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Printing date 01/20/2014

Reviewed on 01/20/2014

1 Identification		
 Product identifier Trade name: 	Crystal Clean Spray	
 Article number: Relevant identified uses of the substance or mixture and uses 	10954	
advised against • Application of the substance / the mixture	No further relevant information available. Cleaning agent/ Cleaner	
 Details of the supplier of the saf Manufacturer/Supplier: 	ety data sneet AKEMI chemisch technische Spezialfabrik GmbH Lechstrasse 28 D 90451 Nürnberg	Tel. +49(0)911-642960 Fax. +49(0)911-644456 e-mail info@akemi.de
 Information department: Emergency telephone number: 	Laboratory Product Safety Department AKEMI chemisch technis Tel. +49(0)911-64296-59 Reachable during the following office hours: Monday – Thursday from 07:30 a.m. to 16:30 p.m. Friday from 07:30 a.m. to 13:30 p.m.	che Spezialfabrik GmbH
2 Hazard(s) identification		
· Classification of the substance		
or mixture	The product is not classified according to the Glo (GHS).	bally Harmonized System
Classification according to Directive 67/548/EEC or Directive 1999/45/EC	Not applicable.	
· Label elements		
GHS label elements	Void	
Hazard pictograms	Void	
Signal word Hazard statements	Void Void	
· Classification system:	Volu	
• NFPA ratings (scale 0 - 4)	Health = 0 Fire = 0 Reactivity = 0	
• HMIS-ratings (scale 0 - 4)	HEALTH 0 Health = 0 FIRE 0 Fire = 0 REACTIVITY 0 Reactivity = 0	
· Other hazards		
 Results of PBT and vPvB assessment 		
· PBT:	Not applicable.	
• <u>vPvB:</u>	Not applicable.	
3 Composition/information on ing		
Chemical characterization: Subs CAS No. Description	stances 7732-18-5 water, distilled, conductivity or of similarpu	rity
Identification number(s)	1132-10-5 water, ustilled, conductivity of of similarpu	iity
· EC number:	231-791-2	
Description:	Mixture: consisting of the following components.	
		(Contd. on page 2)

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Index number: 603-117-00-0 R67 Additional information: F First-aid measures Description of first aid measures General information: T After inhalation: S After skin contact: C After swallowing: If Information for doctor: Most important symptoms and effects, both acute and delayed M Indication of any immediate medical attention and special	(Contd. of page of the second seco
CAS: 67-63-0 propan EINECS: 200-661-7 Xi F Index number: 603-117-00-0 R67 Additional information: First-aid measures Additional information: F First-aid measures General information: After inhalation: T After skin contact: C After eye contact: F Information for doctor: Most important symptoms and effects, both acute and delayed Indication of any immediate medical attention and special N	R36; F R11 m. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 For the wording of the listed risk phrases refer to section 16. Take affected persons out into the fresh air. No special measures required. Supply fresh air; consult doctor in case of complaints. Generally the product does not irritate the skin. Rinse opened eye for several minutes under running water. Then consul doctor. If symptoms persist consult doctor. No further relevant information available.
EINECS: 200-661-7 Xi F Index number: 603-117-00-0 R67 Additional information: Fiar Additional information: F First-aid measures F General information: T After inhalation: S After eye contact: After eye contact: After swallowing: If Information for doctor: Most important symptoms and effects, both acute and delayed Indication of any immediate medical attention and special N	R36; F R11 m. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 For the wording of the listed risk phrases refer to section 16. Take affected persons out into the fresh air. No special measures required. Supply fresh air; consult doctor in case of complaints. Generally the product does not irritate the skin. Rinse opened eye for several minutes under running water. Then consul doctor. If symptoms persist consult doctor. No further relevant information available.
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First-aid measures Description of first aid measures General information: T After inhalation: S After skin contact: After skin contact: After eye contact: F After swallowing: If Information for doctor: Most important symptoms and effects, both acute and delayed M Indication of any immediate medical attention and special	Take affected persons out into the fresh air. No special measures required. Supply fresh air; consult doctor in case of complaints. Generally the product does not irritate the skin. Rinse opened eye for several minutes under running water. Then consul doctor. If symptoms persist consult doctor. No further relevant information available.
Description of first aid measuresGeneral information:TAfter inhalation:SAfter skin contact:GAfter skin contact:GAfter swallowing:IfInformation for doctor:Most important symptoms andeffects, both acute and delayedIndication of any immediatemedical attention and specialMost	No special measures required. Supply fresh air; consult doctor in case of complaints. Generally the product does not irritate the skin. Rinse opened eye for several minutes under running water. Then consul doctor. If symptoms persist consult doctor. No further relevant information available.
General information: T After inhalation: N After skin contact: After skin contact: After eye contact: F After swallowing: Information for doctor: Most important symptoms and effects, both acute and delayed N Indication of any immediate M	No special measures required. Supply fresh air; consult doctor in case of complaints. Generally the product does not irritate the skin. Rinse opened eye for several minutes under running water. Then consul doctor. If symptoms persist consult doctor. No further relevant information available.
General information:TAfter inhalation:NAfter skin contact:After skin contact:After eye contact:After swallowing:Information for doctor:Information for doctor:Most important symptoms and effects, both acute and delayed Indication of any immediate medical attention and special	No special measures required. Supply fresh air; consult doctor in case of complaints. Generally the product does not irritate the skin. Rinse opened eye for several minutes under running water. Then consul doctor. If symptoms persist consult doctor. No further relevant information available.
After inhalation:SAfter skin contact:After skin contact:After eye contact:After eye contact:After swallowing:Information for doctor:Most important symptoms and effects, both acute and delayedNIndication of any immediate medical attention and specialN	Supply fresh air; consult doctor in case of complaints. Generally the product does not irritate the skin. Rinse opened eye for several minutes under running water. Then consul doctor. If symptoms persist consult doctor. No further relevant information available.
After skin contact: C After eye contact: F After swallowing: If Information for doctor: Most important symptoms and effects, both acute and delayed N Indication of any immediate medical attention and special	Generally the product does not irritate the skin. Rinse opened eye for several minutes under running water. Then consu doctor. If symptoms persist consult doctor. No further relevant information available.
After swallowing: If Information for doctor: Most important symptoms and effects, both acute and delayed Indication of any immediate medical attention and special	doctor. If symptoms persist consult doctor. No further relevant information available.
After swallowing:IfInformation for doctor:Most important symptoms andeffects, both acute and delayedNIndication of any immediatemedical attention and special	If symptoms persist consult doctor. No further relevant information available.
Information for doctor: Most important symptoms and effects, both acute and delayed Indication of any immediate medical attention and special	No further relevant information available.
Most important symptoms and effects, both acute and delayed Indication of any immediate medical attention and special	
effects, both acute and delayed N Indication of any immediate medical attention and special	
Indication of any immediate medical attention and special	
medical attention and special	No further relevant information available
	No further relevant information available
 	Formation of toxic gases is possible during heating or in case of fire. In case of fire, the following can be released: Carbon monoxide (CO) Nitrogen oxides (NOx) In certain fire conditions, traces of other toxic gases cannot be excluded.
Advice for firefighters	
Protective equipment:	No special measures required.
Accidental release measures	
Personal precautions, protective	
equipment and emergency	Ensure adequate ventilation
	Ensure adequate ventilation Do not allow product to reach sewage system or any water course.
I	Inform respective authorities in case of seepage into water course or sewa system.
	Dilute with plenty of water.
E	Do not allow to enter sewers/ surface or ground water.
Methods and material for	
	Absorb with liquid-binding material (sand, diatomite, acid binders, univer
	binders, sawdust).
	See Section 7 for information on safe handling.
	See Section 8 for information on personal protection equipment.
	See Section 13 for disposal information. No dangerous substances are released.
ľ	(Contd. on pag

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me: Crystal Clean Spray ling and storage ling: utions for safe handling nation about protection st explosions and fires:	(Contd. of page 2) No special measures required.
ling: utions for safe handling nation about protection	
ling: utions for safe handling nation about protection	No special measures required
utions for safe handling nation about protection	No special measures required
	No special measures required.
itions for safe storage, inclu	uding any incompatibilities
qe:	uding any incompatibilities
rements to be met by ooms and receptacles:	Store only in the original receptacle.
on storage facility:	Store away from oxidizing agents. Store away from foodstuffs.
ions:	Protect from frost.
	10 No further relevant information available.
sure controls/personal prot	ection
ional information about	
n of technical systems:	No further data; see item 7.
ol parameters	
onents with limit values that r	require monitoring at the workplace:
-0 propan-2-ol	
Long-term value: 980 mg/m ³ ,	400 ppm
•	
Long-term value: 492 mg/m ³ ,	
lients with biological limit valu	Jes:
-0 propan-2-ol	
/ledium: urine Time: end of shift at end of wo	
onal information:	The lists that were valid during the creation were used as basis.
nal protective equipment: al protective and hygienic ures: ning equipment:	Do not eat, drink, smoke or sniff while working. Use skin protection cream for skin protection. Clean skin thoroughly immediately after handling the product. Not required. No chemical-protective gloves required. Preventive skin protection by use of skin-protecting agents is recommended. Akemi skin protection agent recommendation for preventive skin shelter withou use of protective gloves: STOKODERM (http://www.stoko.com) Akemi skin protection recommendation for skin cleaning after product handling: FRAPANTOL (http://www.stoko.com) Akemi skin protection agent recommendation for skin aftercare:
	irements to be met by cooms and receptacles: nation about storage in one non storage facility: er information about storage tions: ge class: ific end use(s) sure controls/personal prote- tional information about in of technical systems: rol parameters ponents with limit values that in -0 propan-2-ol Long-term value: 980 mg/m ³ , Short-term value: 980 mg/m ³ , Bhort-term value: 980 mg/m ³ , Bhort-term value: 980 mg/m ³ , Short-term value: 980 mg/m ³ , Bhort-term value: 980 mg/m ³ , Short-term value: 980 mg/m ³ , Bhort-term value: 980 mg/m ³ , Dong-term value: 980 mg/m ³ , Short-term

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Trade name: Crystal Clean Spray

	(Contd. of page 3)
	STOKO VITAN (http://www.stoko.com)
	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.
· Penetration time of glove material	The exact break trough 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 a General Information Appearance: Form: Color:	nd chemical properties Fluid Colorless
• <u>Odor:</u>	Odorless
· pH-value at 20 °C (68 °F):	7
 <u>Change in condition</u> <u>Melting point/Melting range:</u> Boiling point/Boiling range: 	0 °C (32 °F) 100 °C (212 °F)
· Flash point:	Not applicable.
 Danger of explosion: 	Product does not present an explosion hazard.
 Explosion limits: Lower: Upper: 	Not determined. Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)
 Density at 20 °C (68 °F): 	1 g/cm ³ (8.345 lbs/gal)
Specific gravity at 20 °C (68 °F):	1 g/cm ³ (8.345 lbs/gal)
Solubility in / Miscibility with Water:	Fully miscible.
· <u>Viscosity:</u> Dynamic: Kinematic at 20 °C (68 °F):	Not determined. 11 s (DIN 53211/4)
<u>Solvent content:</u> <u>Organic solvents:</u> <u>Water:</u> Other information	0.3 % 99.3 % No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition /
- conditions to be avoided: • Possibility of hazardous

No decomposition if used according to specifications.

reactions

Reacts with strong acids. Reacts with strong oxidizing agents.

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USA

Trade name: Crystal Clean Spray	
 Conditions to avoid Incompatible materials: 	(Contd. of page No further relevant information available. No further relevant information available.
 Hazardous decomposition products: 	No dangerous decomposition products known.
11 Toxicological information	
Information on toxicological effective Acute toxicity:	ects
Primary irritant effect:	
• <u>on the skin:</u> • on the eye:	No irritant effect. No irritating effect.
Sensitization:	No sensitizing effects known.
 Additional toxicological information: 	When used and handled assorting to apositions, the product does not have
information:	When used and handled according to specifications, the product does not hav any harmful effects according to our experience and the information provided us.
	The substance is not subject to classification.
· Carcinogenic categories	
· IARC (International Agency for Re	
67-63-0 propan-2-ol	
 NTP (National Toxicology Program 	<u>n)</u>
None of the ingredients is listed.	
 <u>Toxicity</u> <u>Aquatic toxicity:</u> Persistence and degradability 	No further relevant information available. No further relevant information available.
Behavior in environmental system	
Bioaccumulative potential Mobility in soil	No further relevant information available. No further relevant information available.
Additional ecological information General notes:	on: Water hazard class 1 (Self-assessment): slightly hazardous for water
· Results of PBT and vPvB asses	
· <u>PBT:</u>	Not applicable.
 vPvB: Other adverse effects 	Not applicable. No further relevant information available.
13 Disposal considerations	
· Waste treatment methods	
Recommendation:	Smaller quantities can be disposed of with household waste.
· Uncleaned packagings:	
Recommendation:	Disposal must be made according to official regulations.
Recommended cleansing agent:	Water, if necessary with cleansing agents.
14 Transport information	
· <u>UN-Number</u> · <u>DOT, ADR, ADN, IMDG, IATA</u>	Void
• UN proper shipping name • DOT, ADR, ADN, IMDG, IATA	Void
	(Contd. on page
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Trade name: Crystal Clean Spray		
		(Contd. of page 5)
· Transport hazard class(es)		
· <u>DOT,</u> ADR, ADN, IMDG, IATA · <u>Class</u>	Void	
 Packing group DOT, ADR, IMDG, IATA 	Void	
· Environmental hazards:		
<u>Marine pollutant:</u>	No	
 Special precautions for user 	Not applicable.	
 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	nf Not applicable.	
<u>Transport/Additional information:</u>	Not dangerous according to the above specifications.	
· UN "Model Regulation":	-	

15 Regulatory information

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

· <u>Sara</u>
Section 355 (extremely hazardous substances):
None of the ingredient is listed.
Section 313 (Specific toxic chemical listings):
67-63-0 propan-2-ol
<u>TSCA (Toxic Substances Control Act):</u>
All ingredients are listed.
Proposition 65
Chemicals known to cause cancer:
None of the ingredients is listed.
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)
None of the ingredients is listed.
TLV (Threshold Limit Value established by ACGIH)
67-63-0 propan-2-ol A4
· MAK (German Maximum Workplace Concentration)
None of the ingredients is listed.
 NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.
OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.
· GHS label elements Void
Hazard pictograms Void Signal word Void
· <u>Signal woru</u> (Contd. on page 7)

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Trade name: Crystal Clean Spray	
 Hazard statements National regulations: 	(Contd. of page 6) Void
Water hazard class:	Water hazard class 1 (Self-assessment): slightly hazardous for water.
 VOC USA Chemical safety assessment: 	2.8 g/l / 0.02 lb/gl A Chemical Safety Assessment has not been carried out.
	present knowledge. However, this shall not constitute a guarantee for any specific ablish a legally valid contractual relationship.
 Department issuing MSDS: Contact: Date of preparation / last revision Abbreviations and acronyms: 	Laboratory Dieter Zimmermann 01/20/2014 / - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

of preparation / last revision	01/20/2014 / -
eviations and acronyms:	RID: Règlement international concernant le transport des marchandises dangereuses par chemin fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
	IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization
	ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
	ADR: Accord européen sur le transport des marchandises dangereuses par Route (Europé 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)



USA