SAFETY DATA SHEETS

This SDS packet was issued with item: 077173313

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

070386938 070386946 070386953 070386961 070386979 070386987 070386995 070387001 070387019 070387027 070442509 070442517 070442525 070442533 070442541 070442558 070442566 070442574 070442582 070442590 070442608 070442616 070442624 070442632 070442640 070442657 070442665 070442673 070442681 070442699 070442889 070442897 070442913 070442939 070442947 070442954 077143613 077143621 077143639 077143647 077143654 077144843 077173008 077173016 077173024 077173032 077173040 077173057 077173065 077173305 077173321 077173339 077173347 077173354 077173362 077173370 077173388 077173396 077173404 077173412 077173420 077173438 077173446 077173453 077173461 077173479 077173487 077173495 077173503 077173511 077173529 077173537 077173545 077173552 077173560 077173578 077173586 077173594 077173602 077173610 077173628 077173636 077173644 077173651 077173669 077173677 077173685 077173693 077173701 077173982 077173990 077174006 077174014 077174022 077174030 077174048 077174055 077174063 077174071 077174089 077174139 077174147 077174154 077174162 077174170 077174188 077174196 077174204 077174212 077174220 077174238 077174287 077174295 077174303 077174311 077174329 077174337 077174345 077174352 077174360 077174378 077174501 077174519 077174527 077174535 077174543 077174550 077174568 077174576 077174584 077174592 077174600 077174618 077174626 077174634 077174642 077174659 077174667 077174675 077174683 077174691 077174709 077174717 077174725 077174733 077174741 077174758 077174766 077174774 077174782 077174790 077174808 077174816 077174824 077174832 077174840 077174899 077175383 077176118 077176126 077176134 077176142 077176159 077176167 077176175 077176183 077176191 077176209 077176217 077176225 077176233 077176241 077176258 077176266 077176274 077176282 077176290 077176308 077176316 273010807

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

070215517 077175359

ivoclar vivadent

*

*

Safety Data Sheet acc. to OSHA HCS

Printing date 05/20/2015

Version number 6

Reviewed on 04/11/2015

1 Identification

· Product identifier

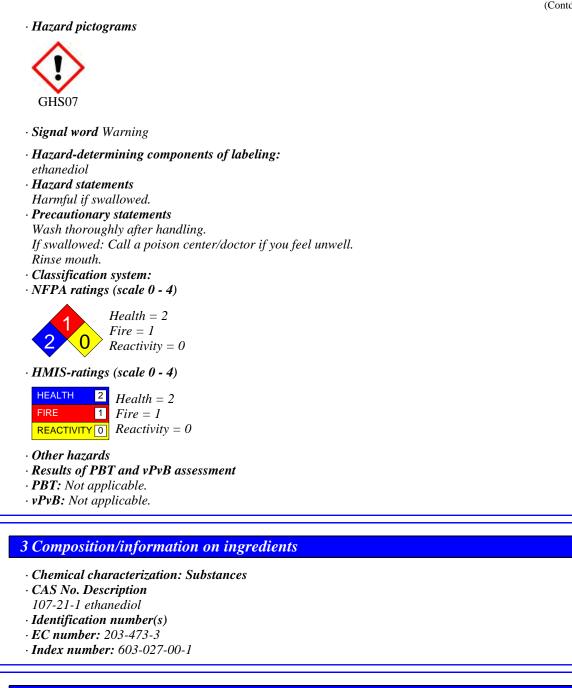
• Trade name: IPS Classic Glaze and Stain Liquid · CAS Number: 107-21-1 • EC number: 203-473-3 · Index number: 603-027-00-1 · Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. · Application of the substance / the mixture Auxiliary for manufacture of dental prothesis · Details of the supplier of the safety data sheet · Manufacturer/Supplier: Ivoclar Vivadent Inc. 175 Pineview Drive, Amherst, N.Y. 14228 USA Tel. +1 800 533 6825 Fax +1 716 691 2285 Ivoclar Vivadent Inc. 1-6600 Dixie Road Mississauga, Ontario L5T 2Y2 Canada Phone: +1 905 670 8499 Fax: +1 905 670 3102 · Information department: Quality Assurance / Regulatory Affairs · Emergency telephone number: 24 Hour Emergency Assistance: Emergency-Call USA - Infotrac: 1-800-535-5053 Emergency-Call Canada - Canutec: 1-613-996-6666 General SDS Assistance: US: 1-800-533-6825 Canada: 1-800-263-8182 2 Hazard(s) identification · Classification of the substance or mixture Acute Tox. 4 H302 Harmful if swallowed. · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Harmful Harmful if swallowed. · Information concerning particular hazards for human and environment: Not applicable. · Label elements · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). (Contd. on page 2) US

Version number 6

Reviewed on 04/11/2015

Trade name: IPS Classic Glaze and Stain Liquid

(Contd. of page 1)



4 First-aid measures

- · Description of first aid measures
- After inhalation:
- Supply fresh air; consult doctor in case of complaints.
- 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. If symptoms persist, consult a doctor.
- · After swallowing:
- Rinse out mouth and then drink plenty of water.

(Contd. on page 3)

- US

Printing date 05/20/2015

Version number 6

Reviewed on 04/11/2015

Trade name: IPS Classic Glaze and Stain Liquid

(Contd. of page 2)

Induce vomiting and call for medical help.

- · 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, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: 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).
- *Reference to other sections* See Section 7 for information on safe handling.
- See Section 7 for information on safe nanating. See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Only adequately trained personnel should handle this product. For use in dentistry only.

- · 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 only in the original receptacle.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Keep receptacle tightly sealed.
- This product is hygroscopic.
- · 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.

(Contd. on page 4)

Version number 6

Reviewed on 04/11/2015

Trade name: IPS Classic Glaze and Stain Liquid

(Contd. of page 3)

US

Components with l	imit values that require monitoring at the workplace:
107-21-1 ethanedic	1
0	ue: NIC-10* mg/m ³
	value: $(100) \text{ mg/m}^3$
	able fraction and vapor
Additional informa	<i>tion:</i> The lists that were valid during the creation were used as basis.
Exposure controls	
Personal protective	
	and hygienic measures:
	usures for dental practice. Dodstuffs, beverages and feed.
	breaks and at the end of work.
Avoid contact with	
Breathing equipme	
	osure or low pollution use respiratory filter device. In case of intensive or longer exposu
	tective device that is independent of circulating air.
Protection of hand	5:
(Th)	
Protecti	ve gloves
	1 , 1 • 11 1 • , , , , 1 1 , / , 1 1 , / , 1 .
	has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing test.	s no recommendation to the glove material can be given for the product/ the preparation
Due to missing test, the chemical mixture	s no recommendation to the glove material can be given for the product/ the preparation/ re.
Due to missing test, the chemical mixtur Selection of the glo	s no recommendation to the glove material can be given for the product/ the preparation
Due to missing test, the chemical mixtur Selection of the glo degradation	s no recommendation to the glove material can be given for the product/ the preparation/ re.
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves	s no recommendation to the glove material can be given for the product/ the preparation/ re.
Due to missing test, the chemical mixtur Selection of the glo degradation	s no recommendation to the glove material can be given for the product/ the preparation. re. ve material on consideration of the penetration times, rates of diffusion and the
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton)
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBF The selection of the	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of quali.
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBR The selection of the and varies from ma	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of quali- nufacturer to manufacturer.
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBR The selection of the and varies from ma Penetration time og	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of quali- nufacturer to manufacturer. f glove material
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBF The selection of the and varies from ma Penetration time of The exact break thr	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBH The selection of the and varies from ma Penetration time oj The exact break the observed.	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of quali- nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBH The selection of the and varies from ma Penetration time oj The exact break the observed.	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBH The selection of the and varies from ma Penetration time oj The exact break the observed.	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of quali- nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBH The selection of the and varies from ma Penetration time oj The exact break thr observed. Eye protection: Say	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBF The selection of the and varies from ma Penetration time of The exact break thr observed. Eye protection: Say	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of quali- nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be ety glasses emical properties
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBF The selection of the and varies from ma Penetration time of The exact break thr observed. Eye protection: Say Physical and ch Information on bas	s no recommendation to the glove material can be given for the product/ the preparation, re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be ety glasses emical properties sic physical and chemical properties
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBF The selection of the and varies from ma Penetration time of The exact break thr observed. Eye protection: Say Physical and ch Information on bas General Informatio	s no recommendation to the glove material can be given for the product/ the preparation/ re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be ety glasses emical properties sic physical and chemical properties
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBF The selection of the and varies from ma Penetration time of The exact break thr observed. Eye protection: Say Physical and ch Information on bas	s no recommendation to the glove material can be given for the product/ the preparation/ re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be ety glasses emical properties sic physical and chemical properties
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBH The selection of the and varies from ma Penetration time oj The exact break thr observed. Eye protection: Saj Physical and ch Information on bas General Informatio Appearance:	s no recommendation to the glove material can be given for the product/ the preparation/ re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be rety glasses emical properties sic physical and chemical properties m
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBH The selection of the and varies from ma Penetration time oj The exact break thr observed. Eye protection: Saj Physical and ch Information on bas General Informatio Appearance: Form: Color: Odor:	s no recommendation to the glove material can be given for the product/ the preparation/ re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be rety glasses emical properties sic physical and chemical properties m Fluid
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBH The selection of the and varies from ma Penetration time of The exact break the observed. Eye protection: Say Physical and ch Information on bas General Informatio Appearance: Form: Color:	s no recommendation to the glove material can be given for the product/ the preparation/ re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be rety glasses emical properties sic physical and chemical properties m Fluid Colorless
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBH The selection of the and varies from ma Penetration time oj The exact break thr observed. Eye protection: Saj Physical and ch Information on bas General Informatio Appearance: Form: Color: Odor:	s no recommendation to the glove material can be given for the product/ the preparation/ re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be rety glasses emical properties sic physical and chemical properties m Fluid Colorless Odorless
Due to missing test. the chemical mixtur Selection of the glo degradation Material of gloves Butyl rubber, BR Fluorocarbon rubb Nitrile rubber, NBH The selection of the and varies from ma Penetration time of The exact break thr observed. Eye protection: Say Physical and ch Information on bas General Informatio Appearance: Form: Color: Odour threshold:	s no recommendation to the glove material can be given for the product/ the preparation/ re. we material on consideration of the penetration times, rates of diffusion and the er (Viton) suitable gloves does not only depend on the material, but also on further marks of qualit nufacturer to manufacturer. f glove material ough time has to be found out by the manufacturer of the protective gloves and has to be ety glasses emical properties m Fluid Colorless Odorless Not determined. Not determined.

Version number 6

Reviewed on 04/11/2015

Trade name: IPS Classic Glaze and Stain Liquid

		(Contd. of page 4)
Boiling point/Boiling range:	197 °C (387 °F)	
· Flash point:	111 °C (232 °F)	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:	410 °C (770 °F)	
· Auto igniting:	Not determined.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	3.2 Vol %	
Upper:	53 Vol %	
· Vapor pressure at 20 °C (68 °F):	0.08 hPa	
• Density at 20 •C (68 •F):	1.11 g/cm ³ (9.263 lbs/gal)	
· Relative density	Not determined.	
· Vapour density	Not determined.	
• Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water at 20 °C (68 °F):	1 g/l	
· Partition coefficient (n-octanol/wate	e r): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
• Other information	No further relevant information available.	

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Chemical stability Stable under normal handling and storage conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Reacts with strong oxidizing agents. Reacts with alkali (lyes).
- Conditions to avoid No further relevant information available.
- $\cdot \textit{Incompatible materials: } No further relevant information available.$
- · Hazardous decomposition products: None under normal conditions of storage and use.

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:

· LD/LC50 values that are relevant for classification:

107-21-1 ethanediol

- Oral LD50 5840 mg/kg (rat)
- Dermal LD50 9530 mg/kg (rabbit)

• Primary irritant effect:

- on the skin: No irritant effect.
- \cdot on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.

(Contd. on page 6)

Printing date 05/20/2015

Version number 6

Reviewed on 04/11/2015

Trade name: IPS Classic Glaze and Stain Liquid

(Contd. of page 5)

- · Additional toxicological information:
- · Carcinogenic categories
- · NTP (National Toxicology Program)
- Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration)
- Substance is not 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.
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (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.

- 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:

Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.

- Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

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, ADR, ADN, IMDG, IATA · Class Void · Packing group · DOT, ADR, IMDG, IATA Void · Environmental hazards: · Marine pollutant: No (Contd. on page 7) US

Version number 6

Reviewed on 04/11/2015

Trade name: IPS Classic Glaze and Stain Liquid

	(Contd. of page
 Special precautions for user 	Not applicable.
· Transport in bulk according to Annex	: II of
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Product is not classified as a dangerous good for transport (ADR, IMDG, IATA).
· UN ''Model Regulation'':	-

15 Regulatory information

	ara
	ection 355 (extremely hazardous substances):
S	ubstance is not listed.
S	ection 313 (Specific toxic chemical listings):
S	ubstance is listed.
1	SCA (Toxic Substances Control Act):
S	ubstance is listed.
ŀ	Proposition 65
(Themicals known to cause cancer:
S	ubstance is not listed.
(Chemicals known to cause reproductive toxicity for females:
S	ubstance is not listed.
(Chemicals known to cause reproductive toxicity for males:
S	ubstance is not listed.
(Chemicals known to cause developmental toxicity:
S	ubstance is not listed.
(Carcinogenic categories
ŀ	EPA (Environmental Protection Agency)
S	ubstance is not listed.
1	LV (Threshold Limit Value established by ACGIH)
1	07-21-1 ethanediol A4
Ν	IIOSH-Ca (National Institute for Occupational Safety and Health)
S	ubstance is not listed.
1	GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). Iazard pictograms



· Signal word Warning

(Contd. on page 8)

Printing date 05/20/2015

Version number 6

Reviewed on 04/11/2015

Trade name: IPS Classic Glaze and Stain Liquid

(Contd. of page 7)

- Hazard-determining components of labeling: ethanediol
- Hazard statements Harmful if swallowed.
- **Precautionary statements** Wash thoroughly after handling. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth.
- National regulations:
 Other regulations, limitations and prohibitive regulations The product is a medical device according to the Directive 93/42/EEC. This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and Drug Administration and Health Canada.
- 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.

· Date of preparation / last revision 05/20/2015 / 5

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
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 LC50: Lethal dose, 50 percent
 LD50: Lethal dose, 50 percent
 Acute Tox. 4: Acute toxicity, Hazard Category 4
 * Data compared to the previous version altered.