

Safety Data Sheet

AUTOMATE™ Red 9BHF Liquid Dye

Version 1.5

Revision Date: 11/05/2022

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 : Colorant

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

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.

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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 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

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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

Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST-AID MEASURES

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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 (CO ₂)
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. 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 containers. Use a water spray to cool fully closed containers.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency measures	: Use personal protective equipment. Ensure adequate ventilation.
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gency procedures

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

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
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

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			52 mg/m3	
		STEV	15 ppm	CA QC OEL
			79 mg/m3	

Personal protective equipment

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	:	aromatic
Odour Threshold	:	No data available
pH	:	No data available
Freezing Point (°C)	:	232 - 275 °C (450 - 527 °F)
Boiling Point (°C)	:	-8 °C (18 °F)
Flash point	:	> 71 °C (160 °F)
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	1.8 %(V)
Lower explosion limit	:	11.80 %(V)
Vapour pressure	:	0.1 mmHg @ 20 °C (68 °F)
Relative vapour density	:	5.2
Relative density	:	1.000Reference 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	:	484 °C
Thermal decomposition	:	No data available

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SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.
 Chemical stability : Stable
 Possibility of hazardous reactions : No decomposition if stored and applied as directed.

Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.
 Incompatible materials : Alkalies
 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
 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
 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.

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91-20-3:

Acute oral toxicity

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

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

Components:

1330-20-7:

Species: Rabbit

Exposure time: 24 h

Result: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

1330-20-7:

Species: Rabbit

Result: Irritating to eyes.

Germ cell mutagenicity

Components:

91-20-3:

Germ cell mutagenicity -

: In vivo tests did not show mutagenic effects

Assessment

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

ACGIH

Confirmed animal carcinogen with unknown relevance to humans

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64742-94-5	Solvent naphtha (petroleum), heavy arom.
91-20-3	Naphthalene
100-41-4	Ethylbenzene

Reproductive toxicity**Components:****91-20-3:**

Reproductive toxicity - Assessment

Fertility classification not possible from current data.

Teratogenicity - Assessment : Did not show teratogenic effects in 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**Product:**

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

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:**

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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 |
| 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 |

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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.

Persistence and degradability

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)

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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 : 91-20-3
100-41-4

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 determined

NZIoC : not determined

ENCS : not determined

KECI : not determined

PICCS : not determined

IECSC : not determined

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 : 11/05/2022

Material number:
16188257, 16175422, 16175198

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

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	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%