Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.10.2019 *Version number 5* *Revision: 20.10.2019*

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

1.1 Product identifier

Trade name: Neutralisator

CAS Number:
5329-14-6
EC number:
226-218-8

Index number:
016-026-00-0

Registration number *01-2119488633-28-xxxx*

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

Sector of Use *Sectors of Use are to be taken from the attached exposure scenarios.*
Process category *The Process Categories are to be taken from the attached exposure scenarios.*
Environmental release category
The Environmental Release Categories are to be taken from the attached exposure scenarios.

Application of the substance / the mixture *Neutraliser*

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Ludwig Lock GmbH & Co. KG
Robert-Bosch-Str. 20
D - 73431 Aalen
Telefon: +49 (0) 7361 / 376 155
Telefax: +49 (0) 7361 / 376 396

Further information obtainable from:
Daniela Vogt
Telefon: +49 (0) 7361 376 155
info@lock-lauge.de

1.4 Emergency telephone number:
UNIVERSITÄTSKLINIKUM FREIBURG
Giftnotruf: Telefon +49 (0) 761 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

GHS07

Skin Irrit. 2 *H315 Causes skin irritation.*
Eye Irrit. 2 *H319 Causes serious eye irritation.*

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.10.2019 *Version number 5* *Revision: 20.10.2019*

Trade name: Neutralisator

(Contd. of page 1)

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The substance is classified and labelled according to the CLP regulation.
Hazard pictograms

GHS07

Signal word *Warning*
Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P280	*Wear protective gloves/protective clothing/eye protection/face protection.*
P273	*Avoid release to the environment.*
P305+P351+P338	*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
P337+P313	*If eye irritation persists: Get medical advice/attention.*
P302+P352	*IF ON SKIN: Wash with plenty of water/Seife*
P501	*Dispose of contents/container in accordance with local/regional/national/international regulations.*

2.3 Other hazards

Results of PBT and vPvB assessment
PBT: *Not applicable.*
vPvB: *Not applicable.*

SECTION 3: Composition/information on ingredients

3.1 Substances
CAS No. Description
5329-14-6 sulphamidic acid
Identification number(s)
EC number: *226-218-8*
Index number: *016-026-00-0*

SECTION 4: First aid measures

4.1 Description of first aid measures
General information:
Take affected persons out of danger area and lay down.
Take affected persons out into the fresh air.
Immediately remove any clothing soiled by the product.
Seek medical treatment.
After inhalation: *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. Then consult a doctor.*
After swallowing:
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
4.2 Most important symptoms and effects, both acute and delayed *No further relevant information available.*

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.10.2019 *Version number 5* *Revision: 20.10.2019*

Trade name: Neutralisator

(Contd. of page 2)

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: *Use fire extinguishing methods suitable to surrounding conditions.*
5.2 Special hazards arising from the substance or mixture
The following hazardous decomposition products can result in the event of a fire: Sulphur oxides, nitrogen oxides (NOx), ammonia
5.3 Advice for firefighters
Protective equipment:
No special measures required.
Wear self-contained respiratory protective device.
Wear fully protective suit.
Additional information *Collect contaminated fire fighting water separately. It must not enter the sewage system.*

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid formation of dust.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
6.2 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.
6.3 Methods and material for containment and cleaning up:
Pick up mechanically.
Dispose of the material collected according to regulations.
6.4 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
Any unavoidable deposit of dust must be regularly removed.
Emergency eye baths should be available in the immediate vicinity.
Information about fire - and explosion protection:
Hydrogen is given off through reaction with metals. Danger of explosion.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: *Store only in the original receptacle.*
Information about storage in one common storage facility: *Not required.*
Further information about storage conditions:
Keep container tightly sealed.
Protect from heat and direct sunlight.
Storage class: *8 B*
7.3 Specific end use(s) *No further relevant information available.*

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.10.2019 *Version number 5* *Revision: 20.10.2019*

Trade name: Neutralisator

(Contd. of page 3)

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: *No further data; see item 7.*

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace: *Not required.*
DNELs
Employees, long-term - systemic effects, skin contact: 10mg/kg KG/day
Population, long-term - systemic effects, skin contact: 5mg/kg KG/day
PNECs
Fresh water: 0.048 mg/l
Seawater: 0.0048 mg/l
Wastewater cleaning plant (STP): 2mg/l
Fresh water sediment: 0.173 mg/kg DW
Soil: 0.00638 mg/kg DW
**) DW = Dry weight*
Additional information:
The lists valid during the making were used as basis.
DNEL and PNEC values are based on manufacturers' data.

8.2 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.
Avoid contact with the eyes and skin.
Respiratory protection: *Suitable respiratory protective device recommended.*
Protection of hands:

Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Preventive skin protection by use of skin-protecting agents is recommended.
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.
Natural rubber, NR
Recommended thickness of the material: ≥ 5 mm
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.
Break through time: ≥ 8 hours (0,5mm)
Eye protection:

Tightly sealed goggles

Body protection: *Protective work clothing*

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance:

Form:	*Solid*
Colour:	*White*

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.10.2019 *Version number 5* *Revision: 20.10.2019*

Trade name: Neutralisator

(Contd. of page 4)

Odour:	*Odourless*
Odour threshold:	*Not determined.*
pH-value at 20 °C:	*ca. 1.2 ((10g/l))*
Change in condition	
Melting point/Melting range:	*ca. 190 °C*
Boiling point/Boiling range:	*>200 °C (1013 hPa)*
Flash point:	*Not applicable.*
Flammability (solid, gaseous):	*Product is not flammable.*
Ignition temperature:	
Decomposition temperature:	*209 °C*
Self-igniting:	*Not determined.*
Danger of explosion:	*Product does not present an explosion hazard.*
Explosion limits:	
Lower:	*Not determined.*
Upper:	*Not determined.*
Vapour pressure:	*Not applicable.*
Density at 20 °C:	*2.1 g/cm³*
Bulk density at 20 °C:	*1000-1300 kg/m³*
Relative density	*Not determined.*
Vapour density	*Not applicable.*
Evaporation rate	*Not applicable.*
Solubility in / Miscibility with	
water at 20 °C:	*213 g/l*
Partition coefficient (n-octanol/water):	*0.1 log Kow*
Viscosity:	
Dynamic:	*Not applicable.*
Kinematic:	*Not applicable.*
Organic solvents:	*0.0 %*
Solids content:	*100.0 %*
9.2 Other information	*No further relevant information available.*

SECTION 10: Stability and reactivity

10.1 Reactivity *Danger of explosion in the presence of nitrates.*
10.2 Chemical stability
Thermal decomposition / conditions to be avoided: *No decomposition if used according to specifications.*
10.3 Possibility of hazardous reactions
Reacts with oxidising agents.
Reacts with metals forming hydrogen.
Forms an explosive mixture with nitric acid.
10.4 Conditions to avoid *Extreme temperatures and direct sunlight.*
10.5 Incompatible materials: *Oxidizers*
10.6 Hazardous decomposition products:
Nitrogen oxides
Ammonia
Sulphur oxides (SOx)

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.10.2019 *Version number 5* *Revision: 20.10.2019*

Trade name: Neutralisator

(Contd. of page 5)

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity *Based on available data, the classification criteria are not met.*

LD/LC50 values relevant for classification:		
5329-14-6 sulphamidic acid		
Oral	*LD50*	*3160 mg/kg (rat)*

Primary irritant effect:
Skin corrosion/irritation
Causes skin irritation.
Serious eye damage/irritation
Causes serious eye irritation.
Respiratory or skin sensitisation *Based on available data, the classification criteria are not met.*
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity *Based on available data, the classification criteria are not met.*
Carcinogenicity *Based on available data, the classification criteria are not met.*
Reproductive toxicity *Based on available data, the classification criteria are not met.*
STOT-single exposure *Based on available data, the classification criteria are not met.*
STOT-repeated exposure *Based on available data, the classification criteria are not met.*
Aspiration hazard *Based on available data, the classification criteria are not met.*

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: *No further relevant information available.*
12.2 Persistence and degradability *No further relevant information available.*
12.3 Bioaccumulative potential *No further relevant information available.*
12.4 Mobility in soil *No further relevant information available.*
Ecotoxical effects:
Remark: *Harmful to fish*
Additional ecological information:

General notes:
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms
12.5 Results of PBT and vPvB assessment
PBT: *Not applicable.*
vPvB: *Not applicable.*
12.6 Other adverse effects *No further relevant information available.*

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation *Must not be disposed together with household garbage. Do not allow product to reach sewage system.*
European waste catalogue
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste Codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Uncleaned packaging:
Recommendation: *Disposal must be made according to official regulations.*

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.10.2019 *Version number 5* *Revision: 20.10.2019*

Trade name: Neutralisator

(Contd. of page 6)

SECTION 14: Transport information

14.1 UN-Number
ADR, IMDG, IATA *UN2967*

14.2 UN proper shipping name
ADR, IMDG, IATA *SULPHAMIC ACID*

14.3 Transport hazard class(es)

ADR, IMDG, IATA

Class *8 Corrosive substances.*
Label *8*

14.4 Packing group
ADR, IMDG, IATA *III*

14.5 Environmental hazards: *Not applicable.*

14.6 Special precautions for user *Not applicable.*
Warning: Corrosive substances.
Danger code (Kemler): *80*
EMS Number: *F-A,S-B*
Segregation groups *Acids*

Transport/Additional information:

ADR
Limited quantities (LQ) *5 kg*
Excepted quantities (EQ) *Code: E1*
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 1000 g
Transport category *3*
Tunnel restriction code *E*

UN "Model Regulation": *UN 2967 SULPHAMIC ACID, 8, III*

SECTION 15: Regulatory information

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

Directive 2012/18/EU
Named dangerous substances - ANNEX I *Substance is not listed.*

15.2 Chemical safety assessment: *A Chemical Safety Assessment has been carried out.*

SECTION 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: *10086/176*
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(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Neutralisator

(Contd. of page 7)

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
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Neutraliser

Annex to Safety Data Sheet - Exposure Scenarios

pursuant to 1907/2006/EC, Article 31

Print date: 12.10.2015 Revised: 12.10.2015

No.	Short title	Main user group (SU)	Sector of use (SU)	Product category (PC)	Process category (PROC)	Environmental release category (ERC)	Article category (AC)	Specification
1	Use in chemical synthesis	3	4	19	3	1	NA	ES11057
2	Use as softening agent	22	NA	32	2, 8a, 8b, 10, 11, 16, 17, 20	8a, 8d, 9a, 9b	NA	ES11055
3	Use as additive	3	NA	1	5, 8a, 8b	2, 6d	NA	ES11060
4	Use in food	3	NA	35	1, 4, 7, 8a, 8b, 11, 13	4	NA	ES11049

Neutraliser

Annex to Safety Data Sheet - Exposure Scenarios

pursuant to 1907/2006/EC, Article 31

Print date: 12.10.2015 Revised: 12.10.2015

1. Short description of the exposure scenario 1: Use in chemical synthesis		
Main user groups	SU 3: Industrial uses: Use of substances as such or in preparations on industrial sites	
Sector of end-use	SU4: Manufacture of food and feed stuffs	
Chemical category	PC19: Intermediate products	
Process categories	PROC3: Use in closed batch processes (synthesis or formulation)	
Environmental release categories	ERC1: Manufacture of substances	
Activity	Covers technical uses. Use in food and food stuffs or in human and/or animal medicinal products pursuant to Article 2 (5) (6) of the REACH Regulation is not intended.	
2.1 Contributing scenario to control environmental exposure for: ERC1		
Technical conditions and measures at the process level (source) to prevent releases Technical site conditions and measures to reduce and restrict discharges, air emissions and releases into the soil Organisational measures to prevent/limit releases from the facilities	Air	Use a process that does not generate atmospheric emissions
	Water	Do not empty into drains, do not discharge waste water directly into the environment, do not empty undiluted and/or large volumes into bodies of water or into drains.
	Soil	The production of slurry for agriculture and horticulture is prohibited
Conditions and measures concerning external waste management for disposal	Waste management	Waste should be reused or recycled wherever possible; external management and disposal of waste must comply with the relevant local and/or national regulations.
	Methods of disposal	Packaging that cannot be cleaned should be disposed of in the same manner as the product
2.2 Contributing scenario to control workers' exposure for: PROC3		
Product characteristics	Physical form (at the time of use)	Solid
	Process temperature	< 60 °C
Quantity used	Quantity used at the workplace	1000 ton(s)/year
Human factors dependent on risk management measures	Respiratory volume	10 m3/day
Other operating conditions with effects on the exposure of workers	Room size	>= 20 m3
Technical conditions and measures for controlling dispersion from source to worker	Contaminations and overflows must be rectified immediately. Avoid splashes.	
Organisational measures to prevent/limit release, dispersion and exposure	Understanding of the hazardous characteristics of a substance ensure that control measures are regularly inspected and maintained. The substance may only be handled by suitably trained and authorised personnel	
Conditions and measures	Wear protective gloves.	

As regards personal protection, hygiene and health assessment	Wear suitable eye protection. If necessary: wear suitable protective clothing during work. Do not inhale gas/vapour/aerosols. Respiratory protection

3. Exposure estimation and reference to its source

Environment

There is no exposure estimation for the environment.

Workers

ECETOC TRA-model used.

4. Guidelines for the downstream user to evaluate whether he/she is working within the limits stipulated in the exposure scenario

The guidelines are based on assumed operating conditions that may not necessarily be applicable to all locations; thus some degree of scaling may be required to determine appropriate risk management measures.
The use of adjustment methods (scaling) within the limits of the exposure scenario is reserved for well-trained personnel
If further risk management measures/operating conditions are adopted, users should at the very least ensure that risks are limited to the same level.
Environment
Health

Additional suggestions for good practice beyond the REACH chemical safety assessment

Local extraction is not necessary, but is advisable under good practice.

Neutraliser

Annex to Safety Data Sheet - Exposure Scenarios

pursuant to 1907/2006/EC, Article 31

Print date: 12.10.2015 Revised: 12.10.2015

1. Short description of the exposure scenario 2: Use as softening agent		
Main user groups	SU 22: Commercial uses: public domain (administration, education, entertainment, services, trade)	
Chemical category	PC32: Polymer preparations and compounds	
Process categories	PROC2: Use in closed, continuous processes with occasional controlled exposure PROC8a: Transfer of the substance or preparation (feeding/emptying) from/into vessels/large containers in facilities not specially intended for one single product PROC8b: Transfer of the substance or preparation (feeding/emptying) from/into vessels/large containers in facilities specially intended for one single product PROC10: Roller application or brushing PROC11: Non-industrial spraying PROC16: Use of material as fuel source, limited exposure to unburned product to be expected PROC17: Lubrication under high energy conditions and in partly open process PROC20: Heat and pressure transfer fluids in dispersive, commercial use, but in closed systems	
Environmental release categories	ERC8a: Wide dispersive indoor use of processing aids in open systems ERC8d: Wide dispersive outdoor use of processing aids in open systems ERC9a: Wide dispersive indoor use of substances in closed systems ERC9b: Wide dispersive outdoor use of substances in closed systems	
2.1 Contributing scenario to control environmental exposure for: ERC8a, ERC8d, ERC9a, ERC9b		
Technical conditions and measures at the process level (source) to prevent releases Technical site conditions and measures to reduce and restrict discharges, air emissions and releases into the soil Organisational measures to prevent/limit releases from the facilities	Air	Use a process that does not generate atmospheric emissions
	Water	Do not empty into drains, do not discharge waste water directly into the environment.
	Soil	The production of slurry for agriculture and horticulture is prohibited
Conditions and measures concerning external waste management for disposal	Waste management	Waste should be reused or recycled wherever possible; external management and disposal of waste must comply with the relevant local and/or national regulations.
	Methods of disposal	Packaging that cannot be cleaned should be disposed of in the same manner as the product
2.2 Contributing scenario to control workers' exposure for: PROC2, PROC8a, PROC8b, PROC10, PROC11, PROC16, PROC17, PROC20		
Product characteristics	Physical form (at the time of use)	Liquid, or, solid
	Process temperature	< 60 °C
Quantity used	No information available.	
Human factors dependent on risk management measures	Respiratory volume	10 m3/day
Other operating conditions with effects on the exposure of workers	Room size	>= 20 m3

Technical conditions and measures for controlling dispersion from source to worker	Contaminations and overflows must be rectified immediately. Avoid splashes.
Organisational measures to prevent/limit release, dispersion and exposure	Understanding of the hazardous characteristics of a substance ensure that control measures are regularly inspected and maintained. The substance may only be handled by suitably trained and authorised personnel
Conditions and measures as regards personal protection, hygiene and health assessment	Wear protective gloves. Wear suitable eye protection. If necessary: wear suitable protective clothing during work. Do not inhale gas/vapour/aerosols. Respiratory protection

3. Exposure estimation and reference to its source

Environment

There is no exposure estimation for the environment.

Workers

ECETOC TRA-model used.

4. Guidelines for the downstream user to evaluate whether he/she is working within the limits stipulated in the exposure scenario

The guidelines are based on assumed operating conditions that may not necessarily be applicable to all locations; thus some degree of scaling may be required to determine appropriate risk management measures.
The use of adjustment methods (scaling) within the limits of the exposure scenario is reserved for well-trained personnel
If further risk management measures/operating conditions are adopted, users should at the very least ensure that risks are limited to the same level.
Environment
Health

Additional suggestions for good practice beyond the REACH chemical safety assessment

Local extraction is not necessary, but is advisable under good practice.

Neutraliser

Annex to Safety Data Sheet - Exposure Scenarios

pursuant to 1907/2006/EC, Article 31

Print date: 12.10.2015 Revised: 12.10.2015

1. Short description of the exposure scenario 3: Use as additive		
Main user groups	SU 3: Industrial uses: Use of substances as such or in preparations on industrial sites	
Chemical category	PC1: Adhesive, sealant	
Process categories	PROC5: Mixture or blending in batch processes to formulate preparations and articles (multiple and/or significant contact) PROC8a: Transfer of the substance or preparation (feeding/emptying) from/into vessels/large containers in facilities not specially intended for one single product PROC8b: Transfer of the substance or preparation (feeding/emptying) from/into vessels/large containers in facilities specially intended for one single product	
Environmental release categories	ERC2: Formulation of preparations ERC6d: Industrial use of process regulators for polymerisation processes in the production of resins, rubbers, polymers	
2.1 Contributing scenario to control environmental exposure for: ERC2, ERC6d		
Technical conditions and measures at the process level (source) to prevent releases Technical site conditions and measures to reduce and restrict discharges, air emissions and releases into the soil Organisational measures to prevent/limit releases from the facilities	Water	Do not empty into drains, do not discharge waste water directly into the environment, do not empty undiluted and/or large volumes into bodies of water or into drains. In general the discharge of waste water should ensure that pH changes in the surface water are minimised.
Conditions and measures as regards waste water treatment plants	Type of waste water treatment plant	Public waste water treatment plant
Conditions and measures concerning external waste management for disposal	Waste management	External management and disposal of waste must comply with the relevant local and/or national regulations.
	Methods of disposal	Packaging that cannot be cleaned should be disposed of in the same manner as the product
2.2 Contributing scenario to control workers' exposure for: PROC5, PROC8a, PROC8b		
Product characteristics	Physical form (at the time of use)	Liquid
	Process temperature	< 60 °C
Quantity used	Quantity used at the workplace	Ton(s)/year
Frequency and duration of use	Duration of exposure per day	> 4 h
Human factors dependent on risk management measures	Respiratory volume	10 m3/day
Other operating conditions with effects on the exposure of workers	Room size	>= 20 m3
Technical conditions and measures for controlling dispersion from source to worker	Contaminations and overflows must be rectified immediately. Avoid splashes.	

Organisational measures to prevent/limit release, dispersion and exposure	Understanding of the hazardous characteristics of a substance ensure that control measures are regularly inspected and maintained. The substance may only be handled by suitably trained and authorised personnel
Conditions and measures as regards personal protection, hygiene and health assessment	Wear protective gloves. Wear suitable eye protection. If necessary: wear suitable protective clothing during work. Do not inhale gas/vapour/aerosols. Respiratory protection

3. Exposure estimation and reference to its source

Environment

There is no exposure estimation for the environment.

Workers

ECETOC TRA-model used.

4. Guidelines for the downstream user to evaluate whether he/she is working within the limits stipulated in the exposure scenario

The guidelines are based on assumed operating conditions that may not necessarily be applicable to all locations; thus some degree of scaling may be required to determine appropriate risk management measures.
The use of adjustment methods (scaling) within the limits of the exposure scenario is reserved for well-trained personnel
If further risk management measures/operating conditions are adopted, users should at the very least ensure that risks are limited to the same level.
Environment
Health

Additional suggestions for good practice beyond the REACH chemical safety assessment

Local extraction is not necessary, but is advisable under good practice.

Neutraliser

Annex to Safety Data Sheet - Exposure Scenarios

pursuant to 1907/2006/EC, Article 31

Print date: 12.10.2015 Revised: 12.10.2015

1. Short description of the exposure scenario 4: Use in food		
Main user groups	SU 3: Industrial uses: Use of substances as such or in preparations on industrial sites	
Chemical category	PC35: Washing and cleaning agents (including solvent-based products)	
Process categories	PROC1: Use in closed processes, no likelihood of exposure PROC4: Use in batch and other processes (synthesis) whereby there is a likelihood of exposure PROC7: Industrial spraying PROC8a: Transfer of the substance or preparation (feeding/emptying) from/into vessels/large containers in facilities not specially intended for one single product PROC8b: Transfer of the substance or preparation (feeding/emptying) from/into vessels/large containers in facilities specially intended for one single product PROC11: Non-industrial spraying PROC13: Treatment of articles by dipping and pouring	
Environmental release categories	ERC4: Industrial use of processing aids that do not become part of articles in processes and products	
Activity	Covers technical uses. Use in food and food stuffs or in human and/or animal medicinal products pursuant to Article 2 (5) (6) of the REACH Regulation is not intended.	
2.1 Contributing scenario to control environmental exposure for: ERC4		
Technical conditions and measures at the process level (source) to prevent releases Technical site conditions and measures to reduce and restrict discharges, air emissions and releases into the soil Organisational measures to prevent/limit releases from the facilities	Water	Do not empty into drains, do not discharge waste water directly into the environment, do not empty undiluted and/or large volumes into bodies of water or into drains. In general the discharge of waste water should ensure that pH changes in the surface water are minimised.
Conditions and measures as regards waste water treatment plants	Type of waste water treatment plant	Public waste water treatment plant
Conditions and measures concerning external waste management for disposal	Waste management	External management and disposal of waste must comply with the relevant local and/or national regulations.
	Methods of disposal	Packaging that cannot be cleaned should be disposed of in the same manner as the product
2.2 Contributing scenario to control workers' exposure for: PROC1, PROC4, PROC7, PROC8a, PROC8b, PROC11, PROC13		
Product characteristics	Physical form (at the time of use)	Liquid
	Process temperature	< 60 °C
Quantity used	Quantity used at the workplace	305 ton(s)/year
Frequency and duration of use	Duration of exposure per day	< 8 h
Human factors dependent on risk management measures	Respiratory volume	10 m3/day

Other operating conditions with effects on the exposure of workers	Room size	>= 20 m3
Technical conditions and measures for controlling dispersion from source to worker	Contaminations and overflows must be rectified immediately. Avoid splashes.	
Organisational measures to prevent/limit release, dispersion and exposure	Understanding of the hazardous characteristics of a substance ensure that control measures are regularly inspected and maintained. The substance may only be handled by suitably trained and authorised personnel	
Conditions and measures as regards personal protection, hygiene and health assessment	Wear protective gloves. Wear suitable eye protection. If necessary: wear suitable protective clothing during work. Do not inhale gas/vapour/aerosols. Respiratory protection	

3. Exposure estimation and reference to its source

Environment

There is no exposure estimation for the environment.

Workers

ECETOC TRA-model used.

4. Guidelines for the downstream user to evaluate whether he/she is working within the limits stipulated in the exposure scenario

The guidelines are based on assumed operating conditions that may not necessarily be applicable to all locations; thus some degree of scaling may be required to determine appropriate risk management measures.
The use of adjustment methods (scaling) within the limits of the exposure scenario is reserved for well-trained personnel
If further risk management measures/operating conditions are adopted, users should at the very least ensure that risks are limited to the same level.
Environment
Health

Additional suggestions for good practice beyond the REACH chemical safety assessment

Local extraction is not necessary, but is advisable under good practice.