TERMUL® 3665

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	10/21/2015	400001004395	Date of first issue: 10/21/2015

SECTION 1. IDENTIFICATION

Product name : TERMUL® 3665

Manufacturer or supplier's details

Company name of supplier : Huntsman International LLC
Address : P.O. Box 4980
The Woodlands,
TX 77387
United States of America
Telephone : TechInfo: (281) 719-7780

E-mail address of person responsible for the SDS : MSDS@huntsman.com

Emergency telephone : Chemtrec: (800) 424-9300 or (703) 527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Surfactant

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3

Skin irritation : Category 2

Serious eye damage : Category 1

Specific target organ systemic toxicity - single exposure : Category 3 (Respiratory system)

Aspiration hazard : Category 1

Acute aquatic toxicity : Category 2

Chronic aquatic toxicity : Category 2

GHS Label element

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391 Collect spillage.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1)	577-11-7	60 - 100
Solvent naphtha (petroleum), light arom.	64742-95-6	13 - 30
1,2,4-trimethylbenzene	95-63-6	7 - 13
mesitylene	108-67-8	1 - 3
1-Hexanol, 2-ethyl-	104-76-7	1 - 3

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Consult a physician.
Show this material safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.

If inhaled : Consult a physician after significant exposure.
If unconscious place in recovery position and seek medical advice.

In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing : High volume water jet

media

Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	No hazardous combustion products are known
Specific extinguishing methods	:	No data is available on the product itself.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. In case of inadequate ventilation wear respiratory protection.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.
Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : No smoking.
Keep in a well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Keep away from oxidizing agents.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Ingredients	CAS-No.
Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1)	577-11-7
Solvent naphtha (petroleum), light arom.	64742-95-6
1,2,4-trimethylbenzene	95-63-6
mesitylene	108-67-8
1-Hexanol, 2-ethyl-	104-76-7

Personal protective equipment

Respiratory protection : In the case of vapor formation use a respirator with an approved filter.
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection
Remarks : Impervious gloves
The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection : Eye wash bottle with pure water

		Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems. Ensure that eyewash stations and safety showers are close to the workstation location.
Skin and body protection	:	impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	dark yellow
Odor	:	aromatic
Odor Threshold	:	No data is available on the product itself.
pH	:	6 - 8, Concentration: 100 g/l
Boiling point	:	> 140 °C
Flash point	:	43 °C Method: closed cup
Evaporation rate	:	No data is available on the product itself.
Flammability (solid, gas)	:	No data is available on the product itself.
Upper explosion limit	:	No data is available on the product itself.
Lower explosion limit	:	No data is available on the product itself.
Vapor pressure	:	No data is available on the product itself.
Relative vapor density	:	No data is available on the product itself.
Relative density	:	1.01
Density	:	1.01 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	No data is available on the product itself.
Solubility in other solvents	:	No data is available on the product itself.
Partition coefficient: n-	:	No data is available on the product itself.

octanol/water		
Autoignition temperature	:	No data is available on the product itself.
Thermal decomposition	:	No data is available on the product itself.
Viscosity	:	No data is available on the product itself.
Self-Accelerating decomposition temperature (SADT)	:	No data is available on the product itself.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Vapors may form explosive mixture with air. No decomposition if stored and applied as directed.
Conditions to avoid	:	Heat, flames and sparks.
Hazardous decomposition products	:	Carbon dioxide (CO2) Carbon monoxide Sulfur oxides Metal oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	No data is available on the product itself.

Acute toxicity

Acute oral toxicity - Product	:	Acute toxicity estimate : 3,401 mg/kg Method: Calculation method
Acute inhalation toxicity - Product	:	Acute toxicity estimate: > 10 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):

Acute dermal toxicity	:	LD50 (Rabbit, male): > 10,000 mg/kg Method: OECD Test Guideline 402

Solvent naphtha (petroleum), light arom.:

Acute dermal toxicity	:	LD50 (Rabbit): > 3,160 mg/kg Method: OECD Test Guideline 402 Assessment: The component/mixture is low toxic after single contact with skin.

mesitylene:

Acute dermal toxicity : LD50 (Rat, male and female): > 3,440 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

1-Hexanol, 2-ethyl-:
Acute dermal toxicity : LD50 (Rat, male and female): > 3,000 mg/kg
Method: OECD Test Guideline 402
GLP: no

Acute toxicity (other routes of administration) : No data available

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitization

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):
Routes of exposure: Skin
Species: Humans
Result: Does not cause skin sensitization.

Solvent naphtha (petroleum), light arom.:
Routes of exposure: Skin
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitization.

1,2,4-trimethylbenzene:
Routes of exposure: Skin
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitization.

mesitylene:
Routes of exposure: Skin
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitization.

1-Hexanol, 2-ethyl-:
Routes of exposure: Skin
Species: Humans
Result: Does not cause skin sensitization.

Assessment: No data available

Germ cell mutagenicity

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):

Genotoxicity in vitro : Concentration: 0 - 2500 ug/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Concentration: 0 - 300 µg/L
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Solvent naphtha (petroleum), light arom.:

Genotoxicity in vitro : Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 479
Result: negative

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

1,2,4-trimethylbenzene:

Genotoxicity in vitro : Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

mesitylene:

Genotoxicity in vitro : Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

1-Hexanol, 2-ethyl-:

Genotoxicity in vitro : Concentration: .018 - .24 µg/L
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: no

Concentration: 1 - 1000 ug/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Concentration: 50 - 500 µg/L

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: yes

Ingredients:

Solvent naphtha (petroleum), light arom.:
Genotoxicity in vivo : Application Route: Inhalation
Exposure time: 5 d
Method: OECD Test Guideline 475
Result: negative

1,2,4-trimethylbenzene:
Genotoxicity in vivo : Application Route: Intraperitoneal injection
Dose: 4000 mg/kg
Method: OECD Test Guideline 474
Result: negative

Application Route: Intraperitoneal injection
Dose: 900 mg/kg
Method: OPPTS 870.5915
Result: positive

mesitylene:
Genotoxicity in vivo : Application Route: Intraperitoneal injection
Dose: 4000 mg/kg
Method: OECD Test Guideline 474
Result: negative

Application Route: Intraperitoneal injection
Dose: 900 mg/kg
Method: OPPTS 870.5915
Result: positive

Carcinogenicity

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):
Species: Rat, (male)
Application Route: Oral
Exposure time: 24 month(s)
Dose: 10000 ppm
Frequency of Treatment: 7 daily
Method: OECD Test Guideline 451
Result: negative

1-Hexanol, 2-ethyl-:
Species: Rat, (male and female)
Application Route: Oral
Exposure time: 24 month(s)
Dose: 500 mg/kg
Frequency of Treatment: 5 daily
Method: OECD Test Guideline 453
Result: negative
Target Organs: Gastro-intestinal system

Target Organs: Brain

Target Organs: Liver

Target Organs: Kidney

Target Organs: Testes

Carcinogenicity - Assessment : No data available

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):
Effects on fertility : Species: Rat, male and female
Application Route: Oral
Method: OECD Test Guideline 416

Solvent naphtha (petroleum), light arom.:
Species: Rat, male and female
Application Route: Inhalation

mesitylene:
Species: Rat, male and female
Application Route: Inhalation
Method: OECD Test Guideline 416

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):
Effects on fetal development : Species: Rat, female
Application Route: Oral
General Toxicity Maternal: NOAEL (No observed adverse effect level): 750 mg/kg body weight
Method: OECD Test Guideline 414
Result: No teratogenic effects.

Solvent naphtha (petroleum), light arom.:
Species: Rat, female
Application Route: Inhalation
General Toxicity Maternal: NOAEL (No observed adverse effect level): 100 ppm

Result: No teratogenic effects.

1,2,4-trimethylbenzene:

Species: Rat, female
Application Route: Inhalation
General Toxicity Maternal: NOAEL (No observed adverse effect level): 1,470 mg/m³
Method: OECD Test Guideline 414
Result: No teratogenic effects.

mesitylene:

Species: Rat, female
Application Route: Inhalation
General Toxicity Maternal: NOAEL (No observed adverse effect level): 492 mg/m³
Method: OECD Test Guideline 414
Result: No teratogenic effects.

1-Hexanol, 2-ethyl-:

Species: Rat, female
Application Route: Oral
General Toxicity Maternal: NOAEL (No observed adverse effect level): 130 mg/kg body weight
Method: OECD Test Guideline 414
Result: No teratogenic effects.

Reproductive toxicity - Assessment : No data available

STOT-single exposure

Ingredients:

Solvent naphtha (petroleum), light arom.:
Routes of exposure: inhalation (vapor)
Target Organs: Respiratory Tract, Narcotic effects
Assessment: May cause respiratory irritation.

1,2,4-trimethylbenzene:
Routes of exposure: inhalation (vapor)
Target Organs: Respiratory Tract
Assessment: May cause respiratory irritation.

mesitylene:
Routes of exposure: Inhalation
Target Organs: Respiratory Tract
Assessment: May cause respiratory irritation.

STOT-repeated exposure

No data available

Repeated dose toxicity

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):
Species: Rat, male and female
NOAEL (No observed adverse effect level): 750 mg/kg
Application Route: Ingestion
Exposure time: 2,160 h
Method: Subchronic toxicity

Solvent naphtha (petroleum), light arom.:
Species: Rat
Lowest Observed Effect Concentration: 353 - 1537 ppm
Test atmosphere: vapor
Exposure time: 13 Weeks

1,2,4-trimethylbenzene:
Species: Rat, male and female
NOAEL (No observed adverse effect level): 600 mg/kg
Application Route: Ingestion
Exposure time: 2,160 h
Method: Subchronic toxicity

mesitylene:
Species: Rat, male and female
NOEC: 600 mg/kg, 1800 mg/m3
Application Route: Ingestion
Test atmosphere: vapor
Exposure time: 8,640 h
Number of exposures: 6 h
Method: OECD Test Guideline 452

1-Hexanol, 2-ethyl-:
Species: Rat, male and female
Test atmosphere: vapor
Exposure time: 2,160 h
Number of exposures: 5 d
Method: OECD Test Guideline 413
Remarks: see user defined free text

Species: Rat
No-observed-effect level: 125 mg/kg
Application Route: Ingestion
Exposure time: 13 Weeks
Number of exposures: 5 d
Method: Subchronic toxicity

Repeated dose toxicity - Assessment : No data available

Aspiration toxicity

Ingredients:

Solvent naphtha (petroleum), light arom.:
May be fatal if swallowed and enters airways.

mesitylene:
May be fatal if swallowed and enters airways.

Experience with human exposure

General Information: No data available

Inhalation: No data available

Skin contact: No data available

Eye contact: No data available

Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Concentrations substantially above the TLV value may cause narcotic effects.
Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 49 mg/l
Exposure time: 96 h
Test Type: semi-static test
Test substance: Fresh water
Method: Directive 67/548/EEC, Annex V, C.1.

LC50 (Pimephales promelas (fathead minnow)): 17.3 mg/l
Exposure time: 96 h
Test Type: static test

Test substance: Fresh water
Method: Fish Acute Toxicity Test

Solvent naphtha (petroleum), light arom.:
Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 9.22 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
GLP: yes

1,2,4-trimethylbenzene:
Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 7.72 mg/l
Exposure time: 96 h
Test Type: flow-through test
Test substance: Fresh water

mesitylene:
Toxicity to fish : LC50 (Carassius auratus (goldfish)): 12.52 mg/l
Exposure time: 96 h
Test Type: flow-through test
Test substance: Fresh water

1-Hexanol, 2-ethyl-:
Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 17.1 mg/l
Exposure time: 96 h
Test Type: flow-through test
Test substance: Fresh water
Method: Directive 67/548/EEC, Annex V, C.1.
GLP: yes

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 6.6 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: Fresh water
Method: Directive 67/548/EEC, Annex V, C.2.

Solvent naphtha (petroleum), light arom.:
Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 3.2 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

1,2,4-trimethylbenzene:
Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 3.6 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 202

mesitylene:
Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 6 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 202

1-Hexanol, 2-ethyl-:

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 39 mg/l Exposure time: 48 h Test Type: static test Test substance: Fresh water Method: Directive 67/548/EEC, Annex V, C.2. GLP: yes

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):

Toxicity to algae	:	EC50: > 100 mg/l Exposure time: 96 h Remarks: The data is estimated based on the component aquatic toxicity classification.

Solvent naphtha (petroleum), light arom.:

Toxicity to algae	:	ErL50 (Selenastrum capricornutum (green algae)): 7.9 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

1-Hexanol, 2-ethyl-:

Toxicity to algae	:	ErC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): 11.5 mg/l Exposure time: 72 h Test Type: static test Test substance: Fresh water Method: Directive 67/548/EEC, Annex V, C.3. GLP: yes IC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): 11.5 mg/l Exposure time: 72 h Test Type: static test Test substance: Fresh water Method: Directive 67/548/EEC, Annex V, C.3. GLP: yes
M-Factor (Acute aquatic toxicity)	:	No data available
Toxicity to fish (Chronic toxicity)	:	No data available

Ingredients:

mesitylene:

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.4 mg/l Exposure time: 21 d Test Type: semi-static test Test substance: Fresh water
M-Factor (Chronic aquatic toxicity)	:	No data available

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):
Toxicity to bacteria : EC50 (Pseudomonas putida): 164 mg/l
Exposure time: 16 h
Test Type: static test
Test substance: Fresh water
Method: DIN 38412

Toxicity to soil dwelling organisms : No data available

Plant toxicity : No data available

Sediment toxicity : No data available

Toxicity to terrestrial organisms : No data available

Ecotoxicology Assessment

Ingredients:

mesitylene:
Acute aquatic toxicity : Toxic to aquatic life.

Ingredients:

Solvent naphtha (petroleum), light arom.:
Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

mesitylene:
Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

Further information:
No data available

Persistence and degradability

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):
Biodegradability : Inoculum: activated sludge
Concentration: 10 mg/l
Result: Readily biodegradable.
Biodegradation: 91.2 %
Exposure time: 28 d
Method: ISO 14593

Solvent naphtha (petroleum), light arom.:
Biodegradability : Result: Readily biodegradable.
Biodegradation: > 60 %
Exposure time: 28 d

1,2,4-trimethylbenzene:

Biodegradability : Inoculum: activated sludge
Concentration: 3 mg/l
Result: Not readily biodegradable.
Biodegradation: 4 - 18 %
Exposure time: 28 d
Method: OECD Test Guideline 301C

mesitylene:
Biodegradability : Inoculum: activated sludge
Concentration: 500 mg/l
Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 7.5 d

1-Hexanol, 2-ethyl-:
Biodegradability : Concentration: 100 mg/l
Result: Readily biodegradable.
Biodegradation: 79 - 99 %
Exposure time: 14 d
Method: OECD Test Guideline 301C

Ingredients:

Solvent naphtha (petroleum), light arom.:
Biochemical Oxygen Demand (BOD) : 190 mg/l

Ingredients:

Solvent naphtha (petroleum), light arom.:
Chemical Oxygen Demand (COD) : 440 mg/l
BOD/COD : No data available

ThOD : No data available

BOD/ThOD : No data available

Dissolved organic carbon (DOC) : No data available

Physico-chemical removability : No data available

Stability in water : No data available

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):
Photodegradation : Test Type: Air

Test Type: Water

Test Type: Soil

Impact on Sewage Treatment : No data available

Bioaccumulative potential

Ingredients:

1,2,4-trimethylbenzene:

Bioaccumulation	:	Bioconcentration factor (BCF): 132 Species: Pimephales promelas (fathead minnow) Bioconcentration factor (BCF): 243 Remarks: Bioaccumulation is unlikely.

mesitylene:

Bioaccumulation	:	Species: Pimephales promelas (fathead minnow) Bioconcentration factor (BCF): 161 Remarks: Bioaccumulation is unlikely. Bioconcentration factor (BCF): 132 Species: Pimephales promelas (fathead minnow) Bioconcentration factor (BCF): 243 Remarks: Bioaccumulation is unlikely.

1-Hexanol, 2-ethyl-:

Bioaccumulation	:	Bioconcentration factor (BCF): 25.33 GLP: no Remarks: Bioaccumulation is unlikely.

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):

Partition coefficient: n-octanol/water	:	log Pow: 1.998 (20 °C) Method: Partition coefficient

1,2,4-trimethylbenzene:

Partition coefficient: n-octanol/water	:	log Pow: 3.63

mesitylene:

Partition coefficient: n-octanol/water	:	log Pow: 3.42

1-Hexanol, 2-ethyl-:

Partition coefficient: n-octanol/water	:	log Pow: 2.9 (25 °C) pH: 7 Method: OECD Test Guideline 117 GLP: no

Mobility in soil

Mobility	:	No data available

Ingredients:

Butanedioic acid, 2-sulfo-, 1,4-bis(2-ethylhexyl) ester, sodium salt (1:1):

Distribution among environmental compartments	:	Koc: 1040. Koc: 953.

1,2,4-trimethylbenzene:		
Distribution among environmental compartments	:	Koc: 1097.
mesitylene:		
Distribution among environmental compartments	:	Koc: 741.65.
1-Hexanol, 2-ethyl-:		
Distribution among environmental compartments	:	Koc: 26.01.
Stability in soil	:	No data available

Other adverse effects

Environmental fate and pathways	:	No data available
Results of PBT and vPvB assessment	:	No data available
Endocrine disrupting potential	:	No data available
Adsorbed organic bound halogens (AOX)	:	No data available

Hazardous to the ozone layer

Ozone-Depletion Potential	:	Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological information - Product	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.
Global warming potential (GWP)	:	No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International Regulation

IATA

UN/ID No.	:	UN 1993
Proper shipping name	:	Flammable liquid, n.o.s. (PETROLEUM NAPHTHA)
Class	:	3
Packing group	:	III
Labels	:	Flammable Liquids
Packing instruction (cargo aircraft)	:	366
Packing instruction (passenger aircraft)	:	355

IMDG

UN number	:	UN 1993
Proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (PETROLEUM NAPHTHA)
Class	:	3
Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-E
Marine pollutant	:	yes

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

Not applicable for product as supplied.

Domestic regulation

DOT Classification

UN/ID/NA number	:	UN 1993
Proper shipping name	:	FLAMMABLE LIQUIDS, N.O.S. (PETROLEUM NAPHTHA)
Class	:	3
Packing group	:	III
Labels	:	FLAMMABLE LIQUID
ERG Code	:	128
Marine pollutant	:	yes

SECTION 15. REGULATORY INFORMATION

TSCA - 5(a) Significant New Use Rule List of Chemicals : Not relevant

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
XYLENES	1330-20-7	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

1,2,4-trimethylbenzene 95-63-6 9.4275 %

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

California Prop 65

WARNING! This product contains a chemical known in the State of California to cause cancer.

benzene 71-43-2
cumene 98-82-8

WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

benzene 71-43-2

The ingredients of this product are reported in the following inventories:

TSCA : On TSCA Inventory
DSL : All components of this product are on the Canadian DSL.
AICS : On the inventory, or in compliance with the inventory
NZIoC : On the inventory, or in compliance with the inventory
KECI : On the inventory, or in compliance with the inventory
PICCS : On the inventory, or in compliance with the inventory
IECSC : On the inventory, or in compliance with the inventory

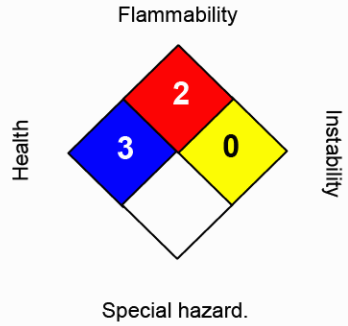
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	3*
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

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