Substance key: KS13233	Revision Date: 01/18/2024
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SECTION 1. IDENTIFICATION

Identification of the company:	Clariant Corporation 500 East Morehead Street Charlotte, NC, 28202 Telephone No.: +1 704 331 7000 **Information of the substance/preparation:** Product Stewardship, +1-704-331-7710 e-mail: SDS.NORAM@clariant.com **Emergency tel. number:** +1 800-424-9300 CHEMTREC

Trade name:	**Hostavin 3206 Liq**
Material number:	103421
Primary product use:	UV absorber
Chemical family:	OXALAMIDE DERIVATIVE DISSOLVED IN XYLENE

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	:	Category 3
Skin irritation	:	Category 2
Eye irritation	:	Category 2A
Specific target organ toxicity - repeated exposure	:	Category 2 (hearing organs)
Specific target organ toxicity - repeated exposure (Inhalation)	:	Category 2 (Kidney, Liver, Central nervous system)

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H373 May cause damage to organs (hearing organs) through prolonged or repeated exposure.

H373 May cause damage to organs (Kidney, Liver, Central nervous system) through prolonged or repeated exposure if inhaled.

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.
P260 Do not breathe mist or vapours.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 Get medical advice/ attention if you feel unwell.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: 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.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

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

Other hazards

No additional hazards are known except those derived from the labelling.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Xylene	1330-20-7	>= 10 - < 20
Ethylbenzene	100-41-4	>= 1 - < 5

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice	:	Get medical advice/ attention if you feel unwell.
If inhaled	:	Move the victim to fresh air. Give oxygen or artificial respiration if needed. Get immediate medical advice/ attention. Never give anything by mouth to an unconscious person.
In case of skin contact	:	Wash thoroughly with soap and water for 15 minutes. If skin irritation occurs, seek medical attention.
In case of eye contact	:	Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
If swallowed	:	Do NOT induce vomiting. Call a physician immediately.
Most important symptoms and effects, both acute and delayed	:	The possible symptoms known are those derived from the labelling (see section 2). No additional symptoms are known. Causes skin irritation. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure.
Notes to physician	:	Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	water Foam Dry powder
Unsuitable extinguishing media	:	No restrictions
Specific hazards during firefighting	:	Nitrogen oxides (NOx) Carbon dioxide (CO2) Vapours may spread long distances and ignite. Keep away from open flames, hot surfaces and sources of ignition.
Further information	:	Wear self-contained breathing apparatus. Solvent floats on water, the use of foam is advisable. Cool containers with fog spray. Primary flammable hazard is xylene. Keep away from sources of ignition.
Special protective equipment for firefighters	:	Impervious clothing Protective helmets Self-contained breathing apparatus

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Wear personal protective equipment. Contain spill. Prevent sources of ignition. Wear appropriate respiratory protection and proper protective equipment. Ventilate if in enclosed area. Recover as liquid using hand or explosion proof pump or use suitable absorbant to collect. Clean up by flushing with water if appropriate or removal of contaminated soils.
Environmental precautions	:	The product should not be allowed to enter drains, water courses or the soil.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Keep away sources of ignition. Vapours may form explosive mixture with air. Vapours may spread long distances and ignite. Electrical equipment should be protected to the appropriate standard.
Advice on safe handling	:	Avoid breathing vapours. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep away from heat. Keep away from flames and sparks.
Further information on storage conditions	:	Store in a cool, dry location away from heat, sparks and open flames. Store in original container. Keep container tightly closed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Xylene	1330-20-7	TWA	100 ppm 435 mg/m3	OSHA Z-1
		TWA	20 ppm	ACGIH
		TWA	100 ppm 435 mg/m3	OSHA P0
		STEL	150 ppm 655 mg/m3	OSHA P0

Ethylbenzene	100-41-4	TWA	20 ppm	ACGIH
		TWA	100 ppm 435 mg/m3	NIOSH REL
		ST	125 ppm 545 mg/m3	NIOSH REL
		TWA	100 ppm 435 mg/m3	OSHA Z-1
		TWA	100 ppm 435 mg/m3	OSHA P0
		STEL	125 ppm 545 mg/m3	OSHA P0

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Ethylbenzene	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid	Urine	End of shift (As soon as possible after exposure ceases)	0.15 g/g creatinine	ACGIH BEI
Xylene	1330-20-7	Methylhippuric acids	Urine	End of shift (As soon as possible after exposure ceases)	1.5 g/g creatinine	ACGIH BEI

Engineering measures : Local ventilation recommended - mechanical ventilation may be used.

Personal protective equipment

Respiratory protection : Use NIOSH/MSHA approved respirators following manufacturer's recommendations where dust or fume may be generated.

Use only in well-ventilated areas.
In the case of vapour formation use a respirator with an approved filter.
Equipment should conform to EN 14387
If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time.
ABEK-P3-filter

Filter type : Organic gas and low boiling vapour type

Organic vapour type

Hand protection

Remarks	:	Nitrile rubber gloves.
Eye protection	:	Safety glasses or chemical splash goggles.
Skin and body protection	:	Wear suitable protective equipment.
Protective measures	:	Do not breathe vapours, aerosols. Avoid contact with skin and eyes.
Hygiene measures	:	Observe the usual precautions for handling chemicals. Wash contaminated clothing before re-use. When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Liquid
Colour	:	yellow
Odour	:	aromatic
pH	:	substance/mixture is non-soluble (in water)
Melting point	:	not determined
Boiling point	:	> 275 °F / > 135 °C (1,013 hPa)
Flash point	:	108.5 °F / 42.5 °C (1,013 hPa) Method: ABEL (DIN EN ISO 13736) (closed cup), closed cup GLP: no
Evaporation rate	:	not tested.
Flammability (liquids)	:	Sustains combustion Method: closed cup
Self-ignition	:	Method: Expert judgement GLP: no The substance or mixture is not classified as pyrophoric.
Upper explosion limit / upper flammability limit	:	not tested.
Lower explosion limit / Lower flammability limit	:	not tested.

Vapour pressure	:	2.8 hPa (68 °F / 20 °C) Method: OECD Test Guideline 104 GLP: yes 3.9 hPa (77 °F / 25 °C) Method: OECD Test Guideline 104 GLP: yes 16.1 hPa (122 °F / 50 °C) Method: OECD Test Guideline 104 GLP: yes
Relative vapour density	:	not tested.
Density	:	1.01 g/cm3 (68 °F / 20 °C, 1,013 hPa)
Solubility(ies)		
Water solubility	:	< 0.1 mg/l (68 °F / 20 °C) Method: OECD Test Guideline 105 GLP: no
Solubility in other solvents	:	not tested. Solvent: fat
Partition coefficient: n-octanol/water	:	log Pow: 4.7 Method: OECD Test Guideline 117 GLP: no log Pow: 4.4 Method: OECD Test Guideline 117 GLP: yes Information refers to the main component.
Auto-ignition temperature	:	not determined
Decomposition temperature	:	no data available
Viscosity		
Viscosity, dynamic	:	approx. 750 mPa.s (68 °F / 20 °C) Method: DIN 53019
Viscosity, kinematic	:	> 500 mm2/s (104 °F / 40 °C) Method: calculated
Explosive properties	:	Not explosive Method: Expert judgement GLP: no
Oxidizing properties	:	The substance or mixture is not classified as oxidizing. Method: Expert judgement GLP: no

Method: Expert judgement
GLP: no
The product does not contain organic peroxide-groups which result from either the manufacturing process or from added ingredients.

Surface tension	:	not required
Metal corrosion rate	:	Not applicable
Particle size	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable
Possibility of hazardous reactions	:	Stable The substance or mixture does not emit flammable gases in contact with water. Not corrosive to metals
Conditions to avoid	:	None known.
Incompatible materials	:	not known
Hazardous decomposition products	:	When used and handled as intended, none. The product does not contain any chemical groups which suggest self-reactive properties, nor is the estimated SADT less than 75 °C, nor is the exothermic decomposition energy higher than 300 J/g.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Skin contact
Ingestion
Inhalation

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity	:	Remarks: no data available Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Acute inhalation toxicity	:	Acute toxicity estimate: 55 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Components:

Xylene:

Acute oral toxicity	:	LD50 (Rat, male and female): 3523 - > 4000 mg/kg Method: EC Directive 92/69/EEC B.1 Acute Toxicity (Oral) GLP: no
Acute inhalation toxicity	:	LC50 (Rat, male): 27.571 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Directive 67/548/EEC, Annex V, B.2. GLP: No information available. Assessment: The component/mixture is moderately toxic after short term inhalation.
Acute dermal toxicity	:	Other (Rabbit, male): > 4,200 mg/kg Method: Other GLP: No information available. Assessment: The component/mixture is moderately toxic after single contact with skin.

Ethylbenzene:

Acute oral toxicity	:	LD50 (Rat, male and female): ca. 3,500 mg/kg Method: Other GLP: no
Acute inhalation toxicity	:	Assessment: The component/mixture is moderately toxic after short term inhalation.

Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks	:	no data available

Components:

Xylene:

Species	:	Rabbit
Method	:	Other
Result	:	Irritating to skin.

GLP : No information available.

Ethylbenzene:

Species : Rabbit
Method : Other
Result : slight irritation
GLP : no

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks : no data available

Components:

Xylene:

Species : rabbit eye
Result : Irritating to eyes.
Method : Other
GLP : No information available.

Ethylbenzene:

Species : rabbit eye
Result : slight irritation
Method : Other
GLP : no

Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

Product:

Test Type : Mouse local lymphnode assay
Species : Mouse
Assessment : non-sensitizing
Method : OECD Test Guideline 429
Result : non-sensitizing
GLP : yes
Remarks : Information refers to the main component.

Components:

Xylene:

Test Type : Local lymph node assay (LLNA)
Exposure routes : Skin contact
Species : Mouse

Method : OECD Test Guideline 429
Result : Not a skin sensitizer.
GLP : No information available.

Assessment : Harmful in contact with skin., Harmful if inhaled., Causes skin irritation., Causes serious eye irritation.

Ethylbenzene:

Remarks : not required

Germ cell mutagenicity

Not classified due to lack of data.

Product:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes
Remarks: Test result obtained from the mixture.

Test Type: Mutagenicity (Escherichia coli - reverse mutation assay)
Test system: Escherichia coli
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes
Remarks: Test result obtained from the mixture.

Test Type: Chromosome Aberration Test
Test system: Cultured peripheral human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: yes
Remarks: Data corresponds to that of the active component

Germ cell mutagenicity - Assessment : It is concluded that the product is not mutagenic based on evaluation of several mutagenicity tests.

Components:

Xylene:

Genotoxicity in vitro : Test Type: sister chromatid exchange assay
Test system: Chinese hamster ovary cells
Concentration: 5 - 50 µg/ml
Metabolic activation: with and without metabolic activation
Method: Other
Result: negative
GLP: No information available.

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Concentration: 15,1 - 100,5 µg/ml
Metabolic activation: with and without metabolic activation
Method: Regulation (EC) No. 440/2008, Annex, B.10
Result: negative
GLP: No information available.

Genotoxicity in vivo : Test Type: dominant lethal test
Species: Mouse (male and female)
Strain: Other
Exposure time: single injection
Dose: 1 ml/kg
Method: OECD Test Guideline 478
Result: negative
GLP: no

Germ cell mutagenicity - Assessment : In vitro tests did not show mutagenic effects, In vivo tests did not show mutagenic effects

Ethylbenzene:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Concentration: 75 - 125 µg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: no

Test Type: In vitro gene mutation study in mammalian cells
Test system: mouse lymphoma cells
Concentration: 4,2 - 1060 µg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Strain: NMRI
Cell type: Bone marrow
Application Route: oral (gavage)
Exposure time: 24 - 48 h
Dose: 187,5-375-750 mg/kg
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Test Type: unscheduled DNA synthesis assay
Species: Mouse (male and female)
Strain: B6C3F1
Application Route: Inhalation

Exposure time: 6 h
Dose: 375-500-750-1000 ppm
Method: OECD Test Guideline 486
Result: negative
GLP: yes

Germ cell mutagenicity - Assessment : In vitro tests did not show mutagenic effects, In vivo tests did not show mutagenic effects

Carcinogenicity

Not classified due to lack of data.

Product:

Carcinogenicity - Assessment : No information available.

Components:

Xylene:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Ethylbenzene:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

IARC Group 2B: Possibly carcinogenic to humans
Ethylbenzene 100-41-4

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No component 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

Not classified due to lack of data.

Product:

Reproductive toxicity - Assessment : No information available.
No information available.

Components:

Xylene:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Inhalation
Dose: 25 - 100 - 500 ppm
Duration of Single Treatment: 6 h
General Toxicity - Parent: NOAEL: >= 2.171 mg/l

General Toxicity F1: NOAEL: >= 2.171 mg/l
General Toxicity F2: NOAEL: >= 2.171 mg/l
Method: Other
GLP: No information available.
Remarks: By analogy with a product of similar composition

Effects on foetal development : Test Type: Two-generation study
Species: Rat
Application Route: Inhalation
Dose: 100 - 500 - 1000 ppm
Developmental Toxicity: NOAEL: 342 mg/kg body weight
Method: OPPTS 870.3800
GLP: No information available.
Remarks: Based on available data, the classification criteria are not met.

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

Ethylbenzene:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Strain: Sprague-Dawley
Application Route: Inhalation
Dose: 25 - 100 - 500 ppm
Duration of Single Treatment: 6 h
General Toxicity - Parent: NOAEL: 2.21 mg/l
General Toxicity F1: NOAEL: 2.21 mg/l
General Toxicity F2: NOAEL: 2.21 mg/l
Method: OECD Test Guideline 416
GLP: yes

Effects on foetal development : Test Type: Fertility/early embryonic development
Species: Rat
Strain: Sprague-Dawley
Application Route: Inhalation
Dose: 100-500-1000-2000 ppm
Duration of Single Treatment: 15 d
General Toxicity Maternal: 500
Teratogenicity: 2,000
Developmental Toxicity: 500
Method: OECD Test Guideline 414
GLP: No information available.

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

STOT - single exposure

Not classified due to lack of data.

Product:

Remarks : no data available

Components:

Xylene:

Assessment : May cause respiratory irritation.

Ethylbenzene:

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

STOT - repeated exposure

May cause damage to organs (hearing organs) through prolonged or repeated exposure.
May cause damage to organs (Kidney, Liver, Central nervous system) through prolonged or repeated exposure if inhaled.

Product:

Remarks : no data available

Components:

Xylene:

Exposure routes : Inhalation
Target Organs : Kidney, Liver, Central nervous system
Assessment : May cause damage to organs through prolonged or repeated exposure.

Ethylbenzene:

Target Organs : hearing organs
Assessment : May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Product:

Remarks : not tested.

Components:

Xylene:

Species : Rat, male and female
NOAEL : 250 mg/kg
Application Route : oral (gavage)
Exposure time : 103 w
Number of exposures : Once daily (5 days/week).
Dose : 250 - 500 mg/kg
Control Group : yes
Method : Other
GLP : No information available.

Species : Rat, male and female

NOAEL	:	150 mg/kg
LOAEL	:	150 mg/kg
Application Route	:	oral (gavage)
Exposure time	:	90 d
Number of exposures	:	once daily
Dose	:	150 - 750 - 1500 mg/kg
Control Group	:	yes
Method	:	OECD Test Guideline 408
GLP	:	No information available.

Species	:	Rat, male
NOAEL	:	>= 3.515 mg/l
Application Route	:	Inhalation
Exposure time	:	13 w
Number of exposures	:	6 hours/day, 5 days/week
Dose	:	781 - 1996 - 3515 mg/m3
Control Group	:	yes
Method	:	Other
GLP	:	No information available.

Repeated dose toxicity - Assessment	:	Harmful in contact with skin., Harmful if inhaled., Causes skin irritation., Causes serious eye irritation.

Ethylbenzene:

Species	:	Rat, male and female
NOAEL	:	75 mg/kg
Application Route	:	oral (gavage)
Exposure time	:	3 m
Number of exposures	:	twice daily
Dose	:	75 - 250 - 750 mg/kg
Control Group	:	yes
Method	:	OECD Test Guideline 408
GLP	:	yes

Species	:	Rat, male and female
NOAEL	:	0.33 - 1.1 mg/l
Application Route	:	Inhalation
Exposure time	:	2 a
Number of exposures	:	6 hours/day, 5 days/week
Dose	:	75 - 250 - 750 ppm
Control Group	:	yes
Method	:	OECD Test Guideline 453
GLP	:	yes

Application Route	:	Skin contact
Remarks	:	This information is not available.

Aspiration toxicity

Not classified due to lack of data.

Product:

no data available

Components:

Xylene:
May be fatal if swallowed and enters airways.

Ethylbenzene:
May be fatal if swallowed and enters airways.

Experience with human exposure

Product:

General Information	:	The possible symptoms known are those derived from the labelling (see section 2).

Further information

Product:

Remarks	:	Can be absorbed through skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	:	Remarks: not tested.
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: not tested.
Toxicity to algae/aquatic plants	:	NOEC (Desmodesmus subspicatus (green algae)): 36.4 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 GLP: yes Remarks: Information refers to the main component. No observable toxic effect in saturated solution.
Toxicity to microorganisms	:	NOEC (activated sludge, domestic): 1,000 mg/l End point: Bacteria toxicity (respiration inhibition) Exposure time: 3 h Method: OECD Test Guideline 209 GLP: yes Remarks: Information refers to the main component.

Components:

Xylene:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 2.6 mg/l Exposure time: 96 h

Test Type: semi-static test
Analytical monitoring: yes
Method: OECD Test Guideline 203
GLP: No information available.
Remarks: By analogy with a product of similar composition

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): ca. 1 mg/l
Exposure time: 24 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: No information available.
Remarks: By analogy with a product of similar composition

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (microalgae)): 4.36 mg/l
End point: Growth rate
Exposure time: 73 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes
Remarks: By analogy with a product of similar composition

EC50 (Pseudokirchneriella subcapitata (green algae)): 2.2 mg/l
End point: Biomass
Exposure time: 73 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes
Remarks: By analogy with a product of similar composition

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.44 mg/l
Exposure time: 73 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes
Remarks: By analogy with a product of similar composition

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): > 1.3 mg/l
Exposure time: 56 d
Test Type: flow-through test
Analytical monitoring: yes
Method: Other
GLP: no

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Freshwater insects): 0.96 - 1.17 mg/l
End point: Reproduction rate
Exposure time: 7 d
Test Type: semi-static test

Analytical monitoring: yes
Method: Other
GLP: no
Remarks: By analogy with a product of similar composition

Toxicity to microorganisms : EC50 (Nitrosomonas sp.): 96 mg/l
Exposure time: 24 h
Test Type: static test
Analytical monitoring: no
Method: Other
GLP: No information available.
Remarks: By analogy with a product of similar composition
The details of the toxic effect relate to the nominal concentration.

EC50 (activated sludge, domestic): > 157 mg/l
End point: Bacteria toxicity (respiration inhibition)
Exposure time: 3 h
Test Type: static test
Analytical monitoring: no
Method: OECD Test Guideline 209
GLP: yes
Remarks: By analogy with a product of similar composition
The details of the toxic effect relate to the nominal concentration.

Toxicity to soil dwelling organisms : Remarks: Not applicable

Plant toxicity : EC50: ca. > 1 mg/kg
>1 milligram per kilogram
Exposure time: 14 d
End point: Growth
Species: Lactuca sativa (lettuce)
Analytical monitoring: yes
Method: OECD Guide-line 208
GLP: No information available.
Remarks: By analogy with a product of similar composition

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Ethylbenzene:

Toxicity to fish : LC50 (Menidia menidia (Atlantic silverside)): 5.1 mg/l
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: yes
Method: Other
GLP: yes

LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l
Exposure time: 96 h

Test Type: flow-through test
Analytical monitoring: yes
Method: OECD Test Guideline 203
GLP: No information available.

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.8 - 2.4 mg/l
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: EPA
GLP: no

LC50 (Mysidopsis bahia (opossum shrimp)): 2.6 mg/l
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: yes
Method: EPA
GLP: yes

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (microalgae)): 3.6 mg/l
End point: Biomass
Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes
Method: EPA
GLP: yes

EC50 (Skeletonema costatum (marine diatom)): 7.7 mg/l
End point: Biomass
Exposure time: 96 h
Test Type: static test
Analytical monitoring: yes
Method: EPA
GLP: yes

Toxicity to fish (Chronic toxicity) : Chronic Toxicity Value (Fish): 1.13 mg/l
Exposure time: 30 d
Analytical monitoring: no
Method: Expert judgement
GLP: no

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Ceriodaphnia spec.): 0.96 mg/l
End point: Reproduction rate
Exposure time: 7 d
Test Type: semi-static test
Analytical monitoring: yes
Method: Other
GLP: no

Toxicity to microorganisms : EC50 (Nitrosomonas sp.): 96 mg/l
Exposure time: 24 h
Test Type: static test
Analytical monitoring: no
Method: Other

GLP: no
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): 0.047 mg/cm2
Exposure time: 48 h
End point: mortality
Method: OECD Test Guideline 207
GLP: no

Plant toxicity : Remarks: Not applicable

Sediment toxicity : Remarks: Not applicable

Toxicity to terrestrial organisms : Remarks: Not applicable

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability

Product:

Biodegradability : Inoculum: activated sludge, domestic, non-adapted
Biodegradation: 8 - 11 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes
Remarks: Data corresponds to that of the active component
Not readily biodegradable.

Components:

Xylene:

Biodegradability : aerobic
Inoculum: activated sludge
Concentration: 41 mg/l
BOD in % of theoretical OD
Result: Readily biodegradable.
Biodegradation: 87.8 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
GLP: yes

Ethylbenzene:

Biodegradability : aerobic
Inoculum: activated sludge
Concentration: 22 mg/l
Dissolved organic carbon (DOC)
Result: Readily biodegradable.
Biodegradation: 70 - 80 %
Exposure time: 28 d

Method: ISO/DIS 14853
GLP: yes

Photodegradation : Test Type: air
Concentration: 500000 molecule/cm³
Rate constant: 7,1E-12 cm³/(molecule*sec)
Degradation (indirect photolysis): 50 % Degradation half life: 2.3 d
GLP: No information available.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: not available

Components:

Xylene:

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)
Bioconcentration factor (BCF): 7.2 - 25.9
Exposure time: 56 d
Concentration: 0.36 - 0.74 mg/l
Method: Other
GLP: No information available.

Ethylbenzene:

Bioaccumulation : Species: Oncorhynchus kisutch (coho salmon)
Bioconcentration factor (BCF): 1
Exposure time: 42 d
Concentration: 0.005 mg/l
Method: Other
GLP: No information available.

Mobility in soil

Components:

Xylene:

Distribution among environmental compartments : Adsorption/Soil
Medium: water - soil
log Koc: 2.73
Method: OECD Test Guideline 121

Ethylbenzene:

Distribution among environmental compartments : Adsorption/Soil
log Koc: 2.71
Method: estimated

Other adverse effects

Product:

Environmental fate and pathways	:	Remarks: no data available
Results of PBT and vPvB assessment	:	Remarks: no data available
Additional ecological information	:	This information is not available.

Components:

Xylene:

Environmental fate and pathways	:	not available
Results of PBT and vPvB assessment	:	The substance is not identified as a PBT or as a vPvB substance.
Additional ecological information	:	Do not allow to enter ground water, waterways or waste water.

Ethylbenzene:

Environmental fate and pathways	:	not available
Results of PBT and vPvB assessment	:	The substance is not identified as a PBT or as a vPvB substance.
Additional ecological information	:	The product should not be allowed to enter drains, water courses or the soil.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource Conservation and Recovery Authorization Act	:	Yes -- If it becomes a waste as sold.
Waste Code	:	D001
Waste from residues	:	This product may yield waste subject to the RCRA land disposal restrictions found at 40 CFR 268. These wastes must be treated according to the treatment standards at 40 CFR 268 subpart D before land disposal.
Contaminated packaging	:	Dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Regulation:

UN/NA-number:	UN 1993
Proper shipping name:	Flammable liquids, n.o.s.
Technical Name:	Aromatic hydrocarbons
Primary hazard class:	3
Packing group:	III
Reportable Quantity:	283.492 kg Xylene
Emergency Response Guide:	130

IATA

UN/ID number:	UN 1993
Proper shipping name:	Flammable liquid, n.o.s.
Hazard inducer(s):	Aromatic hydrocarbons
Primary risk:	3
Packing group:	III
Remarks:	Shipment permitted

IMDG

UN no.:	UN 1993
Proper shipping name:	Flammable liquid, n.o.s.
Hazard inducer(s):	Aromatic hydrocarbons
Primary risk:	3
Packing group:	III
EmS:	F-E S-E

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Xylene	1330-20-7	100	624
Xylene	1330-20-7	100	624 (F003)
Ethylbenzene	100-41-4	1000	25001
Ethylbenzene	100-41-4	100	25001 (F003)

A characteristic waste RQ of 100 lbs applies to this product in a waste form: D001

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Specific target organ toxicity (single or repeated exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

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

Xylene	1330-20-7	>= 10 - < 20 %
Ethylbenzene	100-41-4	>= 1 - < 5 %

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

Xylene	1330-20-7	>= 10 - < 20 %
Ethylbenzene	100-41-4	>= 1 - < 5 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

Xylene	1330-20-7	>= 10 - < 20 %
Ethylbenzene	100-41-4	>= 1 - < 5 %

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Xylene	1330-20-7	>= 10 - < 20 %
Ethylbenzene	100-41-4	>= 1 - < 5 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Xylene	1330-20-7	>= 10 - < 20 %
Ethylbenzene	100-41-4	>= 1 - < 5 %

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

Ethylbenzene	100-41-4	>= 1 - < 5 %

This product contains the following priority pollutants related to the U.S. Clean Water Act:

Ethylbenzene	100-41-4	>= 1 - < 5 %

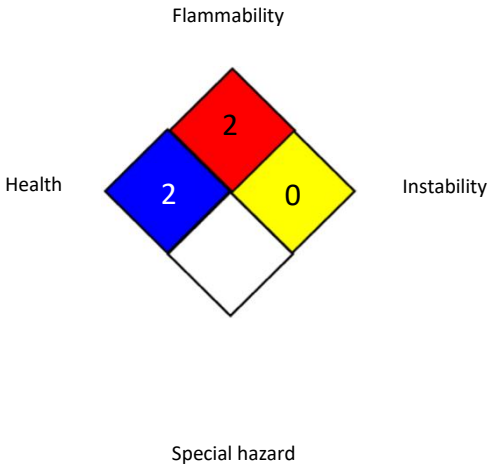
The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory, All components are compliant with the TSCA Inventory Notification (Active) rule.

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA P0	:	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA P0 / TWA	:	8-hour time weighted average
OSHA P0 / STEL	:	Short-term exposure limit
OSHA Z-1 / TWA	:	8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50

- Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

None known.

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