

Acid Alcohol 1%

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
 Issue date: 7/11/2024 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : Acid Alcohol 1%
 Product code : 7561 - all sizes

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only
 For professional use only
 Restrictions on use : Not for food, drug or household use

1.3. Supplier

Astral Diagnostics
 Ethos Biosciences, Inc.
 2070 Center Square Road
 Logan Township, New Jersey 08085
 United States
 T +1-856-224-0900; +1-800-441-0366 Technical Service; Monday-Friday: 8:00 AM-5:00 PM, Eastern US Time
www.ethosbiosciences.com

1.4. Emergency telephone number

Emergency number : 800-424-9300 CHEMTREC (USA) -- 24 Hours/Day, 7 Days/Week

SECTION 2: Hazard(s) identification



2.1. Classification of the substance or mixture

GHS US classification

| | | |
|---|------|-----------------------------------|
| Flammable liquids Category 2 | H225 | Highly flammable liquid and vapor |
| Skin corrosion/irritation Category 2 | H315 | Causes skin irritation |
| Serious eye damage/eye irritation Category 2A | H319 | Causes serious eye irritation |
| Full text of H statements : see section 16 | | |

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :  

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H225 - Highly flammable liquid and vapor
 H315 - Causes skin irritation
 H319 - Causes serious eye irritation

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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.

Acid Alcohol 1%

Safety Data Sheet

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

P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - If on skin: Wash with plenty of water.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | Conc. | GHS US classification |
|-------------------------------|--------------------|-------|--|
| ethanol | CAS-No.: 64-17-5 | 65.55 | Flam. Liq. 2, H225 Carc. 1A, H350 |
| Water | CAS-No.: 7732-18-5 | 30 | Not classified |
| 2-propanol | CAS-No.: 67-63-0 | 3.45 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 Aquatic Chronic 4, H413 |
| hydrochloric acid, conc.; 37% | CAS-No.: 7647-01-0 | 1 | Skin Corr. 1, H314 Eye Dam. 1, H318 |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

Acid Alcohol 1%

Safety Data Sheet

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

4.2. Most important symptoms and effects (acute and delayed)

| | |
|-------------------------------------|---|
| Symptoms/effects after inhalation | : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact | : None under normal conditions. |
| Symptoms/effects after eye contact | : None under normal conditions. |
| Symptoms/effects after ingestion | : None under normal conditions. |

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

| | |
|--------------------------------|--|
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.2. Specific hazards arising from the chemical

| | |
|--|--------------------------------------|
| Fire hazard | : Highly flammable liquid and vapor. |
| Explosion hazard | : No direct explosion hazard. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

5.3. Special protective equipment and precautions for fire-fighters

| | |
|--------------------------------|---|
| Firefighting instructions | : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|---|
| General measures | : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage. |
|------------------|---|

6.1.1. For non-emergency personnel

| | |
|----------------------|---|
| Protective equipment | : Wear recommended personal protective equipment. |
| Emergency procedures | : Ventilate spillage area. No open flames, no sparks, and no smoking. |

6.1.2. For emergency responders

| | |
|----------------------|---|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Evacuate unnecessary personnel. Stop leak if safe to do so. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|---|
| For containment | : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. |
| Other information | : Dispose of materials or solid residues at an authorized site. |

Acid Alcohol 1%

Safety Data Sheet

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-----------------------------------|--|
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| Precautions for safe handling | : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|---------------------|---|
| Technical measures | : Ground/bond container and receiving equipment. |
| Storage conditions | : Store in a well-ventilated place. Keep cool. Keep container tightly closed. |
| Packaging materials | : Store always product in container of same material as original container. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| ethanol (64-17-5) | |
|---|---|
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Ethanol |
| ACGIH OEL STEL | 1000 ppm |
| Remark (ACGIH) | TLV® Basis: URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans) |
| Regulatory reference | ACGIH 2023 |
| USA - OSHA - Occupational Exposure Limits | |
| Local name | Ethyl alcohol (Ethanol) |
| OSHA PEL TWA | 1900 mg/m ³ 1000 ppm |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |
| 2-propanol (67-63-0) | |
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH OEL TWA | 200 ppm |
| ACGIH OEL STEL | 400 ppm |

8.2. Appropriate engineering controls

| | |
|----------------------------------|--|
| Appropriate engineering controls | : Ensure good ventilation of the work station. |
| Environmental exposure controls | : Avoid release to the environment. |

Acid Alcohol 1%

Safety Data Sheet

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

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

| |
|--|
| Hand protection: |
| Protective gloves |
| Eye protection: |
| Safety glasses |
| Skin and body protection: |
| Wear suitable protective clothing |
| Respiratory protection: |
| In case of insufficient ventilation, wear suitable respiratory equipment |

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---------------------|
| Physical state | : Liquid |
| Color | : Colorless |
| Odor | : Alcohol odour |
| Odor threshold | : No data available |
| pH | : No data available |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapor pressure | : No data available |
| Relative vapor density at 20°C | : No data available |
| Relative density | : No data available |
| Molecular mass | : > g/mol |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

| | |
|----------------|---------------------------------|
| ethanol | |
| Boiling point | 78 °C (1013 hPa) |
| Flash point | 13 °C (Closed cup, 1013.25 hPa) |

Acid Alcohol 1%

Safety Data Sheet

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

| ethanol | |
|---------------------------|--------------------------------|
| Auto-ignition temperature | 363 – 425 °C (1013.25 hPa, T2) |
| Vapor pressure | 57 hPa (20 °C) |
| Vapor pressure at 50°C | 300 hPa |

| 2-propanol | |
|---------------------------|----------------------------|
| Boiling point | 83 °C (1013 hPa) |
| Flash point | 12 °C (Closed cup) |
| Auto-ignition temperature | 399 °C (T2) |
| Vapor pressure | 44 hPa (20 °C) |
| Vapor pressure at 50°C | 236 hPa (Antoine equation) |

| hydrochloric acid, conc.; 37% | |
|-------------------------------|----------------|
| Flash point | Not applicable |
| Auto-ignition temperature | Not applicable |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

Acid Alcohol 1%

Safety Data Sheet

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

| ethanol (64-17-5) | |
|-----------------------|--|
| LD50 oral rat | 10470 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s)) |
| LD50 oral | 8300 mg/kg body weight Animal: mouse |
| LD50 dermal rabbit | > 15800 mg/kg body weight (Rabbit, Experimental value, Dermal) |
| LC50 Inhalation - Rat | 124.7 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s)) |
| ATE US (oral) | 8300 mg/kg body weight |

| 2-propanol (67-63-0) | |
|-----------------------------|---|
| LD50 oral rat | 5840 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rabbit | 16400 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 14 day(s)) |
| LC50 Inhalation - Rat [ppm] | > 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s)) |
| ATE US (oral) | 5840 mg/kg body weight |
| ATE US (dermal) | 12890400 mg/kg body weight |

Skin corrosion/irritation : Causes skin irritation.

| ethanol (64-17-5) | |
|-------------------|--------------------|
| pH | 7 (789 g/l, 20 °C) |

| 2-propanol (67-63-0) | |
|----------------------|-------------------------------------|
| pH | No data available in the literature |

| hydrochloric acid, conc.; 37% (7647-01-0) | |
|---|-----|
| pH | < 1 |

Serious eye damage/irritation : Causes serious eye irritation.

| ethanol (64-17-5) | |
|-------------------|--------------------|
| pH | 7 (789 g/l, 20 °C) |

| 2-propanol (67-63-0) | |
|----------------------|-------------------------------------|
| pH | No data available in the literature |

| hydrochloric acid, conc.; 37% (7647-01-0) | |
|---|-----|
| pH | < 1 |

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

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

| 2-propanol (67-63-0) | |
|----------------------|----------------------|
| IARC group | 3 - Not classifiable |

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

Acid Alcohol 1%

Safety Data Sheet

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

| 2-propanol (67-63-0) | |
|---|---|
| STOT-single exposure | May cause drowsiness or dizziness. |
| STOT-repeated exposure | : Not classified |
| ethanol (64-17-5) | |
| NOAEL (subchronic,oral,animal/male,90 days) | < 9700 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents) |
| NOAEL (subchronic,oral,animal/female,90 days) | > 9400 mg/kg body weight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents) |
| Aspiration hazard | : Not classified |
| Viscosity, kinematic | : No data available |
| ethanol (64-17-5) | |
| Viscosity, kinematic | 1.6 mm ² /s (20 °C) |
| 2-propanol (67-63-0) | |
| Viscosity, kinematic | 2.66 mm ² /s (25 °C, Estimated value) |
| hydrochloric acid, conc.; 37% (7647-01-0) | |
| Viscosity, kinematic | 1.933 mm ² /s |
| Symptoms/effects after inhalation | : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact | : None under normal conditions. |
| Symptoms/effects after eye contact | : None under normal conditions. |
| Symptoms/effects after ingestion | : None under normal conditions. |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

| ethanol (64-17-5) | |
|---|--|
| LC50 - Fish [1] | 15300 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal) |
| EC50 72h - Algae [1] | 275 mg/l (Equivalent or similar to OECD 201, Chlorella vulgaris, Static system, Fresh water, Experimental value, Growth rate) |
| NOEC (chronic) | 9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d' |
| 2-propanol (67-63-0) | |
| LC50 - Fish [1] | 9640 – 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal) |
| hydrochloric acid, conc.; 37% (7647-01-0) | |
| LC50 - Fish [1] | 282 mg/l (96 h, Gambusia affinis, Pure substance) |
| EC50 - Crustacea [1] | < 56 mg/l (72 h, Daphnia magna, Pure substance) |

12.2. Persistence and degradability

Acid Alcohol 1%

Persistence and degradability : Not rapidly degradable

Acid Alcohol 1%

Safety Data Sheet

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

| ethanol (64-17-5) | |
|---------------------------------|--|
| Persistence and degradability | Biodegradable in the soil, Readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 0.8 – 0.967 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.7 g O ₂ /g substance |
| ThOD | 2.1 g O ₂ /g substance |
| BOD (% of ThOD) | 0.43 |

| 2-propanol (67-63-0) | |
|---------------------------------|--|
| Persistence and degradability | Biodegradable in the soil, Biodegradable in the soil under anaerobic conditions, Readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 1.19 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 2.23 g O ₂ /g substance |
| ThOD | 2.4 g O ₂ /g substance |

| hydrochloric acid, conc.; 37% (7647-01-0) | |
|---|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

| Water (7732-18-5) | |
|-------------------------------|------------------------|
| Persistence and degradability | Not rapidly degradable |

12.3. Bioaccumulative potential

| ethanol (64-17-5) | |
|---|--|
| Partition coefficient n-octanol/water (Log Pow) | -0.35 (Experimental value, Equivalent or similar to OECD 107, 24 °C) |
| Bioaccumulative potential | Not bioaccumulative. |

| 2-propanol (67-63-0) | |
|---|--|
| BCF - Fish [1] | 1015 (BCFBAF v3.01, Estimated value) |
| Partition coefficient n-octanol/water (Log Pow) | 0.05 (Weight of evidence approach, 25 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

| hydrochloric acid, conc.; 37% (7647-01-0) | |
|---|--|
| Partition coefficient n-octanol/water (Log Pow) | 0.25 (QSAR) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

12.4. Mobility in soil

| ethanol (64-17-5) | |
|--|-----------------------------------|
| Surface tension | 22.31 mN/m (20 °C, 100 %) |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0.2 (log Koc, Experimental value) |
| Ecology - soil | Highly mobile in soil. |

Acid Alcohol 1%

Safety Data Sheet

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

| 2-propanol (67-63-0) | |
|--|--|
| Surface tension | No data available (test not performed) |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |
| Ecology - soil | Highly mobile in soil. |

| hydrochloric acid, conc.; 37% (7647-01-0) | |
|---|--|
| Ecology - soil | No (test)data on mobility of the component(s) available. May be harmful to plant growth, blooming and fruit formation. |

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

| | |
|--|---|
| Regional waste regulation | : Disposal must be done according to official regulations. |
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Sewage disposal recommendations | : Disposal must be done according to official regulations. |
| Product/Packaging disposal recommendations | : Disposal must be done according to official regulations. |
| Additional information | : Flammable vapors may accumulate in the container. Do not re-use empty containers. |

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

| | |
|---------------|----------|
| UN-No.(DOT) | : UN2924 |
| UN-No. (TDG) | : UN2924 |
| UN-No. (IMDG) | : 2924 |
| UN-No. (IATA) | : 2924 |

14.2. UN proper shipping name

| | |
|-----------------------------|--|
| Proper Shipping Name (DOT) | : Flammable liquids, corrosive, n.o.s. (ethanol, hydrochloric acid (1%)) |
| Proper Shipping Name (TDG) | : FLAMMABLE LIQUID, CORROSIVE, N.O.S. |
| Proper Shipping Name (IMDG) | : FLAMMABLE LIQUID, CORROSIVE, N.O.S. |
| Proper Shipping Name (IATA) | : Flammable liquid, corrosive, n.o.s. |

14.3. Transport hazard class(es)

DOT

| | |
|----------------------------------|---------|
| Transport hazard class(es) (DOT) | : 3 (8) |
| Hazard labels (DOT) | : 3, 8 |



TDG

| | |
|----------------------------------|---------|
| Transport hazard class(es) (TDG) | : 3 (8) |
| Hazard labels (TDG) | : 3, 8 |

Acid Alcohol 1%

Safety Data Sheet

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



IMDG

Transport hazard class(es) (IMDG) : 3 (8)
Hazard labels (IMDG) : 3, 8



IATA

Transport hazard class(es) (IATA) : 3 (8)
Hazard labels (IATA) : 3, 8



14.4. Packing group

Packing group (DOT) : II
Packing group (TDG) : II
Packing group (IMDG) : II
Packing group (IATA) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT
UN-No.(DOT) : UN2924
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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.
T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3)
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 243
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 5 L

Acid Alcohol 1%

Safety Data Sheet

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

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

TDG

UN-No. (TDG) : UN2924

TDG Special Provisions : 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the danger or dangers posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3).

(2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name:

(a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S;

(b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S;

(c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S;

(d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or

(e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S.

(3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment:

(a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or

(b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS.

Explosive Limit and Limited Quantity Index : 1 L

Excepted quantities (TDG) : E2

Passenger Carrying Road Vehicle or Passenger : 1 L

Carrying Railway Vehicle Index

Emergency Response Guide (ERG) Number : 132

IMDG

Special provision (IMDG) : 274

Limited quantities (IMDG) : 1 L

Excepted quantities (IMDG) : E2

Packing instructions (IMDG) : P001

IBC packing instructions (IMDG) : IBC02

Tank instructions (IMDG) : T11

Tank special provisions (IMDG) : TP2, TP27

EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS

EmS-No. (Spillage) : S-C - SPILLAGE SCHEDULE Charlie - FLAMMABLE CORROSIVE LIQUIDS

Stowage category (IMDG) : B

Stowage and handling (IMDG) : SW2

Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

IATA

PCA Excepted quantities (IATA) : E2

PCA Limited quantities (IATA) : Y340

PCA limited quantity max net quantity (IATA) : 0.5L

PCA packing instructions (IATA) : 352

PCA max net quantity (IATA) : 1L

CAO packing instructions (IATA) : 363

CAO max net quantity (IATA) : 5L

Special provision (IATA) : A3, A803

ERG code (IATA) : 3CH

Acid Alcohol 1%

Safety Data Sheet

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

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

| | | |
|-------------------------------|-------------------|----|
| hydrochloric acid, conc.; 37% | CAS-No. 7647-01-0 | 1% |
|-------------------------------|-------------------|----|

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.

| | | |
|------------|-----------------|-------|
| 2-propanol | CAS-No. 67-63-0 | 3.45% |
|------------|-----------------|-------|

15.2. International regulations

CANADA

ethanol (64-17-5)

Listed on the Canadian DSL (Domestic Substances List)

2-propanol (67-63-0)

Listed on the Canadian DSL (Domestic Substances List)

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

ethanol (64-17-5)

Listed on IARC (International Agency for Research on Cancer)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

2-propanol (67-63-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Water (7732-18-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Acid Alcohol 1%

Safety Data Sheet

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

| Component | State or local regulations |
|---------------------|---|
| ethanol(64-17-5) | U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List |
| 2-propanol(67-63-0) | U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List |

SECTION 16: Other information

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

| Full text of hazard classes and H-statements | |
|--|--|
| H225 | Highly flammable liquid and vapor |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H336 | May cause drowsiness or dizziness |
| H350 | May cause cancer |
| H413 | May cause long lasting harmful effects to aquatic life |

NFPA health hazard

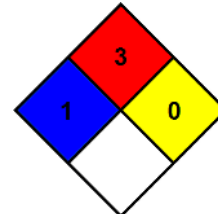
: 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Safety Data Sheet (SDS), USA

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