

## 1 Identification

### Product identifier

**Product Name:** Base/Neutral Surrogate Mix

**Part Name:** ECS-Z-002

### Restrictions

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

**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  
732-549-7144  
USMet-CRMSales@antylia.com

**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



GHS08 Health hazard

Carcinogenicity 2

H351 Suspected of causing cancer.

Toxic to Reproduction 2

H361 Suspected of damaging fertility or the unborn child.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Skin Irritation 2

H315 Causes skin irritation.

Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

### Label elements

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

### Hazard pictograms



GHS07



GHS08

### Signal word

Warning

### Hazard-determining components of labeling:

dichloromethane

Nitrobenzene-d5

### Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H336 May cause drowsiness or dizziness.

### Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

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P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 1

Fire = 1

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 1

Fire = 1

Reactivity = 0

· 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:

75-09-2	dichloromethane	99.7%
4165-60-0	Nitrobenzene-d5	0.1%

· Chemical identification of the substance/preparation

321-60-8	2-Fluorobiphenyl	0.1%
1718-51-0	p-Terphenyl-d14	0.1%

### 4 First-aid measures

· Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact: Immediately rinse with water.

· After eye contact: Rinse opened eye for several minutes under running water.

· After swallowing:

Immediately call a doctor.

Do not give anything to eat or drink - Do not induce vomiting

· 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: Use fire fighting measures that suit the environment.

· Special hazards arising from the substance or mixture No further relevant information available.

· Advice for firefighters

· Protective equipment: No special measures required.

### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

· Environmental precautions: 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.

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- **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.
- **Protective Action Criteria for Chemicals**

· <b>PAC-1:</b>		
75-09-2	dichloromethane	200 ppm
· <b>PAC-2:</b>		
75-09-2	dichloromethane	560 ppm
· <b>PAC-3:</b>		
75-09-2	dichloromethane	6,900 ppm

## 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 respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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:**  
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
At this time, the remaining constituent has no known exposure limits.

<b>75-09-2 dichloromethane</b>	
PEL	Short-term value: 125 ppm Long-term value: 25 ppm see 29 CFR 1910.1052
REL	See Pocket Guide App. A
TLV	Long-term value: 50 ppm BEI, A3

- **Ingredients with biological limit values:**

<b>75-09-2 dichloromethane</b>	
BEI	0.3 mg/L Medium: urine Time: end of shift Parameter: Dichloromethane (semi-quantitative)

- **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.
- **Respiratory protection:**  
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.

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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:** Goggles recommended during refilling.

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

Color: According to product specification

· **Odor:** Characteristic

· **Odour Threshold:** Not applicable.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 40 °C (104 °F)

· **Flash point:** > 100 °C (> 212 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 605 °C (1,121 °F)

· **Decomposition temperature:** Not applicable.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: 13 Vol %

Upper: 22 Vol %

· **Vapor pressure at 20 °C (68 °F):** 453 hPa (339.8 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/water):** Not applicable.

· **Viscosity:**

Dynamic: Not applicable.

Kinematic: Not applicable.

· **Solvent content:**

Organic solvents: 99.7 %

VOC content: 0.00 %

Solids content: 0.0 %

· **Other information** No further relevant information available.

## 10 Stability and reactivity

· **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.

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## 11 Toxicological information

### · Information on toxicological effects

#### · Acute toxicity:

#### · LD/LC50 values that are relevant for classification:

##### 75-09-2 dichloromethane

Oral LD50 1,600 mg/kg (rat)

Inhalative LC50/4 h 88 mg/l (rat)

#### · Primary irritant effect:

· on the skin: Irritant to skin and mucous membranes.

· 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:

Harmful

Irritant

Product is suspected to cause damage to fertility.

Product is suspected to cause birth defects.

#### · Carcinogenic categories

#### · IARC (International Agency for Research on Cancer)

75-09-2 dichloromethane

2A

#### · NTP (National Toxicology Program)

75-09-2 dichloromethane

R

#### · OSHA-Ca (Occupational Safety & Health Administration)

75-09-2 dichloromethane

## 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

UN1593

### · UN proper shipping name

#### · DOT

Dichloromethane

#### · ADR

1593 DICHLOROMETHANE

#### · IMDG, IATA

DICHLOROMETHANE

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· <b>Transport hazard class(es)</b> · <b>DOT</b> 	
· <b>Class</b> · <b>Label</b>	6.1 Toxic substances 6.1
· <b>ADR, IMDG, IATA</b> 	
· <b>Class</b> · <b>Label</b>	6.1 Toxic substances 6.1
· <b>Packing group</b> · <b>DOT, ADR, IMDG, IATA</b>	III
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b> · <b>Hazard identification number (Kemler code):</b> · <b>EMS Number:</b> · <b>Segregation groups</b> · <b>Stowage Category</b> · <b>Stowage Code</b>	Warning: Toxic substances 60 F-A,S-B (SGG1) Acids B SW2 Clear of living quarters.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> Not applicable.	
· <b>Transport/Additional information:</b>	
· <b>ADR</b> · <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>IMDG</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b>	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 1593 DICHLOROMETHANE, 6.1, III

## 15 Regulatory information

· <b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b> · <b>Sara</b>		
· <b>Section 313 (Specific toxic chemical listings):</b>		
75-09-2	dichloromethane	
· <b>TSCA (Toxic Substances Control Act):</b> This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.		
75-09-2	dichloromethane	ACTIVE
321-60-8	2-Fluorobiphenyl	ACTIVE
· <b>Hazardous Air Pollutants</b>		
75-09-2	dichloromethane	
· <b>Proposition 65</b>		
· <b>Chemicals known to cause cancer:</b>		
75-09-2	dichloromethane	
· <b>Chemicals known to cause reproductive toxicity for females:</b>		
None of the ingredients is listed.		
· <b>Chemicals known to cause reproductive toxicity for males:</b>		
None of the ingredients is listed.		

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· <b>Chemicals known to cause developmental toxicity:</b>	
None of the ingredients is listed.	
· <b>Carcinogenic categories</b>	
· <b>EPA (Environmental Protection Agency)</b>	
75-09-2 dichloromethane	L
· <b>TLV (Threshold Limit Value)</b>	
75-09-2 dichloromethane	A3
· <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>	
75-09-2 dichloromethane	
· <b>GHS label elements</b> The product is classified and labeled according to the Globally Harmonized System (GHS).	
· <b>Hazard pictograms</b>	



- **Signal word** Warning
- **Hazard-determining components of labeling:**  
dichloromethane  
Nitrobenzene-d5
- **Hazard statements**  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H351 Suspected of causing cancer.  
H361 Suspected of damaging fertility or the unborn child.  
H336 May cause drowsiness or dizziness.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.  
P330 Rinse mouth.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P321 Specific treatment (see on this label).  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **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** 06/14/2023
- **Abbreviations and acronyms:**  
ADR: Accord relatif au transport international 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  
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)  
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

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TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Skin Irritation 2: Skin corrosion/irritation – Category 2

Carcinogenicity 2: Carcinogenicity – Category 2

Toxic to Reproduction 2: Reproductive toxicity – Category 2

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3