

Safety Data Sheet

AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

SECTION 1. IDENTIFICATION

Product name : AUTOMATE™ Red 9BHF Liquid Dye

Synonyms : No data available

Recommended use of the chemical and restrictions on use

Recommended use : Reserved for industrial and professional use.

Restricted Uses : No data available

Supplier or Repackaging Details

Company : Univar Solutions Canada Ltd.
Address : 64 Arrow Road
 North York, ON, M9M 2L9
 Canada

Manufactured By : THE DOW CHEMICAL COMPANY

Emergency telephone number:

Local Emergency Contact : During Office hours Monday-Friday, 8.00 am - 4.30 pm (Pacific Standard Time) : 1-866-686-4827

Additional Information: : Responsible Party: Product Compliance Department
 E-mail: SDSNA@univarsolutions.com
 SDS Requests: 1-855-429-2661
 Website: www.univarsolutions.com

SECTION 2. HAZARD IDENTIFICATION

Hazardous Classification of the substance or mixture

Flammable liquids : Category 4

Carcinogenicity : Category 2

Reproductive toxicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

Specific target organ toxicity - repeated exposure : Category 2 (Central nervous system, Kidney, Liver)

Aspiration hazard : Category 1

Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H227 Combustible liquid.
 H304 May be fatal if swallowed and enters airways.

Safety Data Sheet

AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs (Central nervous system, Kidney, Liver) through prolonged or repeated exposure.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
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.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P331 Do NOT induce vomiting.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 50 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical name	% by Weight	Synonyms
64742-94-5	Solvent naphtha (petroleum), heavy arom.	30 - 60	Solvent naphtha (petroleum), heavy arom.
1330-20-7	Mixed xylenes	1 - 5	Mixed xylenes
91-20-3	Naphthalene	0.1 - 1	Naphthalene
92257-31-3	2-Naphthalenol, 1-[2-[4-(2-phenyldiazenyl)phenyl]diazenyl]-, ar-heptyl ar',ar''-Me derivs.	45 - 55	2-Naphthalenol, 1-[2-[4-(2-phenyldi-

Safety Data Sheet

AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

			azenyl)phenyl] diazenyl]-, ar- heptyl ar',ar''- Me derivs.
--	--	--	---

Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST-AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- 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 : Flush eyes with water as a precaution.
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.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO2)
Dry chemical
Alcohol-resistant foam
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : A complex mixture of airborne solid and liquid particulates and gases (smoke).
Unidentified organic and inorganic compounds.
Hydrogen sulfide
sulfur oxides
Sulphuric acid
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Safety Data Sheet

AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

Special protective equipment for firefighters	: 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. 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.
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). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of ignition.
Advice on safe handling	: Avoid formation of aerosol. Do not breathe vapours/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. Provide sufficient air exchange and/or exhaust in work rooms. 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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Safety Data Sheet

AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
64742-94-5	Solvent naphtha (petroleum), heavy arom.	TWA	200 mg/m ³ (total hydrocarbon vapor)	CA AB OEL
		TWAEV	200 mg/m ³	CA QC OEL
91-20-3	Naphthalene	TWA	10 ppm 52 mg/m ³	CA AB OEL
		STEL	15 ppm 79 mg/m ³	CA AB OEL
		TWA	10 ppm	CA BC OEL
		TWAEV	10 ppm	CA QC OEL
		STEV	15 ppm 79 mg/m ³	CA QC OEL

Personal protective equipment

- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
- Filter type : Combined particulates and organic vapour type
In the case of vapour formation use a respirator with an approved filter.

Hand protection

- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
- 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
- Colour : red
- Odour : No data available
- Odour Threshold : No data available
- pH : No data available
- Freezing Point (Melting point/freezing point) : -8 °C (18 °F)
- Boiling Point (Boiling point/boiling range) : 232 - 275 °C (450 - 527 °F)
- Flash point : > 71 °C (160 °F)
- Evaporation rate : No data available
- Flammability (solid, gas) : No data available
- Upper explosion limit : No data available

Safety Data Sheet
AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: 1.0 @ 20 °C (68 °F) Reference substance: (water = 1)
Density	: 8.345 lb/gal
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available

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	: Vapours may form explosive mixture with air.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Alkalis Nitrogen oxides (NOx) Strong acids Strong oxidizing agents

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute inhalation toxicity	: Acute toxicity estimate: > 40 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	: Acute toxicity estimate: > 5,000 mg/kg

Components:**64742-94-5:**

Acute oral toxicity	: LD50 (Rat, male and female): > 5,000 mg/kg Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	: LC50 (Rat, male and female): > 5.28 mg/l Exposure time: 4 h Test atmosphere: gas

Safety Data Sheet**AUTOMATE™ Red 9BHF Liquid Dye**

Version 1.4

Revision Date: 02/06/2025

Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

1330-20-7:

Acute inhalation toxicity : LC50 (Rat, male): 6700 ppm
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rabbit): 1,700 mg/kg
Assessment: The component/mixture is moderately toxic after single contact with skin.

91-20-3:

Acute oral toxicity : LD50 (Mouse, male and female): 533 mg/kg
Assessment: The component/mixture is moderately toxic after single ingestion.

92257-31-3:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation**Components:****1330-20-7:**

Species: Rabbit
Exposure time: 24 h
Result: Irritating to skin.

92257-31-3:

Remarks: No data available

Serious eye damage/eye irritation**Components:****1330-20-7:**

Species: Rabbit
Result: Irritating to eyes.

92257-31-3:

Remarks: No data available

Respiratory or skin sensitisation**Components:**

Safety Data Sheet

AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

92257-31-3:

Remarks: No data available

Germ cell mutagenicity

Components:

91-20-3:

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

92257-31-3:

Germ cell mutagenicity - Assessment : Mutagenicity classification not possible from current data

Carcinogenicity

Components:

91-20-3:

Species: Mouse, (male and female)
Application Route: inhalation (vapour)
Exposure time: 104 wks
Activity duration: 6 h
Dose: 0, 10, 30 ppm
Frequency of Treatment: 5 days/week
LOAEL: 10 ppm

Result: Clear evidence of carcinogenic activity in females

Symptoms: increased incidences of alveolar/bronchiolar neoplasms

Carcinogenicity - Assessment : Suspected human carcinogens

92257-31-3:

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

ACGIH

Confirmed animal carcinogen with unknown relevance to humans

64742-94-5 Solvent naphtha (petroleum), heavy arom.

91-20-3 Naphthalene

100-41-4 Ethylbenzene

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

Components:

91-20-3:

Reproductive toxicity - Assessment : Fertility classification not possible from current data.

Safety Data Sheet
AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

Teratogenicity - Assessment : Did not show teratogenic effects in animal experiments.

92257-31-3:

Teratogenicity - Assessment : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

STOT - single exposure**Product:**

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

Components:**1330-20-7:**

Assessment: May cause respiratory irritation.

STOT - repeated exposure**Components:****1330-20-7:**

Target Organs: Central nervous system, Kidney, Liver

Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Aspiration toxicity**Components:****64742-94-5:**

May be fatal if swallowed and enters airways.

1330-20-7:

May be fatal if swallowed and enters airways.

Further information**Product:**

Remarks: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****64742-94-5:**

Toxicity to fish

: LL50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l
Exposure time: 96 h
Test Type: semi-static test

Safety Data Sheet

AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

Toxicity to daphnia and other aquatic invertebrates	: EL50 (Daphnia magna (Water flea)): 1.4 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	: NOEL (Raphidocelis subcapitata (freshwater green alga)): 1 mg/l Exposure time: 48 h Test Type: static test EL50 (Raphidocelis subcapitata (freshwater green alga)): 1 - 3 mg/l Exposure time: 72 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEL (Daphnia magna (Water flea)): 0.48 mg/l Exposure time: 21 d
Acute aquatic toxicity- Assessment	: Toxic to aquatic life.
Chronic aquatic toxicity- Assessment	: Toxic to aquatic life with long lasting effects.
91-20-3: Toxicity to fish	: LC50 (Salmo gairdneri (Rainbow Fish)): 0.11 mg/l Exposure time: 96 h Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 2.16 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	: EC50 (Chlorella vulgaris (Fresh water algae)): 33 mg/l End point: Growth rate Exposure time: 24 h Test Type: static test
M-Factor (Acute aquatic toxicity)	: 1
Toxicity to fish (Chronic toxicity)	: Chronic Toxicity Value (Pimephales promelas (fathead minnow)): 0.45 - 0.85 mg/l Exposure time: 30 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC (Daphnia magna (Water flea)): 0.59 mg/l Exposure time: 125 d
Acute aquatic toxicity- Assessment	: Very toxic to aquatic life.
Chronic aquatic toxicity- Assessment	: Very toxic to aquatic life with long lasting effects.
92257-31-3: Toxicity to fish	: Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	: Remarks: No data available
Toxicity to algae	: Test substance: No data available

Safety Data Sheet
AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

Acute aquatic toxicity- Assessment : Very toxic to aquatic life.
Chronic aquatic toxicity- Assessment : Very toxic to aquatic life with long lasting effects.

Persistence and degradability**Components:****92257-31-3:**

Biodegradability : Remarks: No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-637-7922

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**TDG (Transportation of Dangerous Goods):**

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (MIXED XYLENES), 9, III

IATA (International Air Transport Association):

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (MIXED XYLENES) , 9, III

IMDG (International Maritime Dangerous Goods):

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (MIXED XYLENES), 9, III, Marine Pollutant (NAPHTHALENE) , Flash Point:71 °C(160 °F)

Safety Data Sheet

AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

SECTION 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by the HPR.

NPRI Components : 100-41-4
91-20-3

The components 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 : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

ENCS : Not 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

SECTION 16. OTHER INFORMATION

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions EHS Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

Revision Date : 02/06/2025

Material number:
16175458, 16175204

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Sub-	NIOSH	National Institute for Occupational Safety

Safety Data Sheet

AUTOMATE™ Red 9BHF Liquid Dye

Version 1.4

Revision Date: 02/06/2025

	stances List		& Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50			Lethal Concentration 50%