



SAFETY DATA SHEET AUTOMATE ORANGE 2XS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name AUTOMATE ORANGE 2XS

Product number 58084

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Colourant

1.3. Details of the supplier of the safety data sheet

Supplier Univar
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
+44 1274 267306
sds@univar.com

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 58084

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361f
STOT SE 3 - H335 STOT RE 2 - H373 Asp. Tox. 1 - H304

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word

Danger

AUTOMATE ORANGE 2XS

Hazard statements

H312+H332 Harmful in contact with skin or if inhaled.
 H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H361f Suspected of damaging fertility.
 H335 May cause respiratory irritation.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects.
 H304 May be fatal if swallowed and enters airways.

Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

XYLENE, ETHYLBENZENE, 2-NAPHTHALENOL, 1-((4-(PHENYLAZO)PHENYL)AZO)-, AR-HEPTYL AR', AR' METHYL DERIVATIVES

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

XYLENE			60-100%
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-XXXX	
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 STOT RE 2 - H373 Asp. Tox. 1 - H304			

ETHYLBENZENE			10-30%
CAS number: 100-41-4	EC number: 202-849-4	REACH registration number: 01-2119489370-35-XXXX	
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H332 STOT RE 2 - H373 Asp. Tox. 1 - H304 Aquatic Chronic 3 - H412			

AUTOMATE ORANGE 2XS

2-NAPHTHALENOL,1-((4-(PHENYLAZO)PHENYL)AZO)- ,AR-HEPTYL AR',AR' METHYL DERIVATIVES			1-5%
CAS number: 92257-31-3		EC number: 296-120-8	
Classification Repr. 2 - H361f STOT RE 2 - H373 Aquatic Chronic 4 - H413			

TOLUENE			<1%
CAS number: 108-88-3		EC number: 203-625-9	REACH registration number: 01-2119471310-51-XXXX
Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304 Aquatic Chronic 3 - H412			

The full text for all hazard statements is displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Harmful if inhaled. May cause respiratory irritation.
Ingestion	May be fatal if swallowed and enters airways.
Skin contact	Harmful in contact with skin. Causes skin irritation.
Eye contact	Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

AUTOMATE ORANGE 2XS

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Oxides of the following substances: Carbon. Nitrogen.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Take precautionary measures against static discharges.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists. Keep away from heat, sparks and open flame. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep container tightly closed, in a cool, well ventilated place. Keep away from heat, sparks and open flame.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

XYLENE

Sk

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³

ETHYLBENZENE

AUTOMATE ORANGE 2XS

Long-term exposure limit (8-hour TWA): WEL 100 ppm 441 mg/m³

Short-term exposure limit (15-minute): WEL 125 ppm 552 mg/m³

Sk

2-NAPHTHALENOL,1-((4-(PHENYLAZO)PHENYL)AZO)-,AR-HEPTYL AR',AR' METHYL DERIVATIVES

0.14 mg/m³ (0.008 ppm), 8h TWA, Manuf. data

0.42 mg/m³ (0.02 ppm), STEL, Manuf. data

TOLUENE

Sk

Long-term exposure limit (8-hour TWA): WEL 50 ppm 191 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 384 mg/m³

Sk = Can be absorbed through the skin.

WEL = Workplace Exposure Limit

Ingredient comments

WEL = Workplace Exposure Limits

XYLENE (CAS: 1330-20-7)

Ingredient comments

WEL = Workplace Exposure Limits

DNEL

Workers - Inhalation; Short term systemic effects: 289 mg/m³
 Workers - Inhalation; Short term local effects: 289 mg/m³
 Workers - Dermal; Long term systemic effects: 180 mg/kg/day
 Workers - Inhalation; Long term systemic effects: 77 mg/m³
 Workers - Inhalation; Long term local effects: 77 mg/m³
 General population - Inhalation; Short term systemic effects: 174 mg/m³
 General population - Inhalation; Short term local effects: 174 mg/m³
 General population - Dermal; Long term systemic effects: 108 mg/kg/day
 General population - Inhalation; Long term systemic effects: 14.8 mg/m³
 General population - Oral; Long term systemic effects: 1.6 mg/kg/day

PNEC

- Fresh water; 0.327 mg/l
 - marine water; 0.327 mg/l
 - Intermittent release; 0.327 mg/l
 - STP; 6.58 mg/l
 - Sediment (Freshwater); 12.46 mg/kg
 - Sediment (Marinewater); 12.46 mg/kg
 - Soil; 2.31 mg/kg

ETHYLBENZENE (CAS: 100-41-4)

DNEL

Workers - Inhalation; Long term systemic effects: 77 mg/m³
 Workers - Inhalation; Short term local effects: 293 mg/m³
 Workers - Dermal; Long term systemic effects: 180 mg/kg/day
 General population - Inhalation; Long term systemic effects: 15 mg/m³
 General population - Oral; Long term systemic effects: 1.6 mg/kg/day

PNEC

- Fresh water; 0.1 mg/l
 - marine water; 0.01 mg/l
 - Intermittent release; 0.1 mg/l
 - STP; 9.6 mg/l
 - Sediment (Freshwater); 13.7 mg/kg
 - Sediment (Marinewater); 1.37 mg/kg
 - Soil; 2.68 mg/kg

TOLUENE (CAS: 108-88-3)

AUTOMATE ORANGE 2XS

DNEL

Industry - Inhalation; Short term systemic effects: 384 mg/m³
 Industry - Inhalation; Long term systemic effects: 192 mg/m³
 Industry - Dermal; Long term systemic effects: 384 mg/kg/day
 Industry - Inhalation; Short term local effects: 384 mg/m³
 Industry - Inhalation; Long term local effects: 192 mg/m³
 Consumer - Inhalation; Short term systemic effects: 226 mg/m³
 Consumer - Inhalation; Long term systemic effects: 56.5 mg/m³
 Consumer - Oral; Long term systemic effects: 8.13 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 226 mg/kg/day
 Consumer - Inhalation; Short term local effects: 226 mg/m³
 Consumer - Inhalation; Long term local effects: 56.5 mg/m³

PNEC

- Fresh water; 0.68 mg/l
 - marine water; 0.68 mg/l
 - Intermittent release; 0.68 mg/l
 - STP; 13.61 mg/l
 - Sediment (Freshwater); 16.39 mg/l
 - Sediment (Marinewater); 16.39 mg/kg
 - Soil; 2.89 mg/l

8.2. Exposure controls

Protective equipment



Eye/face protection

The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear rubber footwear. Wear rubber apron.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Dark. Red.
Odour	Characteristic.
Odour threshold	No information available.
pH	No information available.
Melting point	-35°C
Initial boiling point and range	137 - 144°C
Flash point	> 29°C Closed cup.
Evaporation rate	< 1 (butyl acetate = 1)

AUTOMATE ORANGE 2XS

Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	3.6
Relative density	0.94 - 0.97 @ °C
Bulk density	No information available.
Solubility(ies)	Insoluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	466 - 530°C
Decomposition Temperature	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

Other information	Not determined.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
------------	---

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
-----------	---

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Will not polymerise.
------------------------------------	----------------------

10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time. Avoid heat, flames and other sources of ignition.
---------------------	---

AUTOMATE ORANGE 2XS

10.5. Incompatible materials

Materials to avoid Not determined.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of the following substances: Carbon. Nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - dermal

ATE dermal (mg/kg) 1,571.43

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 14.28

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

Inhalation

Harmful by inhalation. May cause respiratory irritation.

Ingestion

May be fatal if swallowed and enters airways.

Skin contact

Harmful in contact with skin. Irritating to skin.

Eye contact

Irritating to eyes.

Toxicological information on ingredients.

XYLENE

Acute toxicity - oral

AUTOMATE ORANGE 2XS

Acute toxicity oral (LD ₅₀ mg/kg)	4,300.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 4300 mg/kg, Oral, Rat
ATE oral (mg/kg)	4,300.0
<u>Acute toxicity - dermal</u>	
Notes (dermal LD ₅₀)	LD ₅₀ 1100 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	1,100.0
<u>Acute toxicity - inhalation</u>	
ATE inhalation (vapours mg/l)	11.0
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Irritating to skin. Rabbit
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Irritating to eyes. Fully reversible within 7 days.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Chromosome aberration: Negative.
Genotoxicity - in vivo	Chromosome aberration: Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Fertility, One-generation study - , Inhalation, Vapour, Rat Negative.
Reproductive toxicity - development	Teratogenicity: - : , Inhalation, Vapour, Rat Negative.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	May cause respiratory irritation.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL (90d) 4.35 mg/l, Inhalation, Vapour, Rat
<u>Aspiration hazard</u>	
Aspiration hazard	May be fatal if swallowed and enters airways.

AUTOMATE ORANGE 2XS

Inhalation	Harmful by inhalation. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.
Ingestion	May be fatal if swallowed and enters airways. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
Skin contact	Harmful in contact with skin. Irritating to skin. Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking. May cause allergic contact eczema.
Eye contact	Causes serious eye irritation.

ETHYLBENZENE

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	3,500.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 3500 mg/kg, Oral, Rat
ATE oral (mg/kg)	3,500.0

Acute toxicity - dermal

Acute toxicity dermal (LD ₅₀ mg/kg)	5,001.0
Species	Rabbit
Notes (dermal LD ₅₀)	LD ₅₀ > 5000 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	5,001.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC ₅₀ vapours mg/l)	17.2
Species	Rat
Notes (inhalation LC ₅₀)	LC ₅₀ (4h) 17.2 mg/l, Inhalation, Vapour, Rat Harmful if inhaled.
ATE inhalation (vapours mg/l)	17.2

Skin corrosion/irritation

Skin corrosion/irritation	No information available.
---------------------------	---------------------------

Serious eye damage/irritation

Serious eye damage/irritation	Not irritating. Rabbit
-------------------------------	------------------------

Respiratory sensitisation

Respiratory sensitisation	No information available.
---------------------------	---------------------------

Skin sensitisation

Skin sensitisation	Patch test - Human: Not sensitising.
--------------------	--------------------------------------

Germ cell mutagenicity

AUTOMATE ORANGE 2XS

Genotoxicity - in vitro Chromosome aberration: Negative. Gene mutation: Negative.

Genotoxicity - in vivo Gene mutation: Negative.

Carcinogenicity

Carcinogenicity No information available.

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - Negative. , Vapour, Inhalation, Rat

Reproductive toxicity - development Developmental toxicity: - Negative.: , Inhalation, Rat

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure LOAEL 75 ppm, Inhalation, Vapour, Rat May cause damage to organs (hearing organs) through prolonged or repeated exposure.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

Inhalation Harmful if inhaled.

Ingestion May be fatal if swallowed and enters airways.

Skin contact Liquid may irritate skin.

Eye contact May cause temporary eye irritation.

2-NAPHTHALENOL, 1-((4-(PHENYLAZO)PHENYL)AZO)-,AR-HEPTYL AR',AR' METHYL DERIVATIVES

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >5000 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Extreme pH Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Skin sensitisation

Skin sensitisation Epidemiological studies have shown no evidence of skin sensitisation.

Germ cell mutagenicity

Genotoxicity - in vitro Positive.

Carcinogenicity

AUTOMATE ORANGE 2XS

Carcinogenicity	Contains a substance which may be potentially carcinogenic.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Contains a substance/a group of substances which may damage fertility.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	May cause damage to organs (Reproductive organs, Blood, Liver) through prolonged or repeated exposure.

TOLUENE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,580.0

Species Rat

ATE oral (mg/kg) 5,580.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rabbit

ATE dermal (mg/kg) 5,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 28.1

Species Rat

ATE inhalation (vapours mg/l) 28.1

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Slightly irritating. Rabbit

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. Bacterial reverse mutation test: Negative.

Genotoxicity - in vivo Chromosome aberration: Negative.

AUTOMATE ORANGE 2XS

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity - fertility - , Inhalation, Vapour, Rat Negative.

Reproductive toxicity - development Suspected of damaging the unborn child. Teratogenicity: - : , Vapour, Inhalation, Rat Positive.

Specific target organ toxicity - single exposure

STOT - single exposure May cause drowsiness or dizziness.

Target organs Liver Kidneys Central nervous system Eyes

Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure if inhaled. LOAEL (26 wk) 1.875 mg/l, Inhalation, Vapour, Rat

Target organs Eyes Liver Kidneys Central nervous system

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

Inhalation May cause damage to organs through prolonged or repeated exposure if inhaled. Vapours may cause drowsiness and dizziness.

Ingestion May be fatal if swallowed and enters airways.

Skin contact Irritating to skin.

Eye contact Irritating to eyes.

Target organs Liver Kidneys Central nervous system

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

XYLENE

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

ETHYLBENZENE

Ecotoxicity Harmful to aquatic life with long lasting effects.

2-NAPHTHALENOL, 1-((4-(PHENYLAZO)PHENYL)AZO)-, AR-HEPTYL AR', AR' METHYL DERIVATIVES

Ecotoxicity It is unlikely that the substance will dissolve in water in amounts big enough to have a toxic effect on fish and daphnia.

TOLUENE

AUTOMATE ORANGE 2XS

Ecotoxicity

Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity

Harmful to aquatic life.

Ecological information on ingredients.

XYLENE

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 2-11 (Roccus saxatilis); 13,5 (Lepomis macrochirus); 21,0 (Phimepales promelas) mg/l,
LC₅₀, 96 hour: 2.6 mg/l, Oncorhynchus mykiss (Rainbow trout)
OECD 203
Read-across data.
NOEC, 56 day: > 1.3 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 1-5 mg/l, Daphnia magna
EC₅₀, 24 hour: 1 mg/l, Daphnia magna
OECD 202
Read-across data.

Acute toxicity - aquatic plants

IC₅₀, 72 hours: 3-5 (Selenastrum sp.) mg/l, Algae
EC₁₀, 72 hour: 1.9 mg/l, Pseudokirchneriella subcapitata
Read-across data.
ErC₅₀, 72 hour: 4.36 mg/l, Pseudokirchneriella subcapitata
Read-across data.

Acute toxicity - microorganisms

EC₅₀, 3 hour: >157 mg/l,
OECD 209
Read-across data.

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates

EC₁₀, 21 day: 1.91 mg/l, Daphnia magna
OECD 211
Read-across data.

ETHYLBENZENE

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hour: 4.2 mg/l, Oncorhynchus mykiss (Rainbow trout)
OECD 203

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 1.8 - 2.4 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants

EC₅₀, 72 hours: 5.4 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - microorganisms

EC₅₀, 30 minutes: >152 mg/l, Activated sludge

Acute toxicity - terrestrial

LC₅₀, 2 day: 0.047 mg/cm², Eisenia Fetida (Earthworm)

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates

NOEC, 7 day: 0.96 mg/l,
(Ceriodaphnia dubia)

AUTOMATE ORANGE 2XS

TOLUENE

Toxicity	Harmful to aquatic life.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC50, 96 hours: 5.5 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 3.78 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 10 mg/l,
Acute toxicity - microorganisms	EC ₅₀ , 24 hour: 84 mg/l, (Nitrosomonas sp.)
<u>Chronic aquatic toxicity</u>	
Chronic toxicity - fish early life stage	NOEC, 40 days: 1.39 mg/l, Oncorhynchus mykiss (Rainbow trout) LOEC, 40 days: 2.77 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOEC, 21 day: 1 mg/l, Daphnia magna NOEC, 7 day: 0.74 mg/l, (Ceriodaphnia dubia)

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

Ecological information on ingredients.

XYLENE

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 87.8%: 28 day OECD 301F

ETHYLBENZENE

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 70 - 80%: 28 day - Degradation 100%: 6 day OECD 301E

2-NAPHTHALENOL, 1-((4-(PHENYLAZO)PHENYL)AZO)-,AR-HEPTYL AR',AR' METHYL DERIVATIVES

Persistence and degradability	The product is expected to be slowly biodegradable.
--------------------------------------	---

TOLUENE

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 86%: 20 day

AUTOMATE ORANGE 2XS

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

XYLENE

Bioaccumulative potential The product is not bioaccumulating. BCF: 5.4 - 25.9, Oncorhynchus mykiss (Rainbow trout)

Partition coefficient log Pow: 2.77 - 3.2

ETHYLBENZENE

Bioaccumulative potential BCF: < 100, Fish Read-across data.

Partition coefficient : 3.5

2-NAPHTHALENOL, 1-((4-(PHENYLAZO)PHENYL)AZO)-, AR-HEPTYL AR', AR' METHYL DERIVATIVES

Partition coefficient log Pow: 5.14 OECD 107

TOLUENE

Bioaccumulative potential The product is not bioaccumulating. BCF: 90, Leuciscus idus (Golden orfe)

Partition coefficient log Pow: 2.65

12.4. Mobility in soil

Mobility The product is insoluble in water.

Ecological information on ingredients.

XYLENE

Mobility The product is immiscible with water and will spread on the water surface.

ETHYLBENZENE

Mobility The product is insoluble in water.

TOLUENE

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Surface tension 0.0242 mN/m @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

XYLENE

AUTOMATE ORANGE 2XS

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

ETHYLBENZENE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

TOLUENE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

XYLENE

Other adverse effects Not determined.

TOLUENE

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

UN No. (ADR/RID) 1993

UN No. (IMDG) 1993

UN No. (ICAO) 1993

UN No. (ADN) 1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, ETHYLBENZENE)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, ETHYLBENZENE)

Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, ETHYLBENZENE)

Proper shipping name (ADN) FLAMMABLE LIQUID, N.O.S. (CONTAINS XYLENE, ETHYLBENZENE)

14.3. Transport hazard class(es)

ADR/RID class 3

AUTOMATE ORANGE 2XS

ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-E, S-E
ADR transport category	3
Emergency Action Code	•3Y
Hazard Identification Number (ADR/RID)	30
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. This product may impact SEVESO storage regulations.
----------------	---

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

AUTOMATE ORANGE 2XS

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. Kow: Octanol-water partition coefficient. LC₅₀: Lethal Concentration to 50 % of a test population. LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose). PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. vPvB: Very Persistent and Very Bioaccumulative. IARC: International Agency for Research on Cancer. MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. cATpE: Converted Acute Toxicity Point Estimate. BCF: Bioconcentration Factor. BOD: Biochemical Oxygen Demand. EC₅₀: 50% of maximal Effective Concentration. LOAEC: Lowest Observed Adverse Effect Concentration. LOAEL: Lowest Observed Adverse Effect Level. NOAEC: No Observed Adverse Effect Concentration. NOAEL: No Observed Adverse Effect Level. NOEC: No Observed Effect Concentration. LOEC: Lowest Observed Effect Concentration. DMEL: Derived Minimal Effect Level. EL50: Exposure Limit 50 hPa: Hectopascal LL50: Lethal Loading fifty OECD: Organisation for Economic Co-operation and Development POW: Octanol-water partition coefficient SCBA: self-contained breathing apparatus STP: Sewage Treatment Plant VOC: Volatile Organic Compounds
Classification abbreviations and acronyms	Acute Tox. = Acute toxicity Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Key literature references and sources for data	Supplier's information.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	26/06/2019
Version number	1.000
SDS number	58084

AUTOMATE ORANGE 2XS

SDS status

Approved.

Hazard statements in full

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H361f Suspected of damaging fertility.
H361f Suspected of damaging fertility if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs (Hearing organs) through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

Signature

Jitendra Panchal