1 Identification

- · Product identifier
- · Product Name: Stock Organic Standard
- · Part Number: 5243-G
- · Application of the substance / the mixture Certified Reference Material
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

SPEX CertiPrep, LLC.

203 Norcross Ave, Metuchen,

NJ 08840 USA

- · Information department: product safety department
- · Emergency telephone number:

Emergency Phone Number (24 hours)

CHEMTREC (800-424-9300)

Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 Health hazard

Carc. 1A H350 May cause cancer.

STOT SE 1 H370 Causes damage to organs.

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







GHS02

GHS06

GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

methanol

vinyl chloride

bromomethane

· Hazard statements

Highly flammable liquid and vapor.

Toxic if inhaled.

May cause cancer.

Causes damage to organs.

· Precautionary statements

 ${\it Keep away from heat/sparks/open flames/hot surfaces.\ No\ smoking.}$

 $\label{thm:continuous} Use\ explosion-proof\ electrical/ventilating/lighting/equipment.$

Do not breathe dust/fume/gas/mist/vapors/spray.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

(Contd. of page 1)

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Product Name: Stock Organic Standard

- · Classification system:
- · NFPA ratings (scale 0 4)



· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

| • | | |
|--|-------------------------|-------|
| · Dangerous components: | | |
| 67-56-1 | methanol | 98.8% |
| 74-87-3 | chloromethane | 0.2% |
| 75-01-4 | vinyl chloride | 0.2% |
| · Chemical identification of the substance/preparation | | |
| | bromomethane | 0.2% |
| 75-71-8 | dichlorodifluoromethane | 0.2% |
| | trichlorofluoromethane | 0.2% |
| 75-45-6 | chlorodifluoromethane | 0.2% |

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- $\cdot \textit{After skin contact:} \ \textit{Immediately wash with water and soap and rinse thoroughly}.$
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- $\cdot \textit{After swallowing:} \ Do \ not \ induce \ vomiting; \ immediately \ call \ for \ medical \ help.$
- $\cdot \textit{Information for Doctor:}$
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

(Contd. on page 3)

Product Name: Stock Organic Standard

(Contd. of page 2)

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

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

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

· Components with limit values that require monitoring at the workplace:

67-56-1 methanol

PEL Long-term value: 260 mg/m³, 200 ppm

REL Short-term value: 325 mg/m³, 250 ppm

Long-term value: 260 mg/m³, 200 ppm

okiii

TLV Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm

Long-term value: 262 mg/m³, 200 ppn

Skin; BEI

74-83-9 bromomethane

PEL Ceiling limit value: 80 mg/m³, 20 ppm

Skin

REL See Pocket Guide App. A

TLV Long-term value: 3.9 mg/m³, 1 ppm

Skin

75-69-4 trichlorofluoromethane

PEL Long-term value: 5600 mg/m³, 1000 ppm

REL Ceiling limit value: 5600 mg/m³, 1000 ppm

TLV Ceiling limit value: 5620 mg/m³, 1000 ppm

75-01-4 vinyl chloride

PEL Short-term value: 5* ppm

Long-term value: 1 ppm

*Avg. not exceeding any 15 min; see 29CFR1910.1017

REL See Pocket Guide App.A

(Contd. on page 4)

Product Name: Stock Organic Standard

(Contd. of page 3)

TLV Long-term value: 2.6 mg/m³, 1 ppm

· Ingredients with biological limit values:

67-56-1 methanol

BEI 15 mg/L

Medium: urine Time: end of shift

Parameter: Methanol (background, nonspecific)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

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

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

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

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

· Penetration time of glove material

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

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- $\cdot \textit{Information on basic physical and chemical properties}$
- · General Information
- · Appearance:

· pH-value:

Form: Liquid

Color: According to product specification
Odor: Characteristic

Not applicable.

• Odour Threshold: Not applicable.

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 64 °C (147 °F)

• Flash point: 11 °C (52 °F)

· Flammability (solid, gaseous): Not applicable.

• Ignition temperature: 455 °C (851 °F)
• Decomposition temperature: Not applicable.

· Auto igniting: Product is not selfigniting.

• Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

(Contd. on page 5)

Product Name: Stock Organic Standard

| | | (Contd. of page |
|---|--|-----------------|
| · Explosion limits: | | |
| Lower: | 5.5 Vol % | |
| Upper: | 44.0 Vol % | |
| · Vapor pressure at 20 °C (68 °F): | 128 hPa (96 mm Hg) | |
| · Density | Not applicable. | |
| Relative density | Not applicable. | |
| · Vapor density | Not applicable. | |
| · Evaporation rate | Not applicable. | |
| · Solubility in / Miscibility with | | |
| Water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol/wate | er): Not applicable. | |
| · Viscosity: | | |
| Dynamic: | Not applicable. | |
| Kinematic: | Not applicable. | |
| · Solvent content: | | |
| Organic solvents: | 99.0 % | |
| VOC content: | 98.8 % | |
| · Other information | No further relevant information available. | |

10 Stability and reactivity

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

| · Atue wxi | · Acute toxicity. | | | | | | |
|------------------------------------|--|----------------------|--|--|--|--|--|
| · LD/LC50 1 | · LD/LC50 values that are relevant for classification: | | | | | | |
| 67-56-1 m | 67-56-1 methanol | | | | | | |
| Oral | LD50 | 5628 mg/kg (rat) | | | | | |
| Dermal | LD50 | 15800 mg/kg (rabbit) | | | | | |
| 74-83-9 br | 74-83-9 bromomethane | | | | | | |
| Oral | LD50 | 214 mg/kg (rat) | | | | | |
| Inhalative LC50/4 h 302 mg/l (rat) | | 302 mg/l (rat) | | | | | |
| 75-69-4 tri | chlorofluo | omethane | | | | | |
| Oral | LD50 | >15000 mg/kg (rat) | | | | | |
| 75-01-4 vii | nyl chlorid | le e | | | | | |
| Oral | LD50 | 500 mg/kg (rat) | | | | | |
| D | Duine and impired off of | | | | | | |

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic

Carcinogenic.

· Carcinogenic categories

| Curemogenic cuicgories | | | | | | | |
|--|-----------------------|-------|--|--|--|--|--|
| · IARC (International Agency for Research on Cancer) | | | | | | | |
| 74-83-9 | bromomethane | 3 | | | | | |
| 74-87-3 | chloromethane | 3 | | | | | |
| 75-01-4 | vinyl chloride | 1 | | | | | |
| 75-45-6 | chlorodifluoromethane | 3 | | | | | |
| | | 1 1 0 | | | | | |

(Contd. on page 6)

Product Name: Stock Organic Standard

(Contd. of page 5)

· NTP (National Toxicology Program)

75-01-4 vinyl chloride

K

· OSHA-Ca (Occupational Safety & Health Administration)

75-01-4 vinyl chloride

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

- · UN-Number
- · DOT, ADR, IMDG, IATA

UN1230

· UN proper shipping name

· DOT, IATA

Methanol

 $\cdot ADR$

1230 Methanol

· IMDG

METHANOL

- · Transport hazard class(es)
- $\cdot DOT$





· Class · Label 3 Flammable liquids

3, 6.1

 $\cdot ADR$





· Class · Label 3 Flammable liquids

3+6.1

(Contd. on page 7)

Product Name: Stock Organic Standard

(Contd. of page 6) · IMDG · Class 3 Flammable liquids · Label 3/6.1 \cdot IATA · Class 3 Flammable liquids · Label 3(6.1)· Packing group · DOT, ADR, IMDG, IATA II · Environmental hazards: Not applicable. · Special precautions for user Warning: Flammable liquids · Danger code (Kemler): 336 F-E,S-D· EMS Number: · Stowage Category · Stowage Code SW2 Clear of living quarters. · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Not applicable. · Transport/Additional information: · Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml \cdot IMDG 1L· Limited quantities (LQ) · Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

UN 1230 METHANOL, 3 (6.1), II

15 Regulatory information

· UN "Model Regulation":

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

| · Section | 355 (extremel | v hazardous | substances): |
|-----------|---------------|-------------|--------------|

74-83-9 bromomethane

· Section 313 (Specific toxic chemical listings):

All ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

75-01-4 vinyl chloride

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

74-87-3 chloromethane

Chemicals known to cause developmental toxicity:

67-56-1 methanol

74-83-9 bromomethane

(Contd. on page 8)

Product Name: Stock Organic Standard

(Contd. of page 7) 74-87-3 chloromethane · Carcinogenic categories · EPA (Environmental Protection Agency) 74-83-9 bromomethane 74-87-3 chloromethane D. CBD 75-01-4 vinyl chloride A, K/L · TLV (Threshold Limit Value established by ACGIH) 74-83-9 bromomethane A474-87-3 chloromethane A4 75-71-8 dichlorodifluoromethane A475-69-4 trichlorofluoromethane A475-01-4 vinyl chloride A175-45-6 chlorodifluoromethane A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

74-83-9 bromomethane

74-87-3 chloromethane 75-01-4 vinyl chloride

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms







GHS02

GHS06

GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

methanol

vinyl chloride

bromomethane

· Hazard statements

Highly flammable liquid and vapor.

Toxic if inhaled.

May cause cancer.

Causes damage to organs.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

 $Use\ explosion-proof\ electrical/ventilating/lighting/equipment.$

 $Do \ not \ breathe \ dust/fume/gas/mist/vapors/spray.$

 ${\it If on skin (or hair): Take of fimme diately all contaminated clothing. Rinse skin with water/shower.}$

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · National regulations:
- · Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases

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

16 Other information

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

- · Department issuing SDS: product safety department
- · Contact:

SPEX CertiPrep, LLC.

1-732-549-7144

- · Date of preparation / last revision 06/10/2016 / -
- $\cdot \textit{Abbreviations and acronyms:}$

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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Safety Data Sheet acc. to OSHA HCS

Printing date 06/10/2016 Reviewed on 06/10/2016

Product Name: Stock Organic Standard

EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

CAS: Chemical Abstracts Service (division of the American NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit BEI: Biological Exposure Limit BEI: Biological Exposure Limit

REL: Recommended Exposure Limit
BEl: Biological Exposure Limit
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Acute Tox. 3: Acute toxicity, Hazard Category 3
Carc. IA: Carcinogenicity, Hazard Category IA
STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category I

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