

1 Identification

· Product identifier

· **Product Name:** HICAL ACIDS MIX

· **Part Name:** HICAL-ACIDS

· 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.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Acute Toxicity - Inhalation 4

H332 Harmful if inhaled.

Skin Irritation 2

H315 Causes skin irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

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
pentachlorophenol
2,4-dinitrophenol
DNOC

· Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

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.

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.

Product Name: HICAL ACIDS MIX

(Contd. of page 1)

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.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

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	97.0%
51-28-5	2,4-dinitrophenol	0.2%
59-50-7	chlorocresol	0.2%
87-86-5	pentachlorophenol	0.2%
88-06-2	2,4,6-trichlorophenol	0.2%
88-75-5	2-nitrophenol	0.2%
95-48-7	o-cresol	0.2%
95-57-8	2-chlorophenol	0.2%
95-95-4	2,4,5-trichlorophenol	0.2%
105-67-9	2,4-xilenol	0.2%
106-44-5	p-cresol	0.2%
108-95-2	phenol	0.2%
120-83-2	2,4-dichlorophenol	0.2%
534-52-1	DNOC	0.2%

· **Chemical identification of the substance/preparation**

65-85-0	Benzoic acid	0.2%
100-02-7	4-nitrophenol	0.2%

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 and to be sure call for a doctor.

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

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **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

(Contd. on page 3)

Product Name: HICAL ACIDS MIX

(Contd. of page 2)

- **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:** Mouth respiratory protective device.

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
51-28-5	2,4-dinitrophenol	0.61 mg/m ³
59-50-7	chlorocresol	5.5 mg/m ³
65-85-0	Benzoic acid	13 mg/m ³
87-86-5	pentachlorophenol	1 mg/m ³
88-06-2	2,4,6-trichlorophenol	2.5 mg/m ³
88-75-5	2-nitrophenol	2.1 mg/m ³
95-57-8	2-chlorophenol	2.3 mg/m ³
95-95-4	2,4,5-trichlorophenol	2.5 mg/m ³
100-02-7	4-nitrophenol	0.69 mg/m ³
105-67-9	2,4-xilenol	6.9 mg/m ³
108-95-2	phenol	15 ppm
120-83-2	2,4-dichlorophenol	0.2 ppm
534-52-1	DNOC	0.6 mg/m ³

· PAC-2:

75-09-2	dichloromethane	560 ppm
51-28-5	2,4-dinitrophenol	6.8 mg/m ³
59-50-7	chlorocresol	60 mg/m ³
65-85-0	Benzoic acid	140 mg/m ³
87-86-5	pentachlorophenol	15 mg/m ³
88-06-2	2,4,6-trichlorophenol	27 mg/m ³
88-75-5	2-nitrophenol	23 mg/m ³
95-57-8	2-chlorophenol	25 mg/m ³
95-95-4	2,4,5-trichlorophenol	27 mg/m ³
100-02-7	4-nitrophenol	7.6 mg/m ³
105-67-9	2,4-xilenol	76 mg/m ³
108-95-2	phenol	23 ppm
120-83-2	2,4-dichlorophenol	2 ppm
534-52-1	DNOC	0.83 mg/m ³

· PAC-3:

75-09-2	dichloromethane	6,900 ppm
51-28-5	2,4-dinitrophenol	16 mg/m ³
59-50-7	chlorocresol	360 mg/m ³
65-85-0	Benzoic acid	830 mg/m ³
87-86-5	pentachlorophenol	150 mg/m ³

(Contd. on page 4)

Product Name: HICAL ACIDS MIX

(Contd. of page 3)

88-06-2	2,4,6-trichlorophenol	160 mg/m ³
88-75-5	2-nitrophenol	140 mg/m ³
95-57-8	2-chlorophenol	150 mg/m ³
95-95-4	2,4,5-trichlorophenol	160 mg/m ³
100-02-7	4-nitrophenol	46 mg/m ³
105-67-9	2,4-xilenol	460 mg/m ³
108-95-2	phenol	200 ppm
120-83-2	2,4-dichlorophenol	20 ppm
534-52-1	DNOC	5 mg/m ³

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 constituents are the only constituents of the product which have 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
87-86-5 pentachlorophenol	
PEL	Long-term value: 0.5 mg/m ³ Skin
REL	Long-term value: 0.5 mg/m ³ Skin
TLV	Short-term value: 1* mg/m ³ Long-term value: 0.5* mg/m ³ Skin; BEI; *inh. fraction+vapor, A3
95-48-7 o-cresol	
PEL	Long-term value: 22 mg/m ³ , 5 ppm Skin
REL	Long-term value: 10 mg/m ³ , 2.3 ppm
TLV	Long-term value: 20* mg/m ³ Skin; *as inhalable fraction and vapor, A4
105-67-9 2,4-xilenol	
TLV	Long-term value: 1* ppm *inh. fraction+vapor; DSEN, A3
106-44-5 p-cresol	
PEL	Long-term value: 22 mg/m ³ , 5 ppm Skin
REL	Long-term value: 10 mg/m ³ , 2.3 ppm
TLV	Long-term value: 20* mg/m ³ Skin; *as inhalable fraction and vapor, A4

(Contd. on page 5)

Product Name: HICAL ACIDS MIX

(Contd. of page 4)

108-95-2 phenol	
PEL	Long-term value: 19 mg/m ³ , 5 ppm Skin
REL	Long-term value: 19 mg/m ³ , 5 ppm Ceiling limit value: 60* mg/m ³ , 15.6* ppm *15-min; Skin
TLV	Long-term value: 5 ppm Skin; BEI, A4
120-83-2 2,4-dichlorophenol	
WEEL	Long-term value: 1 ppm Skin; Q
534-52-1 DNOC	
PEL	Long-term value: 0.2 mg/m ³ Skin
REL	Long-term value: 0.2 mg/m ³ Skin
TLV	Long-term value: 0.2* mg/m ³ *inhalable fraction + vapor; Skin
Ingredients with biological limit values:	
75-09-2 dichloromethane	
BEI	0.3 mg/L Medium: urine Time: end of shift Parameter: Dichloromethane (semi-quantitative)
87-86-5 pentachlorophenol	
BEI	- Medium: urine Time: prior to last shift of workweek Parameter: Pentachlorophenol with hydrolysis (nonquantitative)
108-95-2 phenol	
BEI	250 mg/g creatinine Medium: urine Time: end of shift Parameter: Phenol with hydrolysis (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.

· **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.

(Contd. on page 6)

Printing date 02/28/2023

Reviewed on 02/28/2023

Product Name: HICAL ACIDS MIX

(Contd. of page 5)

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: 97.4 %

VOC content: 0.40 %

Solids content: 2.8 %

· 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.

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.

(Contd. on page 7)

Product Name: HICAL ACIDS MIX

(Contd. of page 6)

- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
75-09-2	dichloromethane	2A
87-86-5	pentachlorophenol	1
88-06-2	2,4,6-trichlorophenol	2B
95-57-8	2-chlorophenol	2B
95-95-4	2,4,5-trichlorophenol	2B
108-95-2	phenol	3
120-83-2	2,4-dichlorophenol	2B
· NTP (National Toxicology Program)		
75-09-2	dichloromethane	R
87-86-5	pentachlorophenol	R
88-06-2	2,4,6-trichlorophenol	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



(Contd. on page 8)

Printing date 02/28/2023

Reviewed on 02/28/2023

Product Name: HICAL ACIDS MIX

(Contd. of page 7)

· 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	
· DOT, ADR, IMDG, IATA	III
· 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
51-28-5	2,4-dinitrophenol
87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol
88-75-5	2-nitrophenol
95-48-7	o-cresol
95-57-8	2-chlorophenol
95-95-4	2,4,5-trichlorophenol
100-02-7	4-nitrophenol
105-67-9	2,4-xylenol
106-44-5	p-cresol
108-95-2	phenol
120-83-2	2,4-dichlorophenol
534-52-1	DNOC

(Contd. on page 9)

Product Name: HICAL ACIDS MIX

(Contd. of page 8)

· **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.

All components have the value ACTIVE.

· **Hazardous Air Pollutants**

75-09-2	dichloromethane
51-28-5	2,4-dinitrophenol
87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol
95-48-7	o-cresol
95-95-4	2,4,5-trichlorophenol
100-02-7	4-nitrophenol
106-44-5	p-cresol
108-95-2	phenol
534-52-1	DNOC

· **Proposition 65**

· **Chemicals known to cause cancer:**

75-09-2	dichloromethane
87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol

· **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	L
65-85-0	Benzoic acid	D
87-86-5	pentachlorophenol	L
88-06-2	2,4,6-trichlorophenol	B2
95-48-7	o-cresol	C
106-44-5	p-cresol	C
108-95-2	phenol	D, I

· **TLV (Threshold Limit Value)**

75-09-2	dichloromethane	A3
87-86-5	pentachlorophenol	A3
108-95-2	phenol	A4

· **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**



GHS07

GHS08

· **Signal word** Warning

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

dichloromethane
pentachlorophenol
2,4-dinitrophenol
DNOC

· **Hazard statements**

H302+H332 Harmful if swallowed or if inhaled.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.

(Contd. on page 10)

Product Name: HICAL ACIDS MIX

(Contd. of page 9)

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.

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.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

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 02/28/2023

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

BEI: Biological Exposure Limit

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Skin Irritation 2: Skin corrosion/irritation – Category 2

Sensitization - Skin 1: Skin sensitisation – Category 1

Carcinogenicity 2: Carcinogenicity – Category 2

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