

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016

Reviewed on 06/30/2016

*** 1 Identification****· Product identifier****· Trade name: Modified Auramine O Stain****· Product number:**

156 345 -250 Modified Auramine O (stain & decolorizer/quencher) 250ml bottle each/pkg

157 345 -01G Modified Auramine O (stain & decolorizer/quencher) - SPECIAL ORDER ONLY, suggest 345-04L as alternative 1 gallon each/pkg

1057 345 -S Modified Auramine O (stain only) 1 gallon/pkg

158 345 -.01L Modified Auramine O (stain & decolorizer/quencher) 1 liter each/pkg

345 -.04L Modified Auramine O (stain & decolorizer/quencher) 4x1 liter each/pkg

159 345-20L Modified Auramine O (stain & decolorizer/quencher) 20 liters each

· Details of the supplier of the safety data sheet**· Manufacturer/Supplier:**Scientific Device Laboratory
411 Jarvis Avenue
Des Plaines, IL 60018
847-803-9495**· Emergency telephone number:**

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 or Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

*** 2 Hazard(s) identification****· Classification of the substance or mixture**

Flame

Highly flammable liquid and vapor. H225



Health hazard

Suspected of causing genetic defects. H341

May cause cancer. H350



Corrosion

Causes severe skin burns and eye damage. H314



Harmful if inhaled. H332

· Label elements**· GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016

Reviewed on 06/30/2016

Trade name: Modified Auramine O Stain

(Contd. of page 1)

· Hazard pictograms

GHS02 GHS05 GHS07 GHS08

· Signal word Danger**· Hazard-determining components of labeling:**Proprietary
SD Alcohol 40-B (Ethanol)**· Hazard statements**Highly flammable liquid and vapor.
Harmful if inhaled.
Causes severe skin burns and eye damage.
Suspected of causing genetic defects.
May cause cancer.**· Precautionary statements**Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Do not breathe dust/fume/gas/mist/vapours/spray.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Use personal protective equipment as required.
Ground/bond container and receiving equipment.
Keep container tightly closed.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash thoroughly after handling.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Specific treatment (see on this label).
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Wash contaminated clothing before reuse.
IF exposed or concerned: Get medical advice/attention.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
In case of fire: Use for extinction: CO2, powder or water spray.
Immediately call a POISON CENTER/doctor.
Call a POISON CENTER/doctor if you feel unwell.
Store locked up.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 3)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016

Reviewed on 06/30/2016

3 Composition/information on ingredients

7732-18-5	water, distilled, conductivity or of similar purity
-----------	-----------------------------------------------------

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous Components:**

	Proprietary
	<ul style="list-style-type: none"> ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ Muta. 2, H341; STOT RE 2, H373; ⚠ Skin Corr. 1B, H314
64-17-5	SD Alcohol 40-B (Ethanol)
	<ul style="list-style-type: none"> ⚠ Flam. Liq. 2, H225; ⚠ Carc. 1A, H350; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.

In case of unconsciousness, place patient securely on side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**

Immediately call a doctor.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

(Contd. on page 4)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016

Reviewed on 06/30/2016

- **Methods and material for containment and cleaning up:**

- Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).
- Use neutralizing agent.
- Dispose contaminated material as waste according to section 13.
- Ensure adequate ventilation.

- **Reference to other sections**

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling**

- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.

- **Information about protection against explosions and fires:**

- Keep ignition sources away - Do not smoke.
- Protect from heat.
- Protect against electrostatic charges.

- **Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
 - Keep receptacle tightly sealed.
 - Store in cool, dry conditions in well sealed receptacles.
 - Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.

- **Control parameters**

- **Components with occupational exposure limits:**

64-17-5 SD Alcohol 40-B (Ethanol)

PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV	Short-term value: 1880 mg/m ³ , 1000 ppm

- **Ingredients with biological limit values:**

Proprietary

BEI	250 mg/g creatinine urine end of shift Phenol with hydrolysis (background, nonspecific)
-----	--------------------------------------------------------------------------------------------------

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016

Reviewed on 06/30/2016

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

- **Eye protection:** Tightly sealed goggles

* 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:

Liquid

Color:

Orangish

- **Odor:**

Odorless

- **Odor threshold:**

Not determined.

- **pH-value:**

Not determined.

- **Change in condition**

Melting point/Melting range:

Not determined.

Boiling point/Boiling range:

78 °C (172 °F)

- **Flash point:**

17 °C (63 °F)

- **Flammability (solid, gaseous):**

Not applicable.

- **Ignition temperature:**

425 °C (797 °F)

- **Decomposition temperature:**

Not determined.

- **Auto igniting:**

Product is not selfigniting.

- **Danger of explosion:**

Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

Lower:

0.0 Vol %

Upper:

9.5 Vol %

- **Vapor pressure @ 20 °C (68 °F):**

23 hPa (17 mm Hg)

- **Density @ 20 °C (68 °F):**

0.975 g/cm³ (8.136 lbs/gal)

- **Relative density**

Not determined.

- **Vapour density**

Not determined.

(Contd. on page 6)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016

Reviewed on 06/30/2016

- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Solvent content:**
 - Organic solvents:** 0.0 %
 - Water:** 80.0 %
 - VOC content:** 306.8 g/l / 2.56 lb/gl
 - Solids content:** 30.1 %
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Proprietary

Oral	LD50	317 mg/kg (rat)
Dermal	LD50	850 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Corrosive effect.
- **Additional toxicological information:**
 - The product shows the following dangers according to internally approved calculation methods for preparations:
 - Harmful
 - Corrosive
 - Swallowing will lead to a corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

	Proprietary	3
64-17-5	SD Alcohol 40-B (Ethanol)	1

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

(Contd. on page 7)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016

Reviewed on 06/30/2016

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
 - Do not allow product to reach ground water, water course or sewage system.
 - Must not reach bodies of water or drainage ditch undiluted or unneutralized.
 - Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
 - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

* 14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** UN1993
- **UN proper shipping name**
- **DOT** Flammable liquids, n.o.s. (Ethanol)
- **ADR** UN1993 Flammable liquids, n.o.s. (Ethanol (Ethyl alcohol))
- **IMDG** FLAMMABLE LIQUID, N.O.S. (ETHANOL (ETHYL ALCOHOL))
- **IATA** FLAMMABLE LIQUID, N.O.S. (ETHANOL)
- **Transport hazard class(es)**
- **DOT**



- **Class** 3 Flammable liquids
- **Label** 3

(Contd. on page 8)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016

Reviewed on 06/30/2016

 · **ADR**


- **Class** 3 (F1) Flammable liquids
- **Label** 3

 · **IMDG, IATA**


- **Class** 3 Flammable liquids
- **Label** 3
- **Packing group**
- **DOT, ADR, IMDG, IATA** II
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Warning: Flammable liquids
- **Danger code (Kemler):** 33
- **EMS Number:** F-E, S-E
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **Transport/Additional information:**
- **DOT**
- **Quantity limitations** On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L

- **ADR**
- **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

- **IMDG**
- **Limited quantities (LQ)** 1L
- **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
- **UN "Model Regulation":** UN1993, Flammable liquids, n.o.s. (Ethanol (Ethyl alcohol)), 3,II

* 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

<ul style="list-style-type: none"> · Section 355 (extremely hazardous substances):
Proprietary
<ul style="list-style-type: none"> · Section 313 (Specific toxic chemical listings):
Proprietary


(Contd. on page 9)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016

Reviewed on 06/30/2016

· TSCA (Toxic Substances Control Act): All ingredients are listed.	
· Proposition 65	
· Chemicals known to cause cancer: None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.	
· Chemicals known to cause developmental toxicity: 64-17-5 SD Alcohol 40-B (Ethanol)	
· Carcinogenic categories	
· EPA (Environmental Protection Agency) Proprietary D, I	
· TLV (Threshold Limit Value established by ACGIH)	
Proprietary A4	
64-17-5 SD Alcohol 40-B (Ethanol) A3	
· NIOSH-Ca (National Institute for Occupational Safety and Health) This product is listed as a hazardous material under criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).	
· Hazard pictograms	
	
GHS02 GHS05 GHS07 GHS08	
· Signal word Danger	
· Hazard-determining components of labeling: Proprietary SD Alcohol 40-B (Ethanol)	
· Hazard statements Highly flammable liquid and vapor. Harmful if inhaled. Causes severe skin burns and eye damage. Suspected of causing genetic defects. May cause cancer.	
· Precautionary statements Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof electrical/ventilating/lighting/equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Ground/bond container and receiving equipment.	

(Contd. on page 10)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016









Reviewed on 06/30/2016

Keep container tightly closed.
 Use only non-sparking tools.
 Take precautionary measures against static discharge.
 Wash thoroughly after handling.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 Specific treatment (see on this label).
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 Wash contaminated clothing before reuse.
 IF exposed or concerned: Get medical advice/attention.
 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 In case of fire: Use for extinction: CO₂, powder or water spray.
 Immediately call a POISON CENTER/doctor.
 Call a POISON CENTER/doctor if you feel unwell.
 Store locked up.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

• **National regulations:**

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

• **State Right to Know**

	Proprietary	
	 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331;  Muta. 2, H341; STOT RE 2, H373;  Skin Corr. 1B, H314	
64-17-5	SD Alcohol 40-B (Ethanol)	
	 Flam. Liq. 2, H225;  Carc. 1A, H350;  Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	
2465-27-2	4,4'-carbonimidoylbis(N,N-dimethylaniline)monohydrochloride	
	 Acute Tox. 3, H311;  Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2A, H319	
7732-18-5	water, distilled, conductivity or of similar purity	
2465-27-2	4,4'-carbonimidoylbis(N,N-dimethylaniline)monohydrochloride	0.079%

• **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• **Date of preparation / last revision** 08/04/2014 / 3

• **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent

(Contd. on page 11)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 06/30/2016

Reviewed on 06/30/2016

LD50: Lethal dose, 50 percent
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Acute Tox. 3: Acute toxicity, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
Muta. 2: Germ cell mutagenicity, Hazard Category 2
Carc. 1A: Carcinogenicity, Hazard Category 1A
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2