

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : HARDENER HV 1580

Unique Formula Identifier (UFI) : 6JS5-F0T6-1004-0AC7

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Hardener

1.3 Details of the supplier of the safety data sheet

Company : Huntsman Advanced Materials (Europe) BV
Address : Everslaan 45
3078 Everberg
Belgium

Telephone : +41 61 299 20 41
Telefax : +41 61 299 20 40

E-mail address of person responsible for the SDS : Global_Product_EHS_AdMat@huntsman.com

1.4 Emergency telephone number

Emergency telephone number : Berlin: 0049 30 19 24 0 & 0049 30 30 68 6 7 11
Bonn: 0049 228 19 27 0 & 0049 228 28 7 3 32 11
Erfurt: 0049 361 73 07 30
Freiburg: 0049 761 16 24 0
Göttingen: 0049 51 19 24 0 & 0049 551 38 31 80
Homburg: 0049 6841 19 24 0
Mainz: 0049 6131 19 24 0 & 0049 6131 23 24 66
München: 0049 89 19 24 0
Nürnberg: 0049 911 39 8 2 45 1
EUROPE: +32 35 75 1234
France ORFILA: +33(0)145425959
ASIA: +65 6336-6011
China: +86 20 39377888
+86 532 83889090
India: + 91 22 42 87 5333
Australia: 1800 786 152
New Zealand: 0800 767 437
USA: +1 800-424-9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2

H315: Causes skin irritation.

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

Eye irritation, Category 2

H319: Causes serious eye irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of water.
P332 + P313 If skin irritation occurs: Get medical advice/
attention.
P337 + P313 If eye irritation persists: Get medical advice/
attention.
P362 + P364 Take off contaminated clothing and wash it
before reuse.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
benzyl alcohol	100-51-6 202-859-9	Acute Tox. 4; H302 Acute Tox. 4; H332	>= 1 - < 10

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

	603-057-00-5 01-2119492630-38	Eye Irrit. 2; H319 Acute toxicity estimate Acute oral toxicity: 1 620 mg/kg Acute inhalation toxicity (dust/mist): 4,178 mg/l	
2,4,6- tris(dimethylaminomethyl)phenol	90-72-2 202-013-9 603-069-00-0 01-2119560597-27	Acute Tox. 4; H302 Skin Corr. 1C; H314 Eye Dam. 1; H318	>= 1 - < 3
Substances with a workplace exposure limit :			
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6 238-877-9 01-2120140278-58		>= 10 - < 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Treat symptomatically.
Get medical attention if symptoms occur.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing
If potential for exposure exists refer to Section 8 for specific personal protective equipment.
No action shall be taken involving any personal risk or without suitable training.
- If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

Unsuitable extinguishing media : Exercise caution when using a high volume water jet as it may scatter and spread fire

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : No information available.

Hazardous combustion products : Carbon oxides
Nitrogen oxides (NO_x)

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : No action shall be taken involving any personal risk or without suitable training.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version	Revision Date:	SDS Number:	Date of last issue: 14.05.2020
2.0	18.04.2023	400001010378	Date of first issue: 09.04.2019

Print Date 19.04.2023

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal considerations see section 13., See Section 1 for emergency contact information., For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Keep in properly labelled containers.

Advice on common storage : For incompatible materials please refer to Section 10 of this SDS.

Storage class (TRGS 510) : 10

Recommended storage temperature : 2 - 40 °C

Further information on storage stability : Stable under normal conditions.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version
2.0

Revision Date:
18.04.2023

SDS Number:
400001010378

Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6	AGW (Inhalable fraction)	10 mg/m ³	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)			
Further information	When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		AGW (Alveolate fraction)	1,25 mg/m ³	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)			
Further information	When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		TWA (Respirable dust)	0,1 mg/m ³	2004/37/EC
Further information	Carcinogens or mutagens			
		BM (Alveolar dust fraction)	0,5 mg/m ³	DE TRGS 527
benzyl alcohol	100-51-6	AGW (Vapour and aerosols)	5 ppm 22 mg/m ³	DE TRGS 900
Peak-limit: excursion factor (category)	2;(I)			
Further information	Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value	
benzyl alcohol	Workers	Inhalation	Long-term systemic effects	22 mg/m ³	
		Inhalation	Short-term exposure, Systemic effects	110 mg/m ³	
	Workers	Dermal	Long-term systemic effects	8 mg/kg bw/day	
		Dermal	Short-term exposure, Systemic effects	40 mg/kg bw/day	
	Consumers	Inhalation	Long-term systemic effects	5,4 mg/m ³	
		Inhalation	Short-term exposure, Systemic effects	27 mg/m ³	
	Consumers	Dermal	Long-term systemic effects	4 mg/kg bw/day	
		Dermal	Systemic effects, Short-term exposure	20 mg/kg bw/day	
	Consumers	Oral	Long-term systemic effects	4 mg/kg bw/day	
		Oral	Short-term exposure, Systemic effects	20 mg/kg bw/day	
	2,4,6-tris(dimethylaminomet	Workers	Inhalation	Long-term systemic effects	0,53 mg/m ³

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version
2.0

Revision Date:
18.04.2023

SDS Number:
400001010378

Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

hyl)phenol				
	Workers	Inhalation	Acute systemic effects	2,1 mg/m ³
	Workers	Dermal	Long-term systemic effects	0,150 mg/kg
	Workers	Dermal	Acute systemic effects	0,600 mg/kg
	Consumers	Inhalation	Long-term systemic effects	0,130 mg/m ³
	Consumers	Inhalation	Acute systemic effects	0,130 mg/m ³
	Consumers	Dermal	Long-term systemic effects	0,075 mg/kg
	Consumers	Dermal	Acute systemic effects	0,075 mg/kg
	Consumers	Oral	Long-term systemic effects	0,075 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
2,4,6-tris(dimethylaminomethyl)phenol	Fresh water	0,046 mg/l
	Marine water	0,005 mg/l
	Remarks:Assessment Factors	
	Sewage treatment plant	0,262 mg/l
benzyl alcohol	Remarks:Assessment Factors	
	Freshwater - intermittent	0,46 mg/l
	Soil	0,025 mg/kg
	Fresh water	1 mg/l
benzyl alcohol	Remarks:Assessment Factors	
	Marine water	0,1 mg/l
	Remarks:Assessment Factors	
	Freshwater - intermittent	2,3 mg/l
	Remarks:Assessment Factors	
	Sewage treatment plant	39 mg/l
	Remarks:Assessment Factors	
	Fresh water sediment	5,27 mg/kg
	Remarks:Assessment Factors	
	Marine sediment	0,527 mg/kg
Remarks:Assessment Factors		
Soil	0,456 mg/kg	
Remarks:Assessment Factors		
Secondary Poisoning		
Remarks:Assessment Factors		

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Hand protection

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

Material : butyl-rubber
Break through time : > 8 h

Material : Nitrile rubber
Break through time : 10 - 480 min

Material : Ethyl Vinyl Alcohol Laminate (EVAL)
Break through time : > 8 h

Remarks : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : **W A R N I N G !** This product contains quartz, which has been classified by IARC as carcinogenic for humans (Group 1), and which can cause silicosis and lung cancer following exposure to respirable dust. It is therefore important to take particular care to avoid inhalation exposure when mechanically processing cured material (e.g. grinding, sanding, sawing).

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : paste

Colour : blue

Odour : slight

Odour Threshold : No data is available on the product itself.

pH : substance/mixture is non-soluble (in water)

Melting point/freezing point : No data is available on the product itself.

Boiling point : > 200 °C

Flash point : > 100 °C
Method: Pensky-Martens closed cup

Flammability (solid, gas) : No data is available on the product itself.

Upper explosion limit / Upper flammability limit : No data is available on the product itself.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

Lower explosion limit / Lower flammability limit : No data is available on the product itself.

Vapour pressure : No data is available on the product itself.

Relative vapour density : No data is available on the product itself.

Relative density : No data is available on the product itself.

Density : No data is available on the product itself.

Solubility(ies)
Water solubility : practically insoluble (20 °C)

Solubility in other solvents : No data is available on the product itself.

Partition coefficient: n-octanol/water : No data is available on the product itself.

Auto-ignition temperature : No data is available on the product itself.

Decomposition temperature : > 200 °C

Viscosity : No data is available on the product itself.

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Strong acids
Strong bases
Strong oxidizing agents

10.6 Hazardous decomposition products

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

Hazardous decomposition products : carbon monoxide
carbon dioxide
Nitrogen oxides (NO_x)

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 2 000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Components:

benzyl alcohol:

Acute oral toxicity : LD50 (Rat, male): 1 620 mg/kg
Method: OECD Test Guideline 401

Acute toxicity estimate: 1 620 mg/kg
Method: Calculation method

Acute inhalation toxicity : LC50 (Rat, male and female): 4,178 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute toxicity estimate: 4,178 mg/l
Test atmosphere: dust/mist
Method: Calculation method

2,4,6-tris(dimethylaminomethyl)phenol:

Acute oral toxicity : LD50 (Rat, male and female): 2 169 mg/kg
Method: OECD Test Guideline 401
Assessment: The component/mixture is low toxic after single ingestion.

Acute dermal toxicity : LD50 (Rat, male): > 1 ml/kg
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Components:

benzyl alcohol:

Species : Rabbit

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

Assessment : No skin irritation
Method : OECD Test Guideline 404
Result : No skin irritation

2,4,6-tris(dimethylaminomethyl)phenol:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Corrosive after 1 to 4 hours of exposure

Species : synthetic macromolecular bio-barrier
Method : OECD Test Guideline 435
Result : Corrosive after 1 to 4 hours of exposure

Serious eye damage/eye irritation

Components:

benzyl alcohol:

Species : Rabbit
Assessment : Irritant
Method : OECD Test Guideline 405
Result : Irritating to eyes.

2,4,6-tris(dimethylaminomethyl)phenol:

Species : Rabbit
Assessment : Corrosive
Method : Other guidelines
Result : Corrosive

Respiratory or skin sensitisation

Components:

benzyl alcohol:

Exposure routes : Skin
Species : Guinea pig
Result : Does not cause skin sensitisation.

2,4,6-tris(dimethylaminomethyl)phenol:

Exposure routes : Skin
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Components:

benzyl alcohol:

Genotoxicity in vivo : Application Route: Intraperitoneal injection
Dose: 200 mg/kg
Method: OECD Test Guideline 474
Result: negative

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

2,4,6-tris(dimethylaminomethyl)phenol:

Genotoxicity in vitro : Concentration: 5000 ug/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Concentration: 2500 ug/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Carcinogenicity

Components:

benzyl alcohol:

Species : Rat, male and female
Application Route : Oral
Exposure time : 103 weeks
Dose : 400 mg/kg
Frequency of Treatment : 5 daily
Method : OECD Test Guideline 453
Result : negative

Reproductive toxicity

Components:

benzyl alcohol:

Effects on foetal development : Species: Mouse, female
Application Route: Oral
General Toxicity Maternal: LOAEL: 550 mg/kg body weight
Result: No teratogenic effects

2,4,6-tris(dimethylaminomethyl)phenol:

Effects on fertility : Species: Rat, male and female
Application Route: Oral
Method: OECD Test Guideline 422
Remarks: No significant adverse effects were reported

STOT - single exposure

No data available

STOT - repeated exposure

No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

Repeated dose toxicity

Components:

benzyl alcohol:

Species : Rat, male and female
NOEC : 400 mg/kg, 1072 mg/m³
Application Route : Inhalation
Test atmosphere : dust/mist
Exposure time : 4 Weeks
Number of exposures : 6 h
Method : OECD Test Guideline 412

2,4,6-tris(dimethylaminomethyl)phenol:

Species : Rat, male and female
NOEL : 15 mg/kg
Application Route : Ingestion
Exposure time : 1 032 h
Number of exposures : 7 d
Method : Subacute toxicity

Aspiration toxicity

No data available

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

benzyl alcohol:

Toxicity to fish : LC50 : 460 mg/l
Exposure time: 96 h

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

Test Type: static test
Test substance: Fresh water
Method: OPPTS 850.1075

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 230 mg/l
Exposure time: 48 h
Test substance: Fresh water
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EgC50 (Selenastrum capricornutum (green algae)): 770 mg/l
Exposure time: 72 h
Test Type: static test
Test substance: Fresh water
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 51 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: semi-static test
Test substance: Fresh water
Method: OECD Test Guideline 211

2,4,6-tris(dimethylaminomethyl)phenol:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 175 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: Fresh water

Toxicity to daphnia and other aquatic invertebrates : LC50 (Palaeomonetes vulgaris (Grass shrimp)): 718 mg/l
End point: mortality
Exposure time: 96 h
Test Type: static test
Analytical monitoring: no
Test substance: Marine water

Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): 84 mg/l
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Test substance: Fresh water
Method: OECD Test Guideline 201

NOEC (Desmodesmus subspicatus (green algae)): 6,25 mg/l
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Test substance: Fresh water
Method: OECD Test Guideline 201

Talc (Mg₃H₂(SiO₃)₄):

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 100 mg/l
Exposure time: 24 h

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

12.2 Persistence and degradability

Components:

benzyl alcohol:

Biodegradability : Inoculum: Sewage (STP effluent)
Concentration: 20 mg/l
Result: Readily biodegradable.
Biodegradation: 95 - 97 %
Exposure time: 21 d
Method: OECD Test Guideline 301A

2,4,6-tris(dimethylaminomethyl)phenol:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge, non-adapted
Concentration: 2 mg/l
Result: Not biodegradable
Biodegradation: 4 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

12.3 Bioaccumulative potential

Components:

benzyl alcohol:

Bioaccumulation : Bioconcentration factor (BCF): 1
Partition coefficient: n-octanol/water : log Pow: 1,1 (20 °C)

2,4,6-tris(dimethylaminomethyl)phenol:

Partition coefficient: n-octanol/water : Pow: $\geq 0,219$ (21,5 °C)
log Pow: -0,66 (21,5 °C)
Method: OPPTS 830.7550

12.4 Mobility in soil

Components:

benzyl alcohol:

Distribution among environmental compartments : Koc: 5 - 15

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of contents and container in accordance with all local, regional, national and international regulations. Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number or ID number

UNRTDG : Not regulated as dangerous goods
ADN : Not regulated as dangerous goods
ADR : Not regulated as dangerous goods
RID : Not regulated as dangerous goods
IMDG : Not regulated as dangerous goods
IATA : Not regulated as dangerous goods

14.2 UN proper shipping name

UNRTDG : Not regulated as dangerous goods
ADN : Not regulated as dangerous goods
ADR : Not regulated as dangerous goods
RID : Not regulated as dangerous goods
IMDG : Not regulated as dangerous goods
IATA : Not regulated as dangerous goods

14.3 Transport hazard class(es)

ADN : Not regulated as dangerous goods

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

ADR : Not regulated as dangerous goods
RID : Not regulated as dangerous goods
IMDG : Not regulated as dangerous goods
IATA : Not regulated as dangerous goods

14.4 Packing group

ADN : Not regulated as dangerous goods
ADR : Not regulated as dangerous goods
RID : Not regulated as dangerous goods
IMDG : Not regulated as dangerous goods
IATA (Cargo) : Not regulated as dangerous goods
IATA (Passenger) : Not regulated as dangerous goods

14.5 Environmental hazards

Not regulated as dangerous goods

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:
Number on list 75, 3

If you intend to use this product as tattoo ink, please contact your vendor.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable

Water hazard class : WGK 1 slightly hazardous to water

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version 2.0 Revision Date: 18.04.2023 SDS Number: 400001010378 Date of last issue: 14.05.2020
Date of first issue: 09.04.2019

Print Date 19.04.2023

(Germany) Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) :

- 5.2.1: Total dust: Not applicable
- 5.2.2: Inorganic substances in powdered form: Not applicable
- 5.2.4: Inorganic substances in gaseous form: Not applicable
- 5.2.5: Organic Substances: Not applicable
- 5.2.7.1.1: Carcinogenic substance: Not applicable
- 5.2.7.1.1: Quartz fine dust PM4: Not applicable
- 5.2.7.1.1: Formaldehyde: Not applicable
- 5.2.7.1.1: fibres: Not applicable
- 5.2.7.1.2: Germ cell mutagens: Not applicable
- 5.2.7.1.3: Substances toxic to reproduction: Not applicable
- 5.2.7.2: Poorly degradable, easily enrichable and highly toxic organic substances: Not applicable

The components of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

AIIC : On the inventory, or in compliance with the inventory

ENCS : Notified. Allowed to be imported / manufactured only by the notifiers. Please contact your Huntsman sales representative for more information.

KECI : On the inventory, or in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version	Revision Date:	SDS Number:	Date of last issue: 14.05.2020
2.0	18.04.2023	400001010378	Date of first issue: 09.04.2019

Print Date 19.04.2023

Inventories

AICS (Australia), AIIC (Australia), DSL (Canada), IECSC (China), ENCS (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (United States of America (USA))

15.2 Chemical safety assessment

Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

Full text of H-Statements

H302	: Harmful if swallowed.
H314	: Causes severe skin burns and eye damage.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Eye Dam.	: Serious eye damage
Eye Irrit.	: Eye irritation
Skin Corr.	: Skin corrosion
2004/37/EC	: Europe. Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work
DE TRGS 527	: Germany. TRGS 527 - Activities with nanomaterials
DE TRGS 900	: Germany. TRGS 900 - Occupational exposure limit values.
2004/37/EC / TWA	: Long term exposure limit
DE TRGS 527 / BM	: Assessment scale
DE TRGS 900 / AGW	: Time Weighted Average

Further information

Classification of the mixture:

Skin Irrit. 2	H315
Eye Irrit. 2	H319

Classification procedure:

Calculation method
Calculation method

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

HARDENER HV 1580

Version	Revision Date:	SDS Number:	Date of last issue: 14.05.2020
2.0	18.04.2023	400001010378	Date of first issue: 09.04.2019

Print Date 19.04.2023

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

The trademarks above are the property of Huntsman Corporation or an affiliate thereof.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE.