

Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 02/02/2015

Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : Eosin Y, 1% Alcoholic
Product code : RS4015

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

Use of the substance/mixture : For laboratory and manufacturing use only.

1.3. Details of the supplier of the safety data sheet

Avantik
19 Chapin Road - Building C
Pine Brook, NJ 07058
800-783-9424

1.4. Emergency telephone number

Emergency number : 888-392-8411

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Liq. 2 H225
Acute Tox. 4 (Oral) H302
Carc. 1A H350
Repr. 2 H361
STOT SE 1 H370

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapor
H302 - Harmful if swallowed
H350 - May cause cancer (oral)
H361 - Suspected of damaging the unborn child (oral)
H370 - Causes damage to organs (central nervous system, optic nerve) (oral)

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, ventilating, lighting equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe mist, vapors, spray
P264 - Wash exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves, eye protection
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P308+P313 - IF exposed or concerned: Get medical advice/attention
P330 - If swallowed, rinse mouth
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), extinguishing powder to extinguish

Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to comply with local, state and federal regulations

2.3. Other hazards

Other hazards not contributing to the classification : None.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | Classification (GHS-US) |
|-------------|---------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Ethanol | (CAS No) 64-17-5 | 87.12 - 91.08 | Flam. Liq. 2, H225 Carc. 1A, H350 Repr. 2, H361 |
| Isopropanol | (CAS No) 67-63-0 | 3.465 - 6.435 | Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H335 |
| Methanol | (CAS No) 67-56-1 | 2.97 - 5.94 | Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370 |
| Eosin Y | (CAS No) 17372-87-1 | 1 | Eye Irrit. 2A, H319 |

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries : Suspected of damaging fertility or the unborn child. Causes damage to organs.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Blindness. Central nervous system depression. Dizziness. Drunkenness. Nausea. Vomiting.

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

Obtain medical assistance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapor.

Explosion hazard : May form flammable/explosive vapor-air mixture.

Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Safety glasses.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Avoid breathing mist, spray.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Do not breathe mist, vapors, spray.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources., Ignition sources, incompatible materials. Keep container tightly closed.
- Incompatible products : Strong oxidizers.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Eosin Y, 1% Alcoholic | | |
|-----------------------|------------------------|------------|
| ACGIH | Not applicable | |
| OSHA | Not applicable | |
| Ethanol (64-17-5) | | |
| ACGIH | Not applicable | |
| OSHA | OSHA PEL (TWA) (mg/m³) | 1900 mg/m³ |
| OSHA | OSHA PEL (TWA) (ppm) | 1000 ppm |

Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Isopropanol (67-63-0) | | |
|-----------------------|------------------------|-----------|
| ACGIH | ACGIH TWA (ppm) | 200 ppm |
| ACGIH | ACGIH STEL (ppm) | 200 ppm |
| OSHA | OSHA PEL (TWA) (mg/m³) | 980 mg/m³ |
| OSHA | OSHA PEL (TWA) (ppm) | 400 ppm |
| Methanol (67-56-1) | | |
| ACGIH | ACGIH TWA (ppm) | 200 ppm |
| ACGIH | ACGIH STEL (ppm) | 200 ppm |
| OSHA | OSHA PEL (TWA) (mg/m³) | 260 mg/m³ |
| OSHA | OSHA PEL (TWA) (ppm) | 200 ppm |
| Eosin Y (17372-87-1) | | |
| ACGIH | Not applicable | |
| OSHA | Not applicable | |

8.2. Exposure controls

| | |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appropriate engineering controls | : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation. |
| Personal protective equipment | : Avoid all unnecessary exposure. |
| Materials for protective clothing | : GIVE EXCELLENT RESISTANCE: nitrile rubber. GIVE POOR RESISTANCE: PVA. |
| Hand protection | : Wear protective gloves. |
| Eye protection | : Chemical goggles or safety glasses. |
| Skin and body protection | : Wear suitable protective clothing. |
| Respiratory protection | : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. |
| Other information | : Do not eat, drink or smoke during use. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical state | : Liquid |
| Appearance | : Liquid. |
| Color | : Green |
| Odor | : Alcohol odour |
| Odor threshold | : 100 ppm 188 mg/m³ |
| pH | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : 2.4 |
| Relative evaporation rate (ether=1) | : 8.3 |
| Flammability (solid, gas) | : No data available |
| Explosion limits | : 4.3 - 19 vol % |
| Explosive properties | : No data available. |
| Oxidizing properties | : None. |
| Vapor pressure | : No data available |
| Relative density | : No data available |
| Relative vapor density at 20 °C | : 1.6 |
| Solubility | : Soluble in water. Soluble in ethanol. Water: Solubility in water of component(s) of the mixture : • Ethanol: • Isopropanol: • Methanol: >= 100 g/100ml |

Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| | |
|---------------------------|---------------------|
| Log Pow | : No data available |
| Log Kow | : No data available |
| Auto-ignition temperature | : 363 °C |
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |

9.2. Other information

| | |
|-------------|--------|
| VOC content | : 60 % |
|-------------|--------|

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Hydrogen bromide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Oral: Harmful if swallowed.

| Eosin Y, 1% Alcoholic | |
|----------------------------|------------------------------------------------------------------------------------------------------|
| ATE US (oral) | 1683.502 mg/kg body weight |
| Ethanol (64-17-5) | |
| LD50 oral rat | 10740 mg/kg (Rat; Experimental value,Rat; Experimental value) |
| LD50 dermal rabbit | > 16000 mg/kg (Rabbit; Literature study) |
| ATE US (oral) | 10740.000 mg/kg body weight |
| Isopropanol (67-63-0) | |
| LD50 oral rat | 5045 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 5840 mg/kg bodyweight; Rat) |
| LD50 dermal rabbit | 12870 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 16.4; Rabbit) |
| LC50 inhalation rat (mg/l) | 73 mg/l/4h (Rat) |
| ATE US (oral) | 5045.000 mg/kg body weight |
| ATE US (dermal) | 12870.000 mg/kg body weight |
| ATE US (vapors) | 73.000 mg/l/4h |
| ATE US (dust, mist) | 73.000 mg/l/4h |
| Methanol (67-56-1) | |
| LD50 oral rat | > 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence) |
| LD50 dermal rabbit | 15800 mg/kg (Rabbit; Literature study) |
| LC50 inhalation rat (mg/l) | 85 mg/l/4h (Rat; Literature study) |
| LC50 inhalation rat (ppm) | 64000 ppm/4h (Rat; Literature study) |
| ATE US (oral) | 100.000 mg/kg body weight |
| ATE US (dermal) | 300.000 mg/kg body weight |
| ATE US (gases) | 700.000 ppmV/4h |

Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Methanol (67-56-1) | |
|---------------------------|---------------|
| ATE US (vapors) | 3.000 mg/l/4h |
| ATE US (dust, mist) | 0.500 mg/l/4h |

| | |
|-----------------------------------|----------------------------|
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : May cause cancer (oral). |

| Ethanol (64-17-5) | |
|--------------------------|----------------------------|
| IARC group | 1 - Carcinogenic to humans |

| Isopropanol (67-63-0) | |
|------------------------------|----------------------|
| IARC group | 3 - Not classifiable |

| | |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reproductive toxicity | : Suspected of damaging the unborn child (oral). |
| Specific target organ toxicity (single exposure) | : Causes damage to organs (central nervous system, optic nerve) (oral). |
| Specific target organ toxicity (repeated exposure) | : Not classified |
| Aspiration hazard | : Not classified |
| Potential Adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. Harmful if swallowed. |
| Symptoms/injuries after inhalation | : May cause respiratory irritation. |
| Symptoms/injuries after skin contact | : Causes skin irritation. |
| Symptoms/injuries after eye contact | : Causes serious eye irritation. |
| Symptoms/injuries after ingestion | : Swallowing a small quantity of this material will result in serious health hazard. Blindness. Central nervous system depression. Dizziness. Drunkenness. Nausea. Vomiting. |

SECTION 12: Ecological information

12.1. Toxicity

| Ethanol (64-17-5) | |
|-------------------------------------------|---------------------------------------------------------|
| LC50 fish 1 | 14200 mg/l (96 h; Pimephales promelas) |
| EC50 Daphnia 1 | 9300 mg/l (48 h; Daphnia magna) |
| LC50 fish 2 | 13000 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) |
| EC50 Daphnia 2 | 10800 mg/l (24 h; Daphnia magna) |
| Threshold limit other aquatic organisms 1 | 65 mg/l (72 h; Protozoa) |
| Threshold limit algae 1 | 1450 mg/l (192 h; Microcystis aeruginosa; Growth rate) |
| Threshold limit algae 2 | 5000 mg/l (168 h; Scenedesmus quadricauda; Growth rate) |

| Isopropanol (67-63-0) | |
|------------------------------|-------------------------------------------------------------|
| LC50 fish 1 | 4200 mg/l (96 h; Rasbora heteromorpha; Flow-through system) |
| EC50 Daphnia 1 | > 10000 mg/l (48 h; Daphnia magna) |
| LC50 fish 2 | 9640 mg/l (96 h; Pimephales promelas; Lethal) |
| EC50 Daphnia 2 | 13299 mg/l (48 h; Daphnia magna) |
| Threshold limit algae 1 | > 1000 mg/l (72 h; Scenedesmus subspicatus; Growth rate) |
| Threshold limit algae 2 | 1800 mg/l (72 h; Algae; Cell numbers) |

| Methanol (67-56-1) | |
|-------------------------------------------|--------------------------------------------------------|
| LC50 fish 1 | 15400 mg/l (96 h; Lepomis macrochirus; Lethal) |
| EC50 Daphnia 1 | > 10000 mg/l (48 h; Daphnia magna; Lethal) |
| LC50 fish 2 | 10800 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss) |
| EC50 Daphnia 2 | 24500 mg/l (48 h; Daphnia magna; Locomotor effect) |
| Threshold limit other aquatic organisms 1 | 6600 mg/l (16 h; Pseudomonas putida) |
| Threshold limit algae 1 | 530 mg/l (192 h; Microcystis aeruginosa) |
| Threshold limit algae 2 | 8000 mg/l (168 h; Scenedesmus quadricauda) |

Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.2. Persistence and degradability

| Eosin Y, 1% Alcoholic | |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Persistence and degradability | Not established. |
| Ethanol (64-17-5) | |
| Persistence and degradability | Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil. |
| Biochemical oxygen demand (BOD) | 0.8 - 0.967 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.70 g O ₂ /g substance |
| ThOD | 2.10 g O ₂ /g substance |
| BOD (% of ThOD) | 0.43 % ThOD |
| Isopropanol (67-63-0) | |
| Persistence and degradability | Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No test data on mobility of the substance available. |
| Biochemical oxygen demand (BOD) | 1.19 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 2.23 g O ₂ /g substance |
| ThOD | 2.40 g O ₂ /g substance |
| BOD (% of ThOD) | 0.49 % ThOD |
| Methanol (67-56-1) | |
| Persistence and degradability | Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil. |
| Biochemical oxygen demand (BOD) | 0.6 - 1.12 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.42 g O ₂ /g substance |
| ThOD | 1.5 g O ₂ /g substance |
| BOD (% of ThOD) | 0.8 % ThOD |
| Eosin Y (17372-87-1) | |
| Persistence and degradability | Not established. |

12.3. Bioaccumulative potential

| Eosin Y, 1% Alcoholic | |
|---------------------------|--------------------------------------------------|
| Bioaccumulative potential | Not established. |
| Ethanol (64-17-5) | |
| BCF fish 1 | 1 (72 h; Cyprinus carpio) |
| Log Pow | -0.31 (Experimental value) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |
| Isopropanol (67-63-0) | |
| Log Pow | 0.05 (Experimental value) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |
| Methanol (67-56-1) | |
| BCF fish 1 | < 10 (72 h; Leuciscus idus) |
| BCF fish 2 | 1 (72 h; Cyprinus carpio; Blood) |
| Log Pow | -0.77 (Experimental value; Other) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |
| Eosin Y (17372-87-1) | |
| Bioaccumulative potential | Not established. |

12.4. Mobility in soil

| Ethanol (64-17-5) | |
|-----------------------|-------------------|
| Surface tension | 0.022 N/m (20 °C) |
| Isopropanol (67-63-0) | |
| Surface tension | 0.021 N/m (25 °C) |
| Methanol (67-56-1) | |
| Surface tension | 0.023 N/m (20 °C) |

Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.5. Other adverse effects

- Effect on the global warming : No known ecological damage caused by this product.
- Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations.
- Additional information : Handle empty containers with care because residual vapors are flammable.
- Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

- Transport document description : UN1170 Ethanol solutions, 3, II
- UN-No.(DOT) : UN1170
- Proper Shipping Name (DOT) : Ethanol solutions
- Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
- Hazard labels (DOT) : 3 - Flammable liquid



- Packing group (DOT) : II - Medium Danger
- DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
- DOT Packaging Bulk (49 CFR 173.xxx) : 242
- DOT Special Provisions (49 CFR 172.102) : 24 - Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III.
B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
- DOT Packaging Exceptions (49 CFR 173.xxx) : 4b;150
- DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
- DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
- DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Additional information

- Other information : No supplementary information available.

ADR

No additional information available

Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Eosin Y, 1% Alcoholic

| | |
|-------------------------------------|------------------------------------------------|
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard Fire hazard |
|-------------------------------------|------------------------------------------------|

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

| | | |
|--------------------------------|----------------|---------------|
| Isopropyl Alcohol (2-Propanol) | CAS No 67-63-0 | 3.465 - 6.435 |
| Methanol | CAS No 67-56-1 | 2.97 - 5.94 |

Isopropanol (67-63-0)

Listed on United States SARA Section 313

Methanol (67-56-1)

Listed on United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists) 5000 lb

| | |
|-------------------------------------|------------------------------------------------|
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard Fire hazard |
|-------------------------------------|------------------------------------------------|

15.2. International regulations

CANADA

Eosin Y, 1% Alcoholic

| | |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WHMIS Classification | Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Isopropanol (67-63-0)

| | |
|----------------------|------------------------------------------------------------------------------------------------------------------------|
| WHMIS Classification | Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
|----------------------|------------------------------------------------------------------------------------------------------------------------|

Methanol (67-56-1)

Listed on the Canadian DSL (Domestic Substances List)

| | |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WHMIS Classification | Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Eosin Y (17372-87-1)

Listed on the Canadian DSL (Domestic Substances List)

| | |
|----------------------|-------------------------------------------------------------------------------|
| WHMIS Classification | Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
|----------------------|-------------------------------------------------------------------------------|

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

National regulations

Ethanol (64-17-5)

Listed on IARC (International Agency for Research on Cancer)

Methanol (67-56-1)

Listed on the Canadian IDL (Ingredient Disclosure List)

Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Eosin Y (17372-87-1)

Not listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

Eosin Y, 1% Alcoholic()

| | |
|---------------------------------------------------------------------|-----|
| U.S. - California - Proposition 65 - Carcinogens List | No |
| U.S. - California - Proposition 65 - Developmental Toxicity | Yes |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Female | No |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No |

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

Methanol (67-56-1)

| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No significance risk level (NSRL) |
|-------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------|
| No | Yes | No | No | 23000 µg/day |

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

| | |
|---------------------------|-------------------------------------------------------------|
| Acute Tox. 3 (Dermal) | Acute toxicity (dermal) Category 3 |
| Acute Tox. 3 (Inhalation) | Acute toxicity (inhalation) Category 3 |
| Acute Tox. 3 (Oral) | Acute toxicity (oral) Category 3 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4 |
| Carc. 1A | Carcinogenicity Category 1A |
| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
| Flam. Liq. 2 | Flammable liquids Category 2 |
| Repr. 2 | Reproductive toxicity Category 2 |
| STOT SE 1 | Specific target organ toxicity (single exposure) Category 1 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H225 | Highly flammable liquid and vapor |
| H301 | Toxic if swallowed |
| H302 | Harmful if swallowed |
| H311 | Toxic in contact with skin |
| H319 | Causes serious eye irritation |
| H331 | Toxic if inhaled |
| H335 | May cause respiratory irritation |
| H350 | May cause cancer |
| H361 | Suspected of damaging fertility or the unborn child |
| H370 | Causes damage to organs |

NFPA health hazard

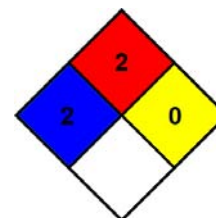
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

: 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Eosin Y, 1% Alcoholic

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

HMIS III Rating

| | |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Health | : 2 Moderate Hazard - Temporary or minor injury may occur |
| Flammability | : 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA) |
| Physical | : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives. |
| Personal Protection | : G G - Safety glasses, Gloves, Vapor respirator |

SDS US (GHS HazCom 2012)

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made, and Belair Instrument Co., Inc. assumes no liability resulting from the use of this SDS. The user must determine the suitability of this information for his application. Belair Instrument Co., Inc. is not the manufacturer or importer of this product. Belair does not assume any liability for damage resulting from handling or direct or indirect contact with the product.