine)	ACGIH BEI (03 2015)

Appropriate Engineering Controls

Provide eyewash station and safety shower. General (mechanical) room ventilation is expected to be satisfactory if handled at low temperatures or in covered equipment.

SS4004P

Individual protection measures, such as personal protective equipment

General information:	Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.
Eye/face protection:	Safety glasses with side shields Monogoggles
Skin Protection	
Hand Protection:	Use chemical-resistant, impervious gloves.
Other:	Wear suitable protective clothing and eye/face protection.
Respiratory Protection:	If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).
Hygiene measures:	Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes, skin, and clothing. Observe good industrial hygiene practices. Wash hands after handling. When using do not eat, drink or smoke.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Red
Odor:	Pungent
Odor threshold:	No data available.
pH:	Not applicable
Melting point/freezing point:	< -34 °C
Initial boiling point and boiling range:	56.5 °C
Flash Point:	ca. -12 °C
Evaporation rate:	> 1
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	12.00 %(V)
Flammability limit - lower (%):	2.10 %(V)
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Heat of combustion:	No data available.
Vapor pressure:	Not applicable

SS4004P

Vapor density:	No data available.
Density:	ca. 0.855 g/cm ³
Relative density:	ca. 0.80
Solubility(ies)	
Solubility in water:	hydrolyses
Solubility (other):	Soluble, Aromatic Solvent
Partition coefficient (n-octanol/water) Log Pow:	No data available.
Auto-ignition temperature:	> 343 °C
Decomposition temperature:	No data available.
SADT:	No data available.
Viscosity, dynamic:	No data available.
Viscosity, kinematic:	< 20.5 mm ² /s (40 °C)
VOC:	636 g/l ;

10. Stability and reactivity

Reactivity:	No dangerous reaction if used as recommended.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization does not occur. Avoid heat, sparks, open flames and other ignition sources.
Conditions to avoid:	Keep away from sources of ignition - No smoking.
Incompatible Materials:	Oxidizing agents.
Hazardous Decomposition Products:	Carbon oxides Formaldehyde. This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and has been classified by the National Toxicology Program as a known human carcinogen. An (M)SDS for formaldehyde is available from Momentive.

11. Toxicological information

Information on likely routes of exposure

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	Causes skin irritation.
Eye contact:	Causes eye irritation.

SS4004P

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix: 3,827.75 mg/kg
ATEmix : 7,364.55 mg/kg

Dermal

Product: ATEmix: 4,627.82 mg/kg
ATEmix : 3,577.73 mg/kg

Inhalation

Product: ATEmix: 105.33 mg/l
ATEmix : 64.63 mg/l
ATEmix : 43.63 mg/l
ATEmix : 64.63 mg/l

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified **US. National Toxicology Program (NTP) Report on Carcinogens:**

SS4004P

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Target Organs

Specific Target Organ Toxicity - Single Exposure: Narcotic effect., Respiratory tract irritation.

Specific Target Organ Toxicity - Repeated Exposure: Liver, Kidney, hearing

Aspiration Hazard

Product: No data available.

SS4004P

Other effects:

More severe effects if alcohol is consumed., Stimulants such as epinephrine may induce ventricular fibrillation., This product contains a component that showed unexpected acute toxicity to pregnant rabbits in a gavage study conducted by the Chemical Manufacturers Association. There were no unexpected toxic effects in pregnant rats exposed in the same study. No developmental effects were noted in either study. Effect levels in rabbits were several times the maximum exposure which would occur at the TLV for this component.

Xylene has been shown to cause embryofetal toxicity and birth defects in laboratory animals, but only at doses which also cause maternal toxicity. In higher concentrations, xylene is irritating to eyes and the respiratory tract, causes drowsiness and may cause central-nervous effects (headache etc.).

Animals exposed repeatedly to high vapor concentrations (800 ppm or greater) of mixed xylenes suffered hearing loss. Long-term exposure to xylene can cause chronic headache, chest pain, nausea, mental confusion, breathing difficulties, heartbeat abnormalities, numbness in limbs, fever, malaise, and fatigue. Skin irritation can occur. Repeated exposures at high concentrations may cause injury to the liver and kidneys.

Isopropyl alcohol has produced fetotoxic effects and developmental effects in animals following oral administration. Isopropyl alcohol has produced developmental effects and reduced fetal weight in animals following inhalation exposure. Ethylbenzene has been shown to cause cancer in laboratory animals. The relevance of this finding to human is uncertain. IARC (International Agency for Research on Cancer) has classified ethylbenzene as a possible human carcinogen.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Acetone	LC50 (Lepomis macrochirus, 96 h): 8,300 mg/l LC0 (Leuciscus idus, 48 h): 6,320 mg/l LC50 (Leuciscus idus, 48 h): 7,505 mg/l
2-Propanol	LC50 (Leuciscus idus, 48 h): 8,970 mg/l LC50 (Pimephales promelas, 96 h): > 65,500 mg/l
Xylene	LC50 (Leuciscus idus, 48 h): 86 mg/l LC50 (Pimephales promelas, 96 h): 13.4 mg/l LC50 (Salmo gairdneri, 96 h): 14 mg/l
Ethylbenzene	LC0 (Leuciscus idus, 48 h): 26 mg/l LC100 (Leuciscus idus, 48 h): 70 mg/l LC50 (Leuciscus idus, 48 h): 44 mg/l LC50 (Salmo gairdneri, 96 h): 4.2 mg/l

SS4004P

Tetraethyl Silicate	LC100 (No data available., 24 h): 9,000 mg/l LC50 (Brachydanio rerio, 96 h): > 245 mg/l
n-BUTANOL	LC0 (Leuciscus idus, 48 h): > 1,000 mg/l LC50 (Leuciscus idus, 48 h): 1,520 mg/l LC50 (Pimephales promelas, 96 h): 1,730 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

2-Propanol	EC50 (Daphnia magna, 24 h): > 10,000 mg/l EC0 (Daphnia magna): 500 mg/l
Xylene	EC50 (Daphnia magna, 24 h): 165 mg/l
Ethylbenzene	LC0 (Daphnia magna): 137 mg/l (Daphnia magna): 184 mg/l LC100 (Daphnia magna): 200 mg/l
Tetraethyl Silicate	EC50 (Blue Crab): 7,800 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Acetone	50 % (5 d, No data available.) 78 % (28 d, No data available.)
2-Propanol	82.5 % (5 d, No data available.)
Ethylbenzene	68 % (28 d, No data available.)
Tetraethyl Silicate	98 % (28 d, OECD-Guideline 301 A (DOC Die-Away Test)) Readily biodegradable

SS4004P

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Acetone	No data available.
2-Propanol	No data available.
Xylene	No data available.
Ethylbenzene	No data available.
Tetraethyl Silicate	No data available.
n-BUTANOL	No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information: The generation of waste should be avoided or minimized wherever possible. See Section 8 for information on appropriate personal protective equipment. Do not discharge into drains, water courses or onto the ground. This product is highly flammable. Don't use fire to cut empty container after use.

Disposal instructions: Disposal should be made in accordance with federal, state and local regulations.

Contaminated Packaging: Dispose of as unused product.

14. Transport information

DOT

UN Number:	UN 1993
UN Proper Shipping Name:	Flammable liquids, n.o.s.(Acetone, Isopropanol)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	II
Marine Pollutant:	No

SS4004P

IMDG

UN Number:	UN 1993
UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S.(Acetone, Isopropanol)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
EmS No.:	F-E, S-E
Packing Group:	II
Marine Pollutant:	No
Limited quantity	1.00L
Excepted quantity	E2

IATA

UN Number:	UN 1993
Proper Shipping Name:	Flammable liquid, n.o.s.(Acetone, Isopropanol)
Transport Hazard Class(es):	
Class:	3
Label(s):	3
Packing Group:	II
Cargo aircraft only Packing	364
Instructions:	
Passenger and cargo aircraft	364
Packing Instructions:	
Limited quantity:	Y341
Packing Instructions:	
Excepted quantity	E2
Environmental Hazards:	Not regulated.
Marine Pollutant:	No

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

SS4004P

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Acetone	Causes mild skin irritation.; Systemic effects
2-Propanol	Moderately irritating to the eyes.; Systemic effects
Xylene	Toxic by skin absorption
Ethylbenzene	Toxic by inhalation.
Tetraethyl Silicate	Moderately irritating to the eyes.; Respiratory hazard.
n-BUTANOL	Toxic by ingestion; Corrosive to eyes; Systemic effects; Respiratory hazard.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Acetone	5,000 lbs.
2-Propanol	100 lbs.
Xylene	100 lbs.
Ethylbenzene	1,000 lbs.
n-BUTANOL	5,000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

- Flammable (gases, aerosols, liquids, or solids)
- Skin Corrosion or Irritation
- Serious eye damage or eye irritation
- Specific target organ toxicity (single or repeated exposure)
- Aspiration Hazard
- Hazards Not Otherwise Classified (HNOC)

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
--------------------------	------------------------------------

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

<u>Chemical Identity</u>	<u>Reporting threshold for other users</u>	<u>Reporting threshold for manufacturing and processing</u>
2-Propanol		
Xylene		
Ethylbenzene		
n-BUTANOL		

SS4004P

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Chemical Identity

Xylene
Ethylbenzene

Reportable quantity

Reportable quantity: 100 lbs.
Reportable quantity: 1,000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65



WARNING

Cancer and Reproductive Harm - www.P65Warnings.ca.gov

WARNING: This product can expose you to chemicals including Ethylbenzene, which is [are] known to the State of California to cause cancer.

This product can expose you to chemicals including Toluene, which is [are] known to the State of California to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Acetone
2-Propanol
Xylene
Polyalkylsiloxane
Ethylbenzene
Tetraethyl Silicate

US. Massachusetts RTK - Substance List

Chemical Identity

2-Propanol
Xylene
Ethylbenzene
Tetraethyl Silicate
n-BUTANOL

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

2-Propanol
Xylene
Ethylbenzene
Tetraethyl Silicate
n-BUTANOL

SS4004P

US. Rhode Island RTK

Chemical Identity

2-Propanol

Xylene

Tetraethyl Silicate

n-BUTANOL

SS4004P

Inventory Status:

Australia AICS:	y (positive listing)	Remarks: None.
Canada DSL Inventory List:	y (positive listing)	Remarks: None.
EU EINECS List:	y (positive listing)	Remarks: None.
Japan (ENCS) List:	y (positive listing)	Remarks: None.
China Inv. Existing Chemical Substances:	y (positive listing)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	y (positive listing)	Remarks: None.
Canada NDSL Inventory:	n (negative listing)	Remarks: None.
Philippines PICCS:	y (positive listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: None.
New Zealand Inventory of Chemicals:	n (negative listing)	Remarks: None.
Taiwan Chemical Substance Inventory:	y (positive listing)	Remarks: None.
REACH:	If purchased from Momentive Performance Materials GmbH in Leverkusen, Germany, all substances in this product have been registered by Momentive Performance Materials GmbH or upstream in our supply chain or are exempt from registration under Regulation (EC) No 1907/2006 (REACH). For polymers, this includes the constituent monomers and other reactants.	Remarks: None.

16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	*	3
Flammability	3	
Physical Hazards	0	
PERSONAL PROTECTION		

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

Issue Date: 01/11/2021

Revision Date: No data available.

Version #: 3.1

SS4004P

Further Information: No data available.

Disclaimer:

Notice to reader

Unless otherwise specified in section 1, Momentive products are intended for use in the manufacture and/or formulation of products and are not intended for direct consumer use. These products are not intended for long-lasting (> 30 days) implantation, injection or direct ingestion into the human body, nor for use in the manufacture of multiple use contraceptives. Keep out of the reach of children.

Further Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safehandling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

®, *, and TM indicate trademarks owned by or licensed to Momentive.