WES40

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Trade name	WES40	
Synonyms	Cresylic acid	
Use	Industrial use, Intermediate, Paint and Coatings, Solvent	
Company	Sasol Chemicals (USA) LLC (an affiliate of Sasol Chemicals North America LLC)	
Address	1914 Haden Road, Houston, TX 77015-6498	
Telephone	CHEMTREC North America Transportation Emergency (24-hr)	(800) 424 9300
	CHEMTREC World Wide	(703) 527-3887
	Other Emergencies (24-hr)	(832) 783 6600
	SDS and Product Information (8:00am-4:30pm CST)	(832) 783 6400
	Health and Safety Information (7:30am-4:00pm CST)	(281) 588 3491
	NCEC - Europe	+44 1235 239 670
	NCEC - Americas	+1 215 207 0061
	NCEC - Middle East/Africa	+44 1235 239 671
	NCEC - East/South East Asia	+65 3158 1074
	NCEC - China	+86 400 120 6011
	NCEC - Australia	+61 2801 44558
E-mail address	SasolElectronicSDS@us.sasol.com	

SECTION 2 HAZARDS IDENTIFICATION

OSHA/GHS Hazards	Acute toxicity (Oral)	Category 3
	Acute toxicity (Inhalation)	Category 4
	Acute toxicity (Dermal)	Category 3
	Skin corrosion	Category 1B
	Serious eye damage	Category 1
	Skin sensitisation	Category 1
	Specific target organ toxicity - repeated exposure	Category 2
	Acute aquatic toxicity	Category 2
	Chronic aquatic toxicity	Category 2

LABEL ELEMENTS

WES40

Hazard symbols

Signal word Danger

Hazard statements

H301 + H311 Toxic if swallowed or in contact with skin.
H332 Harmful if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs (Central nervous system, Hematopoietic system, Kidney, Lungs) through prolonged or repeated exposure.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P363 Wash contaminated clothing before reuse.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P391 Collect spillage.

Storage P405 Store locked up.

Disposal P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
o-Ethylphenol	90-00-6	15 - 35
p-Ethylphenol	123-07-9	10 - 20
p-Cresol	106-44-5	10 - 20
m-Cresol	108-39-4	10 - 20
2,6-Xylenol	576-26-1	1 - 20
m-Ethylphenol	620-17-7	5 - 15
2,4-Xylenol	105-67-9	1 - 15
2,5-Xylenol	95-87-4	1 - 10
2,3-Xylenol	526-75-0	1 - 10
3,5-Xylenol	108-68-9	1 - 10
3,4-Xylenol	95-65-8	1 - 10
o-Cresol	95-48-7	1 - 10
Trimethylphenol	26998-80-1	1 - 10

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

SECTION 4 FIRST AID MEASURES

Eye contact In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.

Skin contact Take off contaminated clothing and shoes immediately. If possible, quickly blot material from skin to avoid spreading it. Rapid skin decontamination is critical. Wash off immediately with plenty of water. Wash off with polyethylene glycol and afterwards with plenty of water. Apply PEG/EtOH solution liberally to affected area. Allow to remain 15 to 30 seconds, then wash with water Continue cycle of water - PEG/EtOH solution for at least 15 minutes (PEG/EtOH solution consists of 2 parts polyethylene glycol 400 to 1 part ethanol. For external use only.) Wash off with soap and water. Obtain medical attention. Wash contaminated clothing before re-use.

Inhalation Remove to fresh air. Keep patient warm and at rest. Obtain medical attention. If breathing is irregular or stopped, administer artificial respiration. Inhalation of vapors in high concentration may cause shortness of breath (lung edema). In case of shortness of breath, give oxygen.

Ingestion Call a physician or poison control centre immediately. Do NOT induce vomiting. Rinse mouth. Immediately give plenty of water (if possible charcoal slurry). Never give anything by mouth to an unconscious person.

SECTION 5 FIREFIGHTING MEASURES

FLAMMABLE PROPERTIES

Fire/explosion May be ignited by open flame.
NFPA Class IIIB combustible liquid.

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do NOT use water jet.
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective suit.
Further information	Evacuate personnel to safe areas. Prevent further leakage or spillage if safe to do so. Keep containers and surroundings cool with water spray. In the event of fire and/or explosion do not breathe fumes. Avoid contact with runoff water

SECTION 6 ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up	Evacuate personnel to safe areas. Use personal protective equipment. Land spill: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not flush into surface water or sanitary sewer system. Water spill: Contain spill with booms. Remove material that settles in deeper areas of waterway. Non-disposable equipment should be thoroughly decontaminated with soap and water. Prevent further leakage or spillage if safe to do so. Do not contaminate any lakes, streams, ponds, groundwater or soil.

SECTION 7 HANDLING AND STORAGE

Safe handling advice	Wear personal protective equipment. Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust in work rooms. In case of insufficient ventilation, wear suitable respiratory equipment.
Storage and handling materials	Unsuitable: Avoid use of aluminum, copper or brass alloys in storage or process equipment which will contact this material
Further information on storage conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Ensure adequate ventilation, especially in confined areas.

PERSONAL PROTECTIVE EQUIPMENT

Eyes Chemical resistant goggles must be worn. Wear as appropriate: Face-shield.

Skin Full protective clothing, chemical boots, and chemical gloves. Impervious gloves. Non-disposable equipment should be thoroughly decontaminated with soap and water.

Inhalation Use NIOSH approved respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

EXPOSURE GUIDELINES

Components	Exposure limit(s)
p-Cresol	ACGIH TLV (8-hour) 20 mg/m3 (inhalable fraction and/or vapor) NIOSH Recommended Exposure Limit 2.3 ppm 10 mg/m3 NIOSH NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations) 250 ppm OSHA PEL (Permissible Exposure Limit) 5 ppm 22 mg/m3
m-Cresol	ACGIH TLV (8-hour) 20 mg/m3 (inhalable fraction and/or vapor) NIOSH Recommended Exposure Limit 2.3 ppm 10 mg/m3 NIOSH NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations) 250 ppm OSHA PEL (Permissible Exposure Limit) 5 ppm 22 mg/m3
o-Cresol	ACGIH TLV (8-hour) 20 mg/m3 (inhalable fraction and/or vapor) NIOSH Recommended Exposure Limit 2.3 ppm 10 mg/m3 NIOSH NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations) 250 ppm OSHA PEL (Permissible Exposure Limit) 5 ppm 22 mg/m3
Naphthalene	OSHA PEL (Permissible Exposure Limit) 10 ppm 50 mg/m3 ACGIH TLV (8-hour) 10 ppm 50 mg/m3 NIOSH Recommended Exposure Limit 10 ppm 50 mg/m3 NIOSH Short term exposure limit 15 ppm 75 mg/m3 NIOSH NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations) 250 ppm
Aniline	OSHA PEL (Permissible Exposure Limit) 5 ppm ACGIH TLV (8-hour) 500 ppm ACGIH STEL (Short Term Exposure Limit) 750 ppm *Skin Hazard: Skin exposure should be prevented or reduced to control skin absorption.
o-Toluidine	OSHA PEL (Permissible Exposure Limit) 5 ppm ACGIH TLV (8-hour) 2 ppm *Skin Hazard: Skin exposure should be prevented or reduced to control skin absorption.

PEL=	Permissible Exposure Limits	TWA=	Time Weighted Average (8 hr.)
TLV=	Threshold Limit Value	STEL=	Short Term Exposure Limit (15 min.)
EL=	Excursion Limit	WEEL=	Workplace Environmental Exposure Level

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid

Colour clear to amber

WES40

Form	liquid
Odour	Antiseptic
Odour Threshold	No data available
Flash point	97 °C, 207 °F;
Flammability	Upper explosion limit: approximately 8 %(V)
	Lower explosion limit: approximately 1 %(V)
Boiling point/boiling range	205 - 220 °C, 401 - 428 °F;
Melting point/range	-20 °C, -4 °F;
Auto-ignition temperature	estimated 490 °C, 914 °F;
Decomposition temperature	No data available
Flammability (solid, gas)	Not applicable
Vapour pressure	0.1 mm Hg @ 25 °C, 77 °F;
Vapour density	approximately 4
Density	1.02 g/cm3 @ 20 °C, 68 °F;
Relative density	1.02 @20 °C, 68 °F;
Water solubility	approximately 20 g/l @ 25 °C, 77 °F;
Viscosity	No data available
Viscosity, dynamic	4 mPa.s @ 50 °C, 122 °F;
pH	5.5
Evaporation rate	No data available
Partition coefficient: n-octanol/water	log Pow: 2;
Molecular weight	118 g/mol

SECTION 10 STABILITY AND REACTIVITY

Reactivity No dangerous reaction known under conditions of normal use.

Chemical stability Stable under recommended storage conditions.

Conditions to avoid Keep away from heat and sources of ignition.

Hazardous decomposition products Combustion products include carbon dioxide, carbon monoxide and possibly other unidentified organic compounds.

Materials to avoid Incompatible with strong acids and bases.. Incompatible with oxidizing agents.. Copper and brass alloys. Aluminium.

Hazardous polymerisation Hazardous polymerisation does not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Additional Remarks Information given is based on data obtained from similar substances or components of this material.

Acute dermal toxicity 336 mg/kg
(calculated ATE)

Acute inhalation toxicity > 1 - 5 mg/l
(calculated ATE)

Acute oral toxicity 201 mg/kg
(calculated ATE)

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitisation Guinea pig: Causes sensitisation.

Germ cell mutagenicity **Genotoxicity in vitro**:
Test substance: cresols
In vitro tests showed mutagenic effects which were not observed with in vivo test.

Genotoxicity in vivo:
In vivo tests did not show mutagenic effects

Assessment Mutagenicity:
Based on available data, the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity:
Rat; Oral;
NOAEL (parents): 375 mg/kg
Test substance: cresols
Rat; Oral; OECD Test Guideline 422
NOAEL (parents): 100 mg/kg
Test substance: Phenol, 3-ethyl

Assessment Reproductive toxicity:
Based on available data, the classification criteria are not met.

Teratogenicity:
Rabbit; Oral;
NOAEL (teratogen): 100 mg/kg
Test substance: cresols
Rat; Oral;
NOAEL (teratogen): 100 mg/kg
Category approach

Assessment teratogenicity:
Based on available data, the classification criteria are not met.

STOT - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

LOAEL: 0.0009 mg/l Inhalation; Short-term exposure; Test substance: mixed cresols
Category approach
Target Organs: Hematopoietic system

Rat; Oral; 13 weeks; LOAEL: 50 mg/kg
Test substance: cresols
Category approach
Target Organs: Kidney

Mouse; Oral; 2 years; LOAEL: 100 mg/kg
Test substance: mixed cresols
Target Organs: Lungs

Target Organs: Central nervous system, Hematopoietic system, Kidney, Lungs
The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Aspiration toxicity

Not applicable

Carcinogenicity

Assessment carcinogenicity:

Contains no ingredient listed as a carcinogen

SECTION 12 ECOLOGICAL INFORMATION

Aquatic toxicity

Toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Toxicity to fish

LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 10 - 100 mg/l
Test substance: p-ethylphenol
(literature value)

LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 10 - 100 mg/l
Test substance: 2,6-xylenol
(literature value)

LC50 (Salmo trutta (brown trout)) 96 hours: > 1 - 10 mg/l
Test substance: p-Cresol
(literature value)

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 48 hours: > 1 - 10 mg/l
Test substance: Xylenol isomer mixture

EC50 (Daphnia magna (Water flea)) 48 hours: > 1 - 10 mg/l
Test substance: p-Cresol
(literature value)

EC50 (Daphnia magna (Water flea)) 48 hours: > 1 - 10 mg/l
Test substance: Ethylphenol isomer mixture

Toxicity to algae

ErC50 (Pseudokirchneriella subcapitata (green algae)) 72 hours: > 10 - 100 mg/l
Test substance: Xylenol isomer mixture

NOErC (Pseudokirchneriella subcapitata (green algae)) 72 hours: > 1 - 10 mg/l
Test substance: Xylenol isomer mixture

ErC50 (Pseudokirchneriella subcapitata (green algae)) 72 hours: > 10 - 100 mg/l
Test substance: Ethylphenol isomer mixture

NOErC (Pseudokirchneriella subcapitata (green algae)) 72 hours: > 1 - 10 mg/l
Test substance: Ethylphenol isomer mixture

ErC50 (Desmodesmus subspicatus (green algae)) 48 hours: > 10 - 100 mg/l
Test substance: p-Cresol
(literature value)

ErC10 (Desmodesmus subspicatus (green algae)) 48 hours: > 1 - 10 mg/l
Test substance: p-Cresol
(literature value)

Chronic toxicity to fish

NOEC (Pimephales promelas (fathead minnow)) 32 d: > 1 - 10 mg/l
Test substance: p-Cresol
(literature value)

Chronic toxicity to aquatic invertebrates

NOEC (Daphnia (water flea)) 21 d: > 0.1 - 1 mg/l
Test substance: p-Cresol
(literature value)

NOEC (Daphnia (water flea)) 21 d: > 0.1 - 1 mg/l
Test substance: 2,6-xylenol
(literature value)

Biodegradation

Product is expected to undergo biodegradation at the levels anticipated in the environment.

Readily biodegradable.OECD Test Guideline 301B (28 d): > 60 %
Test substance: Ethylphenol isomer mixture

Not readily biodegradable.
OECD Test Guideline 301D (28 d): < 60 %
Test substance: Xylenol isomer mixture

Readily biodegradable.
OECD Test Guideline 301D (28 d): > 60 %
Test substance: m-Cresol
(literature value)

Readily biodegradable.
OECD Test Guideline 301C (40 d): > 60 %
Test substance: p-Cresol
(literature value)

Readily biodegradable.
OECD Test Guideline 301D (28 d): > 60 %
Test substance: o-Cresol
(literature value)

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Code Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification.

Disposal methods Dispose of only in accordance with local, state, and federal regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

Empty containers. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

SECTION 14 TRANSPORT INFORMATION

DOT UN 2022, Cresylic Acid, 6.1 (8), II
RQ = 100 lbs.

IATA UN 2022, Cresylic Acid, 6.1 (8), II
RQ = 100 lbs.

IMDG UN 2022, Cresylic Acid, 6.1 (8), II, Marine pollutant (2,4-xylenol)
RQ = 100 lbs.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks No data available

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA Inventory Listing

Components	CAS-No.
Phenol, 2-ethyl	90-00-6
Phenol, 4-ethyl	123-07-9
Phenol, 4-methyl	106-44-5
Phenol, 3-methyl	108-39-4

Phenol, 2,6-dimethyl	576-26-1
Phenol, 3-ethyl	620-17-7
Phenol, 2,4-dimethyl	105-67-9
Phenol, 2,5-dimethyl	95-87-4
Phenol, 2,3-dimethyl	526-75-0
Phenol, 3,5-dimethyl	108-68-9
Phenol, 3,4-dimethyl	95-65-8
Phenol, 2-methyl	95-48-7
Phenol, trimethyl	26998-80-1

SARA 302 Status

Components	CAS-No.	Weight percent
Aniline	62-53-3	< 100 PPM

SARA 311/312 Classification

Should this product meet EPCRA 311/312 Tier reporting criteria of 40 CFR 370, refer to Section 2 of this SDS for appropriate classification and Section 3 for components that meet the hazardous classification.

SARA 313 Chemical

Components	CAS-No.	Weight percent
Phenol, 4-methyl	106-44-5	10 - 20 %
Phenol, 3-methyl	108-39-4	10 - 20 %
Phenol, 2,4-dimethyl	105-67-9	1 - 15 %
Phenol, 2-methyl	95-48-7	1 - 10 %
Naphthalene	91-20-3	< 500 PPM
Aniline	62-53-3	< 100 PPM
o-Toluidine	95-53-4	< 50 PPM

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Components	Reportable Quantity	Weight percent
Phenol, 4-methyl	100 LB	10 - 20 %
Phenol, 3-methyl	100 LB	10 - 20 %
Phenol, 2,4-dimethyl	100 LB	1 - 15 %
Phenol, 2-methyl	100 LB	1 - 10 %
Naphthalene	100 LB	< 500 PPM
Aniline	5,000 LB	< 100 PPM
o-Toluidine	100 LB	< 50 PPM

INTERNATIONAL REGULATIONS

WHMIS Classification

Acute toxicity (Oral)	Category 3
Acute toxicity (Inhalation)	Category 4
Acute toxicity (Dermal)	Category 3
Skin corrosion	Category 1B
Serious eye damage	Category 1
Skin sensitisation	Category 1
Specific target organ toxicity - repeated exposure	Category 2
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

European Union

Classification according to Regulation (EU) 1272/2008.

Acute toxicity (Oral), Category 3
Acute toxicity (Inhalation), Category 4
Acute toxicity (Dermal), Category 3
Skin corrosion, Category 1
Serious eye damage, Category 1
Skin sensitisation, Category 1
Specific target organ toxicity - repeated exposure, Category 2
Chronic aquatic toxicity, Category 2

Australia. Inventory of Chemical Substances (AICS)	Listed
Japan. Inventory of Existing and New Chemical Substances (ENCS)	Listed
Japan. ISHL - Inventory of Chemical Substances	Listed
Canada. Domestic Substances List (DSL) Inventory	Not listed
Canada. Non-Domestic Substance Listing (NDSL) This product contains one or several components listed in the Canadian NDSL.	Listed
Philippines. Inventory of Chemicals / Chemical Substances (PICCS)	Listed
Korea. Existing Chemicals Inventory (KECI)	Not listed
China. Inventory of Existing Chemical Substances (IECSC)	Listed
Mexico. National Inventory of Chemical Substances (INSQ)	Not listed
New Zealand. Inventory of Chemical Substances (NZIoC)	Listed

Switzerland. Inventory of Notified New Substances (CHINV)	Listed
Taiwan. National Existing Chemical Inventory (NECI)	Listed

Please note: The names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in Section 3.

STATE REGULATIONS

California Prop. 65

Components	**CAS-No.**
Naphthalene	91-20-3
Aniline	62-53-3
o-Toluidine	95-53-4

Sasol does not specifically analyze for CA Prop 65-listed chemicals. However, through process knowledge, the components listed above may be present at detectable quantities. Sasol's manufacturing process is designed to minimize impurities which would include such substances.

SECTION 16 OTHER INFORMATION

HAZARD RATINGS

	Health	Flammability	Physical Hazard/ Instability
HMIS®	3	1	0
NFPA	3	1	0

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