



Developer Solution

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 16 April 2020 Revision date: 05 January 2026 Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Developer Solution
Product part number : C50-CHEM-002

1.2. Recommended Use and Restrictions on Use

Use of the substance/mixture : Developer Solution

1.3. Supplier

Company : Breath Monitoring, LLC.
5270 California Ave, Suite 100
Irvine, CA 92617
Telephone : (850)-743-9812
Email : inquiries@invoy.com

1.4. Emergency Telephone Number

Emergency number : (850)-743-9812 (Monday to Friday; 9am – 5pm)

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

GHS US classification

Flammable liquids Category 2 : Highly flammable liquid and vapor.
Acute toxicity (oral) Category 4 : Harmful if swallowed.
Acute toxicity (dermal) Category 4 : Harmful in contact with skin.
Acute toxicity (inhalation: dust, mist) Category 4 : Harmful if inhaled.
Specific target organ toxicity (single exposure) Category 1 : Causes damage to organs (optic nerve, central nervous system).

2.2. GHS Label Elements, Including Precautionary Statements

GHS US Labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger.

Hazard statements (GHS US) : Highly flammable liquid and vapor.
Harmful if swallowed, in contact with skin or if inhaled.
Causes damage to organs (optic nerve, central nervous system).

Precautionary statements (GHS US) : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe mist, spray, vapors.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, eye protection.
If swallowed: Call a poison center or doctor if you feel unwell.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove person to fresh air and keep comfortable for breathing.

Developer Solution

Safety Data Sheet

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

If exposed: Call a poison center/doctor.
Call a poison center or doctor if you feel unwell.
Rinse mouth.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use alcohol resistant foam, Dry chemical, carbon dioxide (CO₂), Water spray or fog to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
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)

Not applicable.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Name	Product Identifier	%	GHS US Classification
methanol	(CAS-No.) 67-56-1	15 – 25	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
Ferrate(2-), pentakis(cyano-C)nitrosyl-, disodium, dihydrate, (OC-6-22)-	(CAS-No.) 13755-38-9	2 – 6	Acute Tox. 3 (Oral), H301

SECTION 4: First-Aid Measures

4.1. Description of First-Aid Measures

- First-aid measures general : IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Wash immediately with lots of water (15 minutes)/shower.
- First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Seek medical advice (show the label where possible).
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Seek immediate medical advice.

4.2. Most Important Symptoms and Effects (Acute and Delayed)

- Symptoms/effects : Symptoms may be delayed.
- Symptoms/effects after inhalation : Harmful if inhaled. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.
- Symptoms/effects after skin contact : Harmful in contact with skin. Components of the product may be absorbed into the body through the skin.
- Symptoms/effects after eye contact : May cause slight temporary irritation.
- Symptoms/effects after ingestion : Harmful if swallowed. Can cause blindness.

4.3. Immediate Medical Attention and Special Treatment, if Necessary

Treat symptomatically. Contains : Methanol.

SECTION 5: Fire-Fighting Measures

5.1. Suitable (and Unsuitable) Extinguishing Media

- Suitable extinguishing media : Alcohol foam. Dry powder. Carbon dioxide. Water spray. Water fog.
- 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. Thermal decomposition can lead to the release of irritating gases and vapors. On combustion, forms: carbon oxides (CO and CO₂).

Developer Solution

Safety Data Sheet

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

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| Explosion hazard | : Flammable or explosive vapor/air mixtures may be formed. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors. |
| Hazardous decomposition products in case of fire | : Toxic and corrosive vapors may be released. |

5.3. Special Protective Equipment and Precautions for Fire-Fighters

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| 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. |
| Other information | : Do not allow run-off from fire fighting to enter drains or water courses. |

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

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| General measures | : Evacuate unnecessary personnel. |
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6.1.1. For Non-Emergency Personnel

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|----------------------|--|
| Protective equipment | : Wear personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Avoid contact with skin, eyes and clothing. No open flames, no sparks, and no smoking. Do not breathe mist, spray, vapors. |

6.1.2. For Emergency Responders

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|----------------------|---|
| 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 | : Stop leak if safe to do so. Ventilate spillage area. Eliminate ignition sources. |

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

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|-------------------------|---|
| For containment | : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Do not use sawdust or other combustible material to absorb spilled material. |
| Methods for cleaning up | : Take up liquid spill into inert absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Use only non-sparking tools. Store away from other materials. Notify authorities if product enters sewers or public waters. |
| Other information | : Dispose of materials or solid residues at an authorized site. |

6.4. Reference to Other Sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13 : "Disposal considerations".

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling

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| Additional hazards when processed | : Container remains hazardous when empty. Continue to observe all precautions |
| Precautions for safe handling | : Provide good ventilation in process area to prevent formation of vapor. Do not get in eyes, on skin, or on clothing. Do not breathe mist, spray, vapors. Use only outdoors or in a well-ventilated area. Wear personal protective equipment. 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. Use explosion-proof equipment. Flammable vapors may accumulate in the container. |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Always wash hands after handling the product. |

7.2. Conditions for Safe Storage, Including Any Incompatibilities

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|------------------------|--|
| Technical measures | : Ground/bond container and receiving equipment. |
| Storage conditions | : Keep only in the original container in a cool well ventilated place. Keep container tightly closed. Store locked up. |
| Incompatible materials | : Strong oxidizing agents. Acids. Reducing agents. |

Developer Solution

Safety Data Sheet

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

SECTION 8: Exposure Controls/Personal Protection

8.1. Control Parameters

Developer Solution	
No additional information available.	
methanol (67-56-1)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Methanol
ACGIH TWA (ppm)	200 ppm
ACGIH STEL (ppm)	250 ppm
USA - ACGIH - Biological Exposure Indices	
Local name	METHANOL
Biological Exposure Indices (BEI)	15 mg/l Parameter: Methanol - Medium: urine - Sampling time: End of shift - Notations: B, Ns
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Methyl alcohol
OSHA PEL (TWA) (mg/m ³)	260 mg/m ³
OSHA PEL (TWA) (ppm)	200 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Ferrate(2-), pentakis(cyano-C)nitrosyl-, disodium, dihydrate, (OC-6-22)- (13755-38-9)	
No additional information available	

8.2. Appropriate Engineering Controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Prevent entry to sewers and public waters. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

8.3. Individual Protection Measures/Personal Protective Equipment

Hand protection:

Impermeable protective gloves

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Use chemically protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits

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	: Viscous.
Color	: Amber.
Odor	: Slight.
Odor threshold	: No data available.
pH	: No data available.
Melting point	: No data available.

Developer Solution

Safety Data Sheet

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

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)	: Not applicable.
Vapor pressure	: No data available.
Relative vapor density at 20 °C	: No data available.
Relative density	: No data available.
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.

9.2. Other Information

No additional information available.

SECTION 10: Stability and Reactivity

10.1. Reactivity

Highly flammable liquid and vapor. May react violently with oxidants.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of Hazardous Reactions

Vapors may form explosive mixture with air.

10.4. Conditions to Avoid

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

10.5. Incompatible Materials

Strong oxidizing agents. Acids. Reducing agents.

10.6. Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition can lead to the release of irritating gases and vapors.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Harmful in contact with skin.
Acute toxicity (inhalation)	: Harmful if inhaled.

ATE US (oral)	323 mg/kg body weight
ATE US (dermal)	1200 mg/kg body weight
ATE US (dust, mist)	2 mg/l/4h
methanol (67-56-1)	
LD50 oral rat	6200 mg/kg
LD50 dermal rabbit	15840 mg/kg
LC50 inhalation rat (ppm)	22500 ppm (Exposure time: 8 h)
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

Developer Solution

Safety Data Sheet

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

Ferrate(2-), pentakis(cyano-C)nitrosyl-, disodium, dihydrate, (OC-6-22)- (13755-38-9)

ATE US (oral)	100 mg/kg body weight
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitization	: Not classified (Based on available data, the classification criteria are not met)
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	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Causes damage to organs (optic nerve, central nervous system).

methanol (67-56-1)

STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Viscosity, kinematic	: No data available
Symptoms/effects	: Symptoms may be delayed.
Symptoms/effects after inhalation	: Harmful if inhaled. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.
Symptoms/effects after skin contact	: Harmful in contact with skin. Components of the product may be absorbed into the body through the skin.
Symptoms/effects after eye contact	: May cause slight temporary irritation.
Symptoms/effects after ingestion	: Harmful if swallowed. Can cause blindness.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological Information

12.1. Toxicity

Ecology - general : This material has not been tested for environmental effects.

methanol (67-56-1)

LC50 fish 1	28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

12.2. Persistence and Degradability

No additional information available.

12.3. Bioaccumulative Potential

methanol (67-56-1)

BCF fish 1	< 10
Partition coefficient n-octanol/water (Log Pow)	-0.77

12.4. Mobility in Soil

No additional information available.

12.5. Other Adverse Effects

Other information : Avoid release to the environment. Notify authorities if product enters sewers or public waters.

SECTION 13: Disposal Considerations

13.1. Disposal Methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Flammable vapors may accumulate in the container.

Ecology - waste materials : Avoid release to the environment. Notify authorities if product enters sewers or public waters.

Developer Solution

Safety Data Sheet

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

SECTION 14: Transport Information

Department of Transportation (DOT)

In accordance with DOT

Transport document description	: UN1230 Methanol (MIXTURE), 3 (6.1), II
UN-No.(DOT)	: UN1230
Proper Shipping Name (DOT)	: Methanol
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT)	: II - Medium Danger
Subsidiary risk (DOT)	: 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
Hazard labels (DOT)	: 3 - Flammable liquid 6.1 - Poison



DOT Symbols	: + - Fixes (cannot be altered) proper shipping name, hazard class, and packing group, I - Proper shipping name appropriate for international and domestic transportation
Other information	: No supplementary information available.

Transportation of Dangerous Goods

Transport document description	: UN1230 METHANOL (MIXTURE), 3 (6.1), II
UN-No. (TDG)	: UN1230
Proper Shipping Name (Transportation of Dangerous Goods)	: METHANOL
TDG Primary Hazard Classes	: 3 - Class 3 - Flammable Liquids
Packing group	: II - Medium Danger
TDG Subsidiary Classes	: 6.1

Transport by Sea

Transport document description (IMDG)	: UN 1230 METHANOL (MIXTURE), 3 (6.1), II (12°C c.c.)
UN-No. (IMDG)	: 1230
Proper Shipping Name (IMDG)	: METHANOL
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: II - substances presenting medium danger
Subsidiary risks (IMDG)	: 6.1 - Toxic substances
Limited quantities (IMDG)	: 1 L

Air Transport

Transport document description (IATA)	: UN 1230 Methanol (MIXTURE), 3 (6.1), II
UN-No. (IATA)	: 1230
Proper Shipping Name (IATA)	: Methanol
Class (IATA)	: 3 - Flammable Liquids
Packing group (IATA)	: II - Medium Danger
Subsidiary hazards (IATA)	: 6.1 - Toxic substances

Developer Solution

Safety Data Sheet

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

SECTION 15: Regulatory Information

15.1. US Federal Regulations

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

Ferrate(2-), pentakis(cyano-C)nitrosyl-, disodium, dihydrate, (OC-6-22)-	CAS-No. 13755-38-9	2 – 6%
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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.

methanol	CAS-No. 67-56-1	15 – 25%
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methanol (67-56-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 5000 lb

15.2. International Regulations

Canada

methanol (67-56-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

methanol (67-56-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National Regulations

methanol (67-56-1)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Poisonous and Deleterious Substances Control Law
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Ferrate(2-), pentakis(cyano-C)nitrosyl-, disodium, dihydrate, (OC-6-22)- (13755-38-9)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Poisonous and Deleterious Substances Control Law
Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State Regulations

 **WARNING:** This product can expose you to methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or Local Regulations
methanol(67-56-1)	U.S. - Maine - Chemicals of Concern

Developer Solution

Safety Data Sheet

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

SECTION 16: Other Information

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

Revision date : 05 January 2026

Other information : None.

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.