



Safety Data Sheet

acc. to OSHA HCS

Printing date 07/07/2015

Reviewed on 07/07/2015

1 Identification

- Product identifier
- Trade name: **KRISTAL HS Surfacer USC Grey 4:1**
- Article number: 5240
- Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
- Application of the substance / the mixture Coating compound/ Surface coating/ paint
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Kristal Coatings B.V.
Platinawerf 22B
6641 TL Beuningen - Holland
Tel: 0031 24 67 526 36
Fax: 0031 24 67 533 60
- Information department: Product safety department: info@kristalcoatings.nl
- Emergency telephone number: 0031 24 67 526 36

* 2 Hazard(s) identification

- Classification of the substance or mixture



GHS02 Flame

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



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to the hearing organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- Label elements

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



GHS02



GHS07



GHS08

- Signal word Danger

- Hazard-determining components of labeling:

Talc (Mg₃H₂(SiO₃)₄)

xylene

titanium dioxide

ethylbenzene

- Hazard statements

Highly flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause damage to the hearing organs through prolonged or repeated exposure.

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· Precautionary statements

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

Take precautionary measures against static discharge.

Do not breathe mist/vapours/spray.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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:

CAS: 7727-43-7 EINECS: 231-784-4 Reg.nr.: 05-2114103894-50-0000	barium sulphate, natural	10-25%
CAS: 67-64-1 EINECS: 200-662-2 Reg.nr.: 01-2119471330-49 05-2114366599-29	acetone	2.5-10%
CAS: 98-56-6 EINECS: 202-681-1 Reg.nr.: 1735902	4-chloro-alpha,alpha,alpha-trifluorotoluene	2.5-10%
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29	n-butyl acetate	2.5-10%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32 01-2119486136-34 01-2119555267-33	xylene	2.5-10%
CAS: 64742-95-6 EINECS: 265-199-0 Reg.nr.: 01-2119455851-35	Solvent naphtha (petroleum), light arom.	2.5-10%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29	2-methoxy-1-methylethyl acetate	2.5-10%
CAS: 100-41-4 EINECS: 202-849-4 Reg.nr.: 01-2119489370-35	ethylbenzene	0.5-2.5%

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CAS: 222716-38-3

Fatty acids, tall-oil, esters with polyethylene glycol mono(hydrogen maleate), compounds $\leq 0.5\%$ with amides from diethylenetriamine and tall-oil fatty acids

4 First-aid measures

- Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After skin contact:
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- After eye contact:
Rinse opened eye for several minutes under running water. Then consult a doctor.
Remove contactlenses.
- After swallowing:
Do not induce vomiting; immediately call for medical help.
Rinse mouth.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: CO₂ or powder. Fight larger fights with alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture Carbon monoxide (CO)
- Advice for firefighters
- Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- Handling:
- Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Store away from oxidizing agents.
- Further information about storage conditions: Keep receptacle tightly sealed.
- Storage class: 3

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· 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:

7727-43-7 barium sulphate, natural

PEL Long-term value: 15* 5** mg/m³
*total dust **respirable fraction

REL Long-term value: 10* 5** mg/m³
*total dust **respirable fraction

TLV Long-term value: (10) NIC-5* mg/m³
*inhalable fraction

67-64-1 acetone

PEL Long-term value: 2400 mg/m³, 1000 ppm

REL Long-term value: 590 mg/m³, 250 ppm

TLV Short-term value: (1782) NIC-1187 mg/m³, (750) NIC-500 ppm
Long-term value: (1188) NIC-475 mg/m³, (500) NIC-200 ppm
BEI

123-86-4 n-butyl acetate

PEL Long-term value: 710 mg/m³, 150 ppm

REL Short-term value: 950 mg/m³, 200 ppm
Long-term value: 710 mg/m³, 150 ppm

TLV Short-term value: 950 mg/m³, 200 ppm
Long-term value: 713 mg/m³, 150 ppm

1330-20-7 xylene

PEL Long-term value: 435 mg/m³, 100 ppm

REL Short-term value: 655 mg/m³, 150 ppm
Long-term value: 435 mg/m³, 100 ppm

TLV Short-term value: 651 mg/m³, 150 ppm
Long-term value: 434 mg/m³, 100 ppm
BEI

108-65-6 2-methoxy-1-methylethyl acetate

WEEL Long-term value: 50 ppm

100-41-4 ethylbenzene

PEL Long-term value: 435 mg/m³, 100 ppm

REL Short-term value: 545 mg/m³, 125 ppm
Long-term value: 435 mg/m³, 100 ppm

TLV Short-term value: 543 mg/m³, 125 ppm
Long-term value: 87 mg/m³, 20 ppm
BEI

· Ingredients with biological limit values:

67-64-1 acetone

BEI 50 mg/L

Medium: urine

Time: end of shift

Parameter: Acetone (nonspecific)

1330-20-7 xylene

BEI 1.5 g/g creatinine

Medium: urine

Time: end of shift

Parameter: Methylhippuric acids

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100-41-4 ethylbenzene

BEI 0.7 g/g creatinine

Medium: urine

Time: end of shift at end of workweek

Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative)

-

Medium: end-exhaled air

Time: not critical

Parameter: Ethyl benzene (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:** Wash hands before breaks and at the end of work.· **Breathing equipment:**

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

Use suitable respiratory protective device in case of insufficient ventilation.

Filter AX

· **Protection of hands:**

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

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

· **Material of gloves**

Butyl rubber, BR

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**Thickness of the gloves ≥ 0.625 mm (acetone)Value for the permeation: Level ≥ 480 min (acetone)

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

· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Solvent resistant protective clothing* **9 Physical and chemical properties**

· Information on basic physical and chemical properties

· General Information

· **Appearance:**

Form: Fluid

Color: Grey

· **Odor:** Characteristic· **Change in condition**

Boiling point/Boiling range: 56 °C (133 °F)

· **Flash point:** 5 °C (41 °F)· **Flammability (solid, gaseous):** Not applicable.· **Ignition temperature:** 370 °C (698 °F)· **Decomposition temperature:** Not determined.· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.· **Explosion limits:**

Lower: Not determined.

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Upper:	Not determined.
· Density at 20 °C (68 °F):	1.55 g/cm ³ (12.935 lbs/gal)
· Solubility in / Miscibility with Water:	Insoluble.
· Viscosity:	
Kinematic at 20 °C (68 °F):	16 s (DIN 53211/4)
· Solvent content:	
Organic solvents:	30.8 %
VOC content:	17.6 %
	248.0 g/l / 2.07 lb/gl
· Other information	No further relevant information available.

10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: Reacts with strong oxidizing agents.
- Conditions to avoid: High temperatures.
- Incompatible materials: Oxidizing agents.
- 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:

67-64-1 acetone

Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4h	> 20 mg/l (rat)

98-56-6 4-chloro-alpha,alpha,alpha-trifluorotoluene

Oral	LD50	11500 mg/kg (mouse)
		13000 mg/kg (rat)

123-86-4 n-butyl acetate

Oral	LD50	10760 mg/kg (rat) (OECD 423)
Dermal	LD50	>14112 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/4h	23.4 mg/l (rat) (OECD 403 in vivo, aerosol)

1330-20-7 xylene

Oral	LD50	3523 mg/kg (rat)
Dermal	LD50	12126 mg/kg bw (rabbit)
Inhalative	LC50/4h	27124 mg/m ³ (rat)

64742-95-6 Hydrocarbons, C9, aromatics

Oral	LD50	3592 mg/kg (rat)
Dermal	LD50	>3160 ml/kg (rabbit)
Inhalative	LC50/4h	>6193 ppm (rat)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 5000 mg/kg (rat)

100-41-4 ethylbenzene

Oral	LD50	3500 mg/kg (rat)
Dermal	LD50	17800 mg/kg (rabbit)

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- Primary irritant effect:
 - on the skin: No irritant effect.
 - on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
- Carcinogenic categories
- IARC (International Agency for Research on Cancer)
 - 14807-96-6 Talc (Mg₃H₂(SiO₃)₄): 2B
 - 13463-67-7 titanium dioxide: 2B
 - 1330-20-7 xylene: 3
 - 100-41-4 ethylbenzene: 2B
 - 1333-86-4 Carbon black: 2B
- NTP (National Toxicology Program)
 - None of the ingredients is listed.
- OSHA-Ca (Occupational Safety & Health Administration)
 - None of the ingredients is listed.

*12 Ecological information

- Toxicity
- Aquatic toxicity:
 - 67-64-1 acetone**
 - EC50 8800 mg/l (daphnia magna)
 - EC50/96h 8300 mg/l (Iepomis macrochirus)
 - IC50 >100 mg/l (algae)
 - >100 mg/l (fish)
 - 98-56-6 4-chloro-alpha,alpha,alpha-trifluorotoluene**
 - IC50/72h 8 mg/l (algae)
 - LC50/96h 40-60 mg/l (fish)
 - 123-86-4 n-butyl acetate**
 - EC50/48h 44 mg/l (daphnia magna)
 - EC50/72h 647.7 mg/l (desmodesmus supspicatus)
 - IC50 356 mg/l (tetrahymena pyriformis) (40 h)
 - LC50/96h 18 mg/l (pimphales promelas) (OECD 203)
 - NOAEL/72h 200 mg/l (desmodesmus supspicatus)
 - 1330-20-7 xylene**
 - EC50/48h 1 mg/l (daphnia magna)
 - IC50/72h 2.2 mg/l (algae)
 - LC50/96h 2.6 mg/l (oncorhynchus mykiss)
 - 108-65-6 2-methoxy-1-methylethyl acetate**
 - EC50/48h 408-500 mg/l (daphnia magna)
 - LC50/96h 100-180 mg/l (oncorhynchus mykiss)
 - 100-41-4 ethylbenzene**
 - EC50/24h >100 mg/l (daphnia magna)
- Persistence and degradability No further relevant information available.
- Degree of elimination:
- 123-86-4 n-butyl acetate**
 - OECD 301D 83 % (I) (28 d)
- Behavior in environmental systems:
- Bioaccumulative potential
 - 1330-20-7 xylene**
 - LogPow 3.15 (I)
- Mobility in soil No further relevant information available.

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Trade name: **KRISTAL HS Surfacer USC Grey 4:1**

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- Ecotoxicological effects:
- Remark: Harmful to fish
- 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.
Harmful to aquatic organisms
- 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,ADN, IMDG, IATA UN1263
- UN proper shipping name
- DOT Paint
- ADR/ADN 1263 Paint
- IMDG, IATA PAINT
- Transport hazard class(es)
- DOT



- Class 3 Flammable liquids
- Label 3

ADR,ADN, IMDG, IATA



- Class 3 Flammable liquids
- Label 3
- Packing group
- DOT, ADR,ADN, IMDG, IATA II
- Environmental hazards:
- Marine pollutant: No
- Special precautions for user Warning: Flammable liquids
- Danger code (Kemler): 33
- EMS Number: F-E,S-E
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
- UN "Model Regulation": UN1263, Paint, 3, II

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* 15 Regulatory information

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

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

1330-20-7 xylene

100-41-4 ethylbenzene

71-36-3 butan-1-ol

108-31-6 maleic anhydride

· TSCA (Toxic Substances Control Act):

14807-96-6 Talc (Mg₃H₂(SiO₃)₄)

7727-43-7 barium sulphate, natural

13463-67-7 titanium dioxide

67-64-1 acetone

98-56-6 4-chloro-alpha,alpha,alpha-trifluorotoluene

123-86-4 n-butyl acetate

1317-65-3 Calciumcarbonaat

1330-20-7 xylene

64742-95-6 Solvent naphtha (petroleum), light arom.

108-65-6 2-methoxy-1-methylethyl acetate

100-41-4 ethylbenzene

68953-58-2 Quaternary ammonium compounds, bis(hydrogenated tallow alky)dimethyl, salts with bentonite

20344-49-4 iron hydroxide oxide

77-58-7 dibutyltin dilaurate

1333-86-4 Carbon black

· Proposition 65

· Chemicals known to cause cancer:

100-41-4 ethylbenzene

1333-86-4 Carbon black

· 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.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

7727-43-7 barium sulphate, natural: D, CBD(inh), NL(oral)

67-64-1 acetone: I

1330-20-7 xylene: I

100-41-4 ethylbenzene: D

71-36-3 butan-1-ol: D

· TLV (Threshold Limit Value established by ACGIH)

14807-96-6 Talc (Mg₃H₂(SiO₃)₄): A4

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13463-67-7 titanium dioxide: A4

67-64-1 acetone: A4

1330-20-7 xylene: A4

100-41-4 ethylbenzene: A3

77-58-7 dibutyltin dilaurate: A4

1333-86-4 Carbon black: A4

108-31-6 maleic anhydride: A4

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

13463-67-7 titanium dioxide

1333-86-4 Carbon black

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

· Hazard pictograms



GHS02

GHS07

GHS08

· Signal word Danger

· Hazard-determining components of labeling:

Talc (Mg₃H₂(SiO₃)₄)

xylene

titanium dioxide

ethylbenzene

· Hazard statements

Highly flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause damage to the hearing organs through prolonged or repeated exposure.

· Precautionary statements

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

Take precautionary measures against static discharge.

Do not breathe mist/vapours/spray.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

· National regulations:

· Other regulations, limitations and prohibitive regulations

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

· 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.

· Contact: Dhr. B. Peters

· Date of preparation / last revision 07/07/2015 / 1

· Abbreviations and acronyms:

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

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VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 2: Carcinogenicity, Hazard Category 2
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

· * Data compared to the previous version altered.

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