Safety Data Sheet (HazCom 2012)
CS-9943 - CS9943

Safety Data Sheet date: 6/27/2025, version 1

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: CS-9943

Other means of identification:

SDS code: CS9943

Recommended use of the chemical and restrictions on use

Recommended use:

Industrial uses

Primer

Restrictions on use:

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Manufacturers:

Flamemaster Corp., 13576 Desmond Street, Pacoima, CA 9 133 1 - USA CAGE Code: 14439

Distributors:

Flamemaster Corp., Tel 818-890-1401, Fax 818-890-6001, www.flamemaster.com

Competent person responsible for the safety data sheet:

Flamemaster Corp., Tel 818-890-1401, Fax 818-890-6001, www.flamemaster.com

Emergency phone number:

CHEMTEL: +1-813-248-0585 (International); 1-800-255-3924 (USA)

2. HAZARD(S) IDENTIFICATION

Classification of the chemical


Danger, Flam. Liq. 2, Highly flammable liquid and vapour.


Warning, Skin Irrit. 2, Causes skin irritation.


Warning, Eye Irrit. 2A, Causes serious eye irritation.


Warning, Skin Sens. 1, May cause an allergic skin reaction.


Warning, Repr. 2, Suspected of damaging fertility or the unborn child.


Danger, STOT SE 1, Causes damage to organs.


Warning, STOT SE 3, May cause respiratory irritation.


Warning, STOT SE 3, May cause drowsiness or dizziness.


Warning, STOT RE 2, May cause damage to organs through prolonged or repeated exposure.

Aquatic Acute 2, Toxic to aquatic life.


Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Label elements

Hazard pictograms:

Danger

Hazard statements:

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.
H370 Causes damage to organs.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

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.
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 dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/clothing and eye/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.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor/...
P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTER/doctor/... if you feel unwell.
P314 Get medical advice/attention if you feel unwell.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P333+P313 If skin irritation or rash 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.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use Alcohol foam, carbon dioxide (CO2), dry chemical, water spray/water fog to extinguish.
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:
None

Hazards not otherwise classified identified during the classification process:
None

Ingredient(s) with unknown acute toxicity:
None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
N.A.

Mixtures
Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

>= 40% - < 50% ethanol; ethyl alcohol
Index number: 603-002-00-5, CAS: 64-17-5, EC: 200-578-6


A.3/2A Eye Irrit. 2A H319


US-HAE/C2 Aquatic Chronic 2 H411


A.8/3 STOT SE 3 H335


B.6/2 Flam. Liq. 2 H225


A.8/3 STOT SE 3 H336

>= 30% - < 40% Toluene
CAS: 108-88-3


B.6/2 Flam. Liq. 2 H225


A.2/2 Skin Irrit. 2 H315


A.3/2A Eye Irrit. 2A H319


A.7/2 Repr. 2 H361d


A.8/3 STOT SE 3 H336


A.9/2 STOT RE 2 H373


A.10/1 Asp. Tox. 1 H304

US-HAE/A2 Aquatic Acute 2 H401
US-HAE/C3 Aquatic Chronic 3 H412

>= 5% - < 7% propan-2-ol; isopropyl alcohol; isopropanol
Index number: 603-117-00-0, CAS: 67-63-0, EC: 200-661-7


A.8/3 STOT SE 3 H335


B.6/2 Flam. Liq. 2 H225


A.3/2A Eye Irrit. 2A H319


A.8/3 STOT SE 3 H336

>= 3% - < 5% methanol
CAS: 67-56-1, EC: 200-659-6


A.1/3/Oral Acute Tox. 3 H301


A.1/3/Dermal Acute Tox. 3 H311


A.1/3/Inhal Acute Tox. 3 H331


A.8/1 STOT SE 1 H370


B.6/2 Flam. Liq. 2 H225

>= 3% - < 5% 4-methylpentan-2-one; isobutyl methyl ketone
REACH No.: 01-2119473980-30, Index number: 606-004-00-4, CAS: 108-10-1, EC: 203-550-1


B.6/2 Flam. Liq. 2 H225


A.3/2A Eye Irrit. 2A H319


A.8/3 STOT SE 3 H335


A.1/4/Inhal Acute Tox. 4 H332

>= 3% - < 5% Water
CAS: 7732-18-5
The product is not classified as hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

>= 1% - < 3% disulfiram; tetraethylthiuramdisulfide
Index number: 006-079-00-8, CAS: 97-77-8, EC: 202-607-8


A.9/2 STOT RE 2 H373


A.4.2/1 Skin Sens. 1 H317


US-HAE/A1 Aquatic Acute 1 H400


US-HAE/C1 Aquatic Chronic 1 H410


A.1/4/Oral Acute Tox. 4 H302

>= 1% - < 3% 1,3-diphenylguanidine
Index number: 612-149-00-4, CAS: 102-06-7, EC: 203-002-1


A.7/2 Repr. 2 H361


A.3/2A Eye Irrit. 2A H319


A.8/3 STOT SE 3 H335


A.2/2 Skin Irrit. 2 H315


US-HAE/C2 Aquatic Chronic 2 H411


A.1/4/Oral Acute Tox. 4 H302

4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Immediately take off all contaminated clothing.
Remove contaminated clothing immediately and dispose of safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting. Obtain a medical examination.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show the packing or label.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
No particular treatment.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

In case of fire: Use Alcohol foam, carbon dioxide (CO2), dry chemical, water spray/water fog to extinguish.

Unsuitable extinguishing media

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

Hazardous combustion products:

None

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up

Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Do not use on extensive surface areas in premises where there are occupants.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, ensure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Avoid accumulating electrostatic charge.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

Safety electric system.

Storage temperature:

Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

ethanol; ethyl alcohol - CAS: 64-17-5

- OEL Type: EU - TWA(8h): 960 mg/m3, 500 ppm - Notes: GERMANY - AGW (BAuA - TRGS 900, 21/06/2010)
- OEL Type: EU - TWA(8h): 1900 mg/m3, 1000 ppm - STEL: 9500 mg/m3, 5000 ppm - Notes: FRANCE (INRS - ED984 : 2012) - TMP N°84

- OEL Type: ACGIH - STEL: 1000 ppm - Notes: A3 - URT irr
- OEL Type: National - TWA: 1000 ppm - Notes: UK
- OEL Type: National - TWA: 1907 mg/m3, 1000 ppm - Notes: Belgique

Toluene - CAS: 108-88-3

- OEL Type: ACGIH - TWA(8h): 20 ppm
- OEL Type: NIOSH REL - TWA: 375 mg/m3, 100 ppm
- OEL Type: ST - TWA: 560 mg/m3, 150 ppm
- OEL Type: TWA - TWA: 200 ppm
- OEL Type: EU - TWA(8h): 192 mg/m3, 50 ppm - STEL: 384 mg/m3, 100 ppm - Notes: Skin

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

- OEL Type: National - STEL: 980 mg/m3, 400 ppm - Notes: France
- OEL Type: National - TWA: 500 mg/m3, 200 ppm - Notes: DFG, Y - Germany
- OEL Type: National - TWA: 999 mg/m3, 400 ppm - STEL: 1250 mg/m3, 500 ppm - Notes: United Kingdom
- OEL Type: ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair
- OEL Type: National - TWA: 999 mg/m3, 400 ppm - STEL: 1250 mg/m3, 500 ppm
- OEL Type: OSHA PEL - TWA: 980 mg/m3, 400 ppm
- OEL Type: NIOSH REL - TWA: 980 mg/m3, 400 ppm - STEL: 1225 mg/m3, 500 ppm
- OEL Type: National - TWA: 500 mg/m3, 200 ppm - STEL(30min (Miw)): 1960 mg/m3, 800 ppm - Notes: Österreich

methanol - CAS: 67-56-1

- OEL Type: National - TWA(8h): 260 mg/m3, 200 ppm - STEL: 1300 mg/m3, 1000 ppm - Notes: France VLEC
- OEL Type: EU - TWA(8h): 260 mg/m3, 200 ppm - Notes: Skin
- OEL Type: ACGIH - TWA(8h): 200 ppm - STEL: 250 ppm - Notes: Skin, BEI - Headache, eye dam, dizziness, nausea
- OEL Type: TWA - TWA: 200 ppm

4-methylpentan-2-one; isobutyl methyl ketone - CAS: 108-10-1

- OEL Type: EU - TWA(8h): 83 mg/m3, 20 ppm - STEL: 208 mg/m3, 50 ppm
- OEL Type: ACGIH - TWA(8h): 20 ppm - STEL: 75 ppm - Notes: A3, BEI - URT irr, dizziness, headache
- OEL Type: National - TWA(4h): 83 mg/m3, 20 ppm - STEL: 208 mg/m3, 50 ppm - Behaviour: Binding - Notes: France

disulfiram; tetraethylthiuramdisulfide - CAS: 97-77-8

- OEL Type: ACGIH - TWA(8h): 2 mg/m3 - Notes: A4 - Vasodilation, nausea

DNEL Exposure Limit Values

ethanol; ethyl alcohol - CAS: 64-17-5

Worker Industry: 1900 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects - Notes: 1000ppm
Worker Industry: 950 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects - Notes: 500ppm
Worker Industry: 343 mg/kg b.w./day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

Worker Industry: 888 mg/kg - Consumer: 319 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 500 mg/kg - Consumer: 89 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 26 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

methanol - CAS: 67-56-1

Worker Industry: 40 mg/kg b.w./day - Consumer: 8 mg/kg b.w./day - Exposure: Human Dermal - Frequency: Short Term, systemic effects

Worker Industry: 40 mg/kg b.w./day - Consumer: 8 mg/kg b.w./day - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 260 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Industry: 260 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Industry: 260 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

4-methylpentan-2-one; isobutyl methyl ketone - CAS: 108-10-1

Worker Industry: 208 mg/m3 - Consumer: 155.2 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Industry: 208 mg/m3 - Consumer: 155.2 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects
Worker Industry: 11.8 mg/kg b.w./day - Consumer: 4.2 mg/kg b.w./day - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 83 mg/m3 - Consumer: 14.7 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 4.2 mg/kg b.w./day - Exposure: Human Oral - Frequency: Long Term, systemic effects
Worker Industry: 83 mg/m3 - Consumer: 14.7 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects

PNEC Exposure Limit Values

ethanol; ethyl alcohol - CAS: 64-17-5

Target: Fresh Water - Value: 0.96 mg/l
Target: Marine water - Value: 0.79 mg/l
Target: Freshwater sediments - Value: 3.6 mg/kg dw
Target: Marine water sediments - Value: 2.9 mg/kg dw
Target: Soil (agricultural) - Value: 0.63 mg/kg dw
Target: PNEC Oral (foodstuff) - Value: 0.72 g/kg

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

Target: Fresh Water - Value: 140.9 mg/l
Target: Marine water - Value: 140.9 mg/l
Target: Freshwater sediments - Value: 552 mg/kg
Target: Marine water sediments - Value: 552 mg/kg
Target: Soil (agricultural) - Value: 28 mg/kg
Target: Microorganisms in sewage treatments - Value: 2251 mg/l
Target: Water (intermittent discharge) - Value: 140.9 mg/l
Target: Oral (secondary poisoning) (foodstuff) - Value: 160 mg/kg

methanol - CAS: 67-56-1

Target: Fresh Water - Value: 20.8 mg/l
Target: Marine water - Value: 2.08 mg/l
Target: Freshwater sediments - Value: 77 mg/kg
Target: Marine water sediments - Value: 7.7 mg/kg
Target: Soil (agricultural) - Value: 3.18 mg/kg
Target: Microorganisms in sewage treatments - Value: 100 mg/l

4-methylpentan-2-one; isobutyl methyl ketone - CAS: 108-10-1

Target: Fresh Water - Value: 0.6 mg/l
Target: Marine water - Value: 0.06 mg/l
Target: Intermittent discharge - Value: 1.5 mg/l
Target: Sewage treatment plant - Value: 27.5 mg/l
Target: Freshwater sediments - Value: 8.27 mg/kg dw
Target: Marine water sediments - Value: 0.83 mg/kg dw
Target: Soil (agricultural) - Value: 1.3 mg/kg dw

Appropriate engineering controls:

None

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged.
Use adequate protective respiratory equipment.

Thermal Hazards:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Value	Method:	Notes
Physical state:	Liquid	--	--
Colour:	Clear	--	--
Odour:	Ketone Odor	--	--
Odour threshold:	N.A.	--	--
pH:	7.5	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	170 F	--	--
Flash Point (°F):	35	--	--
Flash point (°C):	1.5	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	2.07	--	--
Relative density:	0.82 g/cm3	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--

Substance Groups relevant properties	N.A.	--	--

10. STABILITY AND REACTIVITY

Reactivity

It may generate dangerous reactions (See subsections below)

Chemical stability

It may generate dangerous reactions (See subsections below)

Possibility of hazardous reactions

None

Conditions to avoid

Avoid accumulating electrostatic charge.

Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the product:

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Acute toxicity

Not classified

Based on available data, the classification criteria are not met

ATEmix - Oral 2540.83 mg/kg bw

ATEmix - Dermal 9230.77 mg/kg bw

ATEmix - Inhalation (Vapours) 338.462 mg/l

Skin corrosion/irritation

The product is classified: Skin Irrit. 2 H315

Serious eye damage/irritation

The product is classified: Eye Irrit. 2A H319

Respiratory or skin sensitisation

The product is classified: Skin Sens. 1 H317

Germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

Carcinogenicity

Not classified

Based on available data, the classification criteria are not met

Reproductive toxicity

The product is classified: Repr. 2 H361

STOT-single exposure

The product is classified: STOT SE 1 H370;STOT SE 3 H335;STOT SE 3 H336

STOT-repeated exposure

The product is classified: STOT RE 2 H373

Aspiration hazard

Not classified

Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

ethanol; ethyl alcohol - CAS: 64-17-5

Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 50 mg/m3

Toluene - CAS: 108-88-3
Acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat (Male, female) 28.1 mg/l - Notes: The component/mixture is moderately toxic after short term inhalation.
Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg - Notes: The component/mixture is moderately toxic after single contact with skin.
Test: LD50 - Route: Oral - Species: Rat (male) 5580 mg/kg
propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
Acute toxicity:
Test: LD50 - Route: Oral - Species: Rat = 4570 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat = 20 mg/l - Duration: 8h
Test: LC50 - Route: Inhalation Vapour - Species: Rat > 25000 mg/m3 - Duration: 6 hours
Test: LD50 - Route: Skin - Species: Rabbit = 12.800 mg/kg
Reproductive toxicity:
Test: NOAEL - Route: Oral - Species: Rat = 500 mg/kg
STOT-repeated exposure:
Test: NOAEL - Route: Inhalation - Species: Rat = 1.3 mg/l
Test: NOAEL - Route: Inhalation Vapour - Species: Rat (Male, female) = 12.5 mg/l
methanol - CAS: 67-56-1
Acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat = 128.2 mg/l - Duration: 4h
Test: LC50 - Route: Inhalation - Species: Rat = 87.6 mg/l
Test: LD50 - Route: Skin - Species: Rabbit = 17100 mg/kg
Test: LD0 - Route: Oral - Species: Human = 428 mg/kg
4-methylpentan-2-one; isobutyl methyl ketone - CAS: 108-10-1
Acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat < 16.4 mg/l - Duration: 4h - Source: OECD 403
Test: ATE - Route: Inhalation Vapour = 11 mg/l - Source: Reg. (CE) No. 1272/2008
Test: ATE - Route: Oral = 2080 mg/kg
Test: LD50 - Route: Oral - Species: Rat = 2080 mg/kg - Source: OECD 401
Test: LC50 - Route: Inhalation - Species: Rat >= 8.2 mg/l - Duration: 4h - Source: OECD 403
Carcinogenicity:
Test: NOAEL - Route: Oral - Species: Rat = 1.84 mg/l - Source: OECD 453
Reproductive toxicity:
Test: NOAEL - Route: Inhalation - Species: Rat = 4.1 mg/l - Source: OECD 416; Parental toxicity
Test: NOAEL (fertility) - Route: Inhalation - Species: Rat = 8.1 mg/l - Source: OECD 416
disulfiram; tetraethylthiuramdisulfide - CAS: 97-77-8
Acute toxicity:
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
Test: LD50 - Route: Oral - Species: Rat 500 mg/kg
1,3-diphenylguanidine - CAS: 102-06-7
Acute toxicity:
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg
Test: LD50 - Route: Oral - Species: Rat 350 mg/kg

Substance(s) listed on the NTP report on Carcinogens:
None.

Substance(s) listed on the IARC Monographs:
Toluene - Group 3
propan-2-ol; isopropyl alcohol; isopropanol - Group 3
4-methylpentan-2-one; isobutyl methyl ketone - Group 2B
disulfiram; tetraethylthiuramdisulfide - Group 3.
Substance(s) listed as OSHA Carcinogen(s):
None.
Substance(s) listed as NIOSH Carcinogen(s):
None.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Adopt good working practices, so that the product is not released into the environment.
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The product is classified: Aquatic Acute 2 - H401; Aquatic Chronic 2 - H411
ethanol; ethyl alcohol - CAS: 64-17-5
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 100 mg/l - Notes: Leuciscus idus
Endpoint: EC50 - Species: Algae = 275 mg/l - Duration h: 72 - Notes: Chlorella vulgaris
Endpoint: NOEC - Species: Algae = 3240 mg/l - Duration h: 120 - Notes: Skeletonema costatum
Endpoint: NOEC - Species: Daphnia = 9.6 mg/l - Duration h: 240 - Notes: Ceriodaphnia dubia
Endpoint: EC50 - Species: Daphnia = 857 mg/l - Duration h: 48 - Notes: Artemia salina nauplii
Toluene - CAS: 108-88-3
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Oncorhynchus mykiss 5.5 mg/l - Duration h: 96
Endpoint: EC50 - Species: Water flea 3.78 mg/l - Duration h: 48
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Oncorhynchus mykiss 1.39 mg/l - Duration h: 960
Endpoint: NOEC - Species: Water flea 0.74 mg/l - Duration h: 168
c) Bacteria toxicity:
Endpoint: EC50 - Species: bacteria 84 mg/l - Duration h: 24
propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 48 - Notes: Leuciscus melanotus
Endpoint: LC50 - Species: Fish = 9640 mg/l - Duration h: 96 - Notes: Pimephales promelas
Endpoint: LC50 - Species: Daphnia > 10.000 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72 - Notes: Scenedesmus subspicatus
Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48
Endpoint: NOAEC - Species: Algae = 1800 mg/l - Duration h: 84 - Notes: Algues vertes / Green algae
b) Aquatic chronic toxicity:
Endpoint: NOEC - Species: Daphnia = 100 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata
c) Bacteria toxicity:
Species: bacteria = 1.050 mg/l
methanol - CAS: 67-56-1
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Fish = 15400 mg/l - Duration h: 96
Endpoint: NOEC - Species: Fish = 7900 mg/l - Duration h: 200

Endpoint: EC50 - Species: Daphnia > 10000 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 22000 mg/l - Duration h: 96
Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96 - Notes: Carpe

4-methylpentan-2-one; isobutyl methyl ketone - CAS: 108-10-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 179 mg/l - Duration h: 96 - Notes: Danio rerio; OECD 203
Endpoint: EC50 - Species: Daphnia > 200 mg/l - Duration h: 48 - Notes: Daphnia magna; OECD 202
Endpoint: NOEC - Species: Daphnia = 30 mg/l - Duration h: 504 - Notes: Daphnia magna; OECD 211
Endpoint: EC50 - Species: bacteria = 275 mg/l - Duration h: 16 - Notes: Pseudomonas putida; DIN 38412 T.8
Endpoint: ErC50 - Species: Aquatic plants > 146 mg/l - Duration h: 168 - Notes: OECD 221 (Lemna gibba)

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Aquatic invertebrates >= 30 mg/l - Duration h: 504 - Notes: OECD 211, Daphnia magna
Endpoint: NOEC - Species: Aquatic invertebrates <= 35 mg/l - Duration h: 504 - Notes: OECD 211, Daphnia magna

1,3-diphenylguanidine - CAS: 102-06-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Oryzias latipes 17 mg/l - Duration h: 96
Endpoint: LC50 - Species: Oryzias latipes 10 mg/l - Duration h: 48

e) Plant toxicity:

Endpoint: EC50 - Species: Algae 2.9 mg/l - Duration h: 72
Endpoint: EC50 - Species: Daphnia Magna 8.1 mg/l - Duration h: 48

Persistence and degradability

ethanol; ethyl alcohol - CAS: 64-17-5

Biodegradability: Readily biodegradable

Toluene - CAS: 108-88-3

Biodegradability: Biodegradability rate - Test: Aerobic - Duration: 20 days - %: 86 - Notes: Readily biodegradable

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

Biodegradability: Readily biodegradable - Duration: 5 days - %: 53 - Notes: Aerobie, activated sludge
Biodegradability: Oxidizes rapidly by photochemical reactions in air.
Biodegradability: Photodegradation (in air) - overall half-life time - Test: Degradation half-life in fresh or estuarine water - Duration: 33 hours

methanol - CAS: 67-56-1

Biodegradability: Readily biodegradable - Duration: 20 days - %: 95%

4-methylpentan-2-one; isobutyl methyl ketone - CAS: 108-10-1

Biodegradability: Readily biodegradable - Test: OECD 301F - %: 83%

Bioaccumulative potential

ethanol; ethyl alcohol - CAS: 64-17-5

Log Pow -0.35

Toluene - CAS: 108-88-3

Potentially bioaccumulative. - Test: BCF - Bioconcentrantion factor 90

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0

Estimated not significantly bioaccumulative.
Log Pow <=4
Log Kow 0.05 - Notes: 25°C

methanol - CAS: 67-56-1

Log Pow -0.77

4-methylpentan-2-one; isobutyl methyl ketone - CAS: 108-10-1

Log Kow - Test: OECD 117 1.9

Mobility in soil

N.A.

Other adverse effects

No harmful effects expected.

13. DISPOSAL CONSIDERATIONS

Waste treatment and disposal methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

UN number

ADR-UN Number: 1263
DOT number: UN1263
IATA-UN Number: 1263
IMDG-UN Number: 1263

UN proper shipping name

ADR-Shipping Name: PAINT RELATED MATERIAL
DOT-Shipping Name: Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base or Paint related material including paint thinning, drying, removing, or reducing compound
IATA-Shipping Name: PAINT RELATED MATERIAL
IMDG-Shipping Name: PAINT RELATED MATERIAL

Transport hazard class(es)

ADR-Class: 3
DOT Hazard Class: 3
ADR - Hazard identification number: 33
IATA-Class: 3
IATA-Label: 3
IMDG-Class: 3

Packing group

ADR-Packing Group: II
DOT Packing group: II
IATA-Packing group: II
IMDG-Packing group: II

Environmental hazards

ADR-Enviromental Pollutant: No
IMDG-Marine pollutant: No

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

N.A.

Special precautions

DOT Special provisions: 149, 367, B52, B131, IB2, T4, TP1, TP8, TP28
ADR-Subsidiary hazards: -
ADR-S.P.: 163 367 640D 650
ADR-Transport category (Tunnel restriction code): 2 (D/E)
IATA-Passenger Aircraft: 353
IATA-Subsidiary hazards: -

IATA-Cargo Aircraft:	364
IATA-S.P.:	A3 A72 A192
IATA-ERG:	3L
IMDG-EmS:	F-E , S-E
IMDG-Subsidiary hazards:	-
IMDG-Stowage and handling:	Category B
IMDG-Segregation:	-

Q.L.: 5L
Q.E.: E2

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory: All the components of this product are listed as active on or are exempt from the TSCA Inventory..

TSCA sections for substances listed in section 3:
ethanol; ethyl alcohol is listed in TSCA Section 8b
Toluene is listed in TSCA Section 8a - CAIR, Section 8d HSDR, Section 8b
propan-2-ol; isopropyl alcohol; isopropanol is listed in TSCA Section 8d HSDR, Section 8b
methanol is listed in TSCA Section 8b
4-methylpentan-2-one; isobutyl methyl ketone is listed in TSCA Section 8d HSDR, Section 8b
Water is listed in TSCA Section 8b
disulfiram; tetraethylthiuramdisulfide is listed in TSCA Section 8d HSDR, Section 8b, Section 8a - PAIR
1,3-diphenylguanidine is listed in TSCA Section 8b.

SARA - Superfund Amendments and Reauthorization Act

Section 302 Extremely Hazardous Substances: no substances listed.
Section 304 Hazardous substances: Toluene, methanol, 4-methylpentan-2-one; isobutyl methyl ketone.
Section 313 Toxic chemical list: Toluene, propan-2-ol; isopropyl alcohol; isopropanol, methanol, 4-methylpentan-2-one; isobutyl methyl ketone.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA: Toluene - Reportable quantity: 1000 pounds
methanol - Reportable quantity: 5000 pounds
4-methylpentan-2-one; isobutyl methyl ketone - Reportable quantity: 5000 pounds.
Reportable quantity for mixture: 3125 pounds.

CAA - Clean Air Act

CAA listed substances:
ethanol; ethyl alcohol is listed in CAA Section 111
Toluene is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON
propan-2-ol; isopropyl alcohol; isopropanol is listed in CAA Section 111
methanol is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON
4-methylpentan-2-one; isobutyl methyl ketone is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON.

CWA - Clean Water Act

CWA listed substances:
ethanol; ethyl alcohol is listed in CWA Section 304

Toluene is listed in CWA Section 304, Section 307, Section 311, CWA Priority Pollutants
propan-2-ol; isopropyl alcohol; isopropanol is listed in CWA Section 304
methanol is listed in CWA Section 304
4-methylpentan-2-one; isobutyl methyl ketone is listed in CWA Section 304.

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:
Toluene - Listed as reproductive toxicant
methanol - Listed as reproductive toxicant
4-methylpentan-2-one; isobutyl methyl ketone - Listed as carcinogen and reproductive toxicant.

Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:
ethanol; ethyl alcohol
Toluene
propan-2-ol; isopropyl alcohol; isopropanol
methanol
4-methylpentan-2-one; isobutyl methyl ketone
disulfiram; tetraethylthiuramdisulfide.

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:
ethanol; ethyl alcohol
Toluene
propan-2-ol; isopropyl alcohol; isopropanol
methanol
4-methylpentan-2-one; isobutyl methyl ketone
disulfiram; tetraethylthiuramdisulfide.

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:
ethanol; ethyl alcohol
Toluene
propan-2-ol; isopropyl alcohol; isopropanol
methanol
4-methylpentan-2-one; isobutyl methyl ketone
disulfiram; tetraethylthiuramdisulfide.

The following substance(s) in this product has/have an identification by CAS number either in countries not affected by the REACH regulation or in regulations not yet updated to reflect the new naming convention for hydrocarbon solvents:

16. OTHER INFORMATION

Full text of phrases referred to in Section 3:

H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.
H335 May cause respiratory irritation.
H225 Highly flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
H315 Causes skin irritation.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H304 May be fatal if swallowed and enters airways.
H401 Toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
H370 Causes damage to organs.
H332 Harmful if inhaled.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H302 Harmful if swallowed.
H361 Suspected of damaging fertility or the unborn child.

According to TSCA section 3(2)(B)(i) : a hydrated form of a chemical substance is considered a mixture of the corresponding anhydrous form and water.

Disclaimer:
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.
This Safety Data Sheet cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
TOTAL VOC'S (TVOC) /	

NONEXEMPT VOC'S (CVOC): Using California South Coast Air Quality Management District (SCAQMD) Rule 1143.

STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average

Safety Data Sheet date: 6/27/2025, version 1