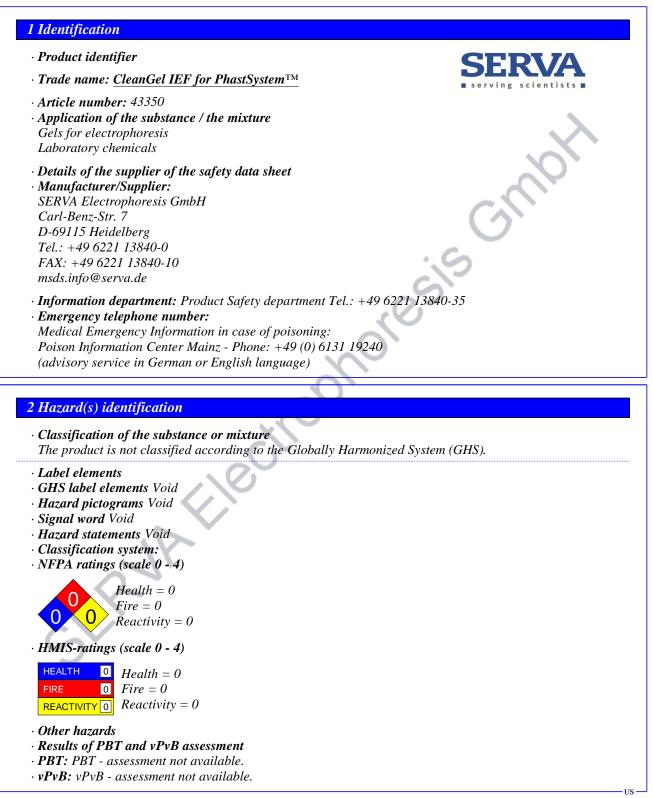
05/04/2018	Kit Components
Product code	Description
43393	CSF Analysis Kit for PhastSystem
Components:	
43350	CleanGel IEF for PhastSystem TM
43888	IEF Mix for CSF Analysis

Printing date 05/04/2018

Reviewed on 05/03/2018



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Printing date 05/04/2018

Reviewed on 05/03/2018

Trade name: CleanGel IEF for PhastSystem™

(Contd. of page 1)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Polyacrylamidegel, crosslinked with methylenebisacrylamide, prepared between 2 sheets of preactivated polyesterfilm. Contains < 0.05 % free acrylamide.

· Dangerous components: Void

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air.
- · After skin contact: Immediately rinse with water.
- After eye contact:

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.

- · After swallowing: Seek medical treatment.
- 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:
- CO_{\geq} extinguishing powder or water spray. Fight larger fire with alcohol resistant foam. • Special hazards arising from the substance or mixture

In case of fire, the following can be released: Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Ammonia (NH₃)

· Advice for firefighters

· Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- Environmental precautions: No special measures required.
- *Methods and material for containment and cleaning up: Pick up mechanically.*
- Dispose contaminated material as waste according to item 13.
- · 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 No special measures required.
- Information about protection against explosions and fires: No special measures required.

(Contd. on page 3)

(Contd. of page 2)

Safety Data Sheet acc. to OSHA HCS

Printing date 05/04/2018

Reviewed on 05/03/2018

Trade name: CleanGel IEF for PhastSystem[™]

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store at -15 to -25 °C
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Store in dry conditions.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Store protective clothing separately.

Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

· Breathing equipment: Suitable respiratory protective device recommended.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

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

- \cdot For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:
- Natural rubber, NR

Nitrile rubber, NBR

- Eye protection: Safety glasses
- **Body protection:** Protective work clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:
- Form:gel between two plastic filmsColor:ColorlessOdor:Odorless

(Contd. on page 4)

Printing date 05/04/2018

Reviewed on 05/03/2018

Trade name: CleanGel IEF for PhastSystemTM

		(Contd. of page 3)
· Change in condition		
Melting point/Melting range:		
Boiling point/Boiling range:	Undetermined.	
· Flash point:	Not applicable.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Density:	Not determined.	
· Solubility in / Miscibility with		
Water:	Insoluble.	
· Solvent content:		
Organic solvents:	0.0 %	
• Other information	No further relevant information available.	

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No further relevant informations available.
- Conditions to avoid No further relevant information available.
- $\cdot \textit{Incompatible materials: } No further relevant information available.$
- Hazardous decomposition products: In case of fire: See Section 5

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
79-06-1 acrylamide	2A
· NTP (National Toxicology Program)	
79-06-1 acrylamide	R
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.

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US

(Contd. of page 4)

Safety Data Sheet acc. to OSHA HCS

Printing date 05/04/2018

Reviewed on 05/03/2018

Trade name: CleanGel IEF for PhastSystemTM

· Behavior in environmental systems:

- · Bioaccumulative potential No further relevant information available.
- \cdot **Mobility in soil** No further relevant information available.
- · Additional ecological information:
- General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow product to reach ground water, water course or sewage system.

- · 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. Disposal must be made according to official regulations.

· Uncleaned packagings:

- *Recommendation:* Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADN · Class	Void
· ADR, IMDG, IATA · Class · Label	Void -
· Packing group · DOT, ADR, IMDG, IATA	Void
• Environmental hazards: • Marine pollutant:	No
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	I of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

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Printing date 05/04/2018

Reviewed on 05/03/2018

Trade name: CleanGel IEF for PhastSystemTM

(Contd. of page 5)

Section 355 (extremely hazardous substances):	
All ingredients are listed.	
Section 313 (Specific toxic chemical listings):	
All ingredients are listed.	
TSCA (Toxic Substances Control Act):	
All ingredients are listed.	
Proposition 65	
None of the ingredients is listed.	
Chemicals known to cause cancer:	
All ingredients are 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)	
79-06-1 acrylamide	
TLV (Threshold Limit Value established by ACGIH)	
79-06-1 acrylamide	

· GHS label elements Void

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department

· Contact: +49 6221 13840-35

• Date of preparation / last revision 05/04/2018 / 1

• Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation PBT: persistent, bioaccumulative, toxic substance (REACH)

vPvB: very persistent, very bioaccumulative substance (REACH)

REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

CLP: Regulation on classification, labelling and packaging of substances and mixtures

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

(Contd. on page 7)

(Contd. of page 6)

Safety Data Sheet acc. to OSHA HCS

Printing date 05/04/2018

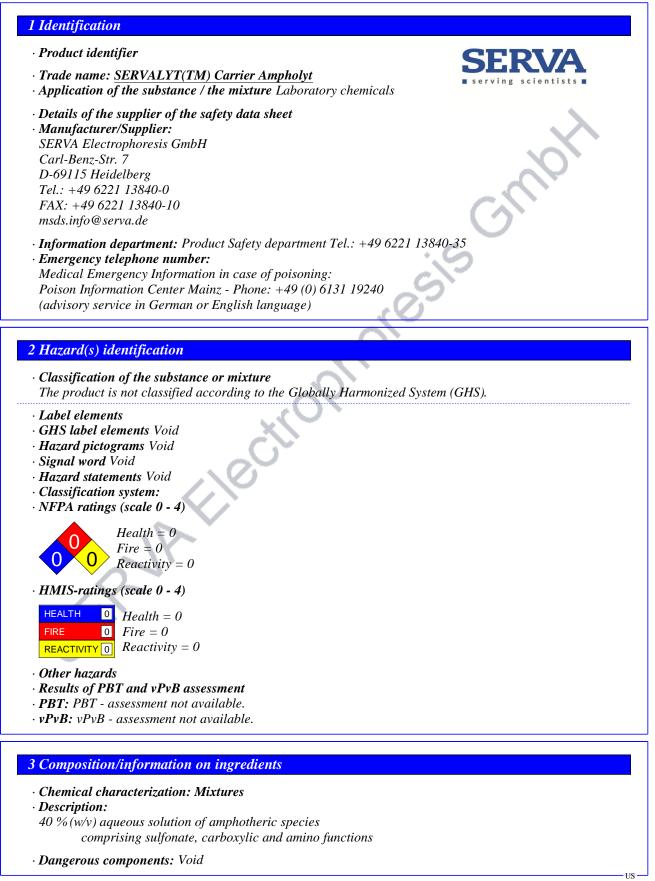
Reviewed on 05/03/2018

Trade name: CleanGel IEF for PhastSystemTM

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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
\cdot * Data compared to the previous version altered.

Printing date 05/04/2018

Reviewed on 04/02/2014



(Contd. on page 2)

Printing date 05/04/2018

Reviewed on 04/02/2014

Trade name: SERVALYT(TM) Carrier Ampholyt

(Contd. of page 1)

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air.
- · After skin contact: Immediately rinse with water.
- · After eye contact:

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.

- After swallowing: Wash out mouth. Seek medical advice if discomfort occurs.
- 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:
- CO_2 , extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • Special hazards arising from the substance or mixture
- Formation of dangerous gases or vapours is possible in case of fire.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions: No special measures required.
- *Methods and material for containment and cleaning up:* Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.
- · 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.*
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- *Requirements to be met by storerooms and receptacles:* Store at dry places in tightly closed receptacles. Store at -15 to -25 °C
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.

(Contd. on page 3)

Printing date 05/04/2018

· Flash point:

· Flammability (solid, gaseous):

Reviewed on 04/02/2014

Trade name: SERVALYT(TM) Carrier Ampholyt

(Contd. of page 2)

8 Exposure controls/personal protection · Additional information about design of technical systems: No further data; see item 7. · Control parameters · Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. • Additional information: The lists that were valid during the creation were used as basis. · Exposure controls · Personal protective equipment: · General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. • **Breathing equipment:** Suitable respiratory protective device recommended. · Protection of hands: Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation · Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. · Penetration time of glove material The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. · For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable: Nitrile rubber, NBR Natural rubber, NR · Eye protection: Safety glasses · Body protection: Protective work clothing 9 Physical and chemical properties · Information on basic physical and chemical properties · General Information · Appearance: Form: Fluid Color: Light yellow **Odorless** · Odor: · Odor threshold: Not determined. 7 • *pH-value at 20* •*C* (68 •*F*): · Change in condition Melting point/Melting range: Undetermined. **Boiling point/Boiling range:** Undetermined.

Not applicable.

Not determined.

(Contd. on page 4)

US

Printing date 05/04/2018

Reviewed on 04/02/2014

Trade name: SERVALYT(TM) Carrier Ampholyt

	(Contd. of pa
Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density:	Not determined.
Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Fully miscible.
• Partition coefficient (n-octanol/wa	ter): Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	0.0 %
• Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant informations available
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No further relevant informations available.
- *Conditions to avoid No further relevant information available.*
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products: In case of fire: See Section 5

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

79-06-1 acrylamide

2A

(Contd. on page 5)

Printing date 05/04/2018

Reviewed on 04/02/2014

Trade name: SERVALYT(TM) Carrier Ampholyt

(Contd. of page 4)

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· NTP (National Toxicology Program)

79-06-1 acrylamide

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · 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.

UN-Number	
ADR, IMDG, IATA	Void
UN proper shipping name	
ADR, IMDG, IATA	Void
Transport hazard class(es)	
ADR, IMDG, IATA	
Class	Void
Label	-
Packing group	
ADR, IMDG, IATA	Void
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II o	f
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.

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Printing date 05/04/2018

Reviewed on 04/02/2014

Trade name: SERVALYT(TM) Carrier Ampholyt

(Contd. of page 5)

15 Regulatory information

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

· Section 355 (extremely hazardous substances):

All ingredients are listed.

• Section 313 (Specific toxic chemical listings): All ingredients are listed.

• TSCA (Toxic Substances Control Act): All ingredients are listed.

· Proposition 65

None of the ingredients is listed.

· Chemicals known to cause cancer:

All ingredients are 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)

None of the ingredients is listed.

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

All ingredients are listed.

· GHS label elements Void

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department

· Contact: +49 6221 13840-35

· Date of preparation / last revision 05/04/2018 / 1

• Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation

PBT: persistent, bioaccumulative, toxic substance (REACH)

vPvB: very persistent, very bioaccumulative substance (REACH)

REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

CLP: Regulation on classification, labelling and packaging of substances and mixtures

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

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

(Contd. on page 7)

Printing date 05/04/2018

Reviewed on 04/02/2014

Trade name: SERVALYT(TM) Carrier Ampholyt

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) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit • * Data compared to the previous version altered.

US

(Contd. of page 6)