

1 Identification

· Product identifier

· **Product Name:** Combination Semivolatile Surrogates Mix

· **Part Name:** ECS-N-027

· 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
(2H6)phenol
2,4,6-tribromophenol

· 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.

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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.

· **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:**

75-09-2	dichloromethane	99.1%
118-79-6	2,4,6-tribromophenol	0.2%
367-12-4	2-fluorophenol	0.2%
13127-88-3	(2H6)phenol	0.2%
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.

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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.
- **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**

· PAC-1:

75-09-2	dichloromethane	200 ppm
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· PAC-2:

75-09-2	dichloromethane	560 ppm
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· PAC-3:

75-09-2	dichloromethane	6,900 ppm
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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 other constituents have no known exposure limits.

75-09-2 dichloromethane

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:

75-09-2 dichloromethane

BEI	0,3 mg/L Medium: urine Time: end of shift Parameter: Dichloromethane (semi-quantitative)
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- **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.

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· 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.

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: 99.3 %
VOC content: 0.20 %

Solids content: 0.4 %

· Other information No further relevant information available.

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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.

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
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· **NTP (National Toxicology Program)**

75-09-2	dichloromethane	R
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· **OSHA-Ca (Occupational Safety & Health Administration)**

75-09-2	dichloromethane	
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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.

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14 Transport information

· UN-Number	UN1593
· DOT, ADR, IMDG, IATA	
· UN proper shipping name	Dichloromethane
· DOT	1593 DICHLOROMETHANE
· ADR	DICHLOROMETHANE
· IMDG, IATA	
· Transport hazard class(es)	
· DOT	
	
· Class	6.1 Toxic substances
· Label	6.1
· ADR, IMDG, IATA	
	
· Class	6.1 Toxic substances
· Label	6.1
· Packing group	III
· DOT, ADR, IMDG, IATA	
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Toxic substances
· Hazard identification number (Kemler code):	60
· EMS Number:	F-A,S-B
· Segregation groups	(SGG1) Acids
· Stowage Category	B
· Stowage Code	SW2 Clear of living quarters.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1593 DICHLOROMETHANE, 6.1, III

15 Regulatory information

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

· Section 313 (Specific toxic chemical listings):

75-09-2 dichloromethane

· TSCA (Toxic Substances Control Act):

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
118-79-6	2,4,6-tribromophenol	ACTIVE
367-12-4	2-fluorophenol	ACTIVE
321-60-8	2-Fluorobiphenyl	ACTIVE

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· Hazardous Air Pollutants	
75-09-2	dichloromethane
· Proposition 65	
· Chemicals known to cause cancer:	
75-09-2	dichloromethane
· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
· Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
· Carcinogenic categories	
· EPA (Environmental Protection Agency)	
75-09-2	dichloromethane
· TLV (Threshold Limit Value)	
75-09-2	dichloromethane
· NIOSH-Ca (National Institute for Occupational Safety and Health)	
75-09-2	dichloromethane

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

· **Hazard pictograms**



· **Signal word** Warning

· **Hazard-determining components of labeling:**

dichloromethane

Nitrobenzene-d5

(2H6)phenol

2,4,6-tribromophenol

· **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

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· **Date of preparation / last revision** 06/06/2023

· **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

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEL: 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