Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

PolySense™ 550

Version number: 8.0
Scodix p/n: DCH-0032-01
Replaces version of: 2023-06-12 (7)

Revision: 2024-10-15

SECTION 1: Identification

1.1 Product identifier

Product name	**PolySense™ 550**
Scodix p/n	HIK-0059-01

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

Relevant identified uses	UV curable overprint clear polymer for use with Scodix digital UV Presses

1.3 Details of the supplier of the safety data sheet

Scodix Ltd.
Ha'Amal 13
4809249 Rosh Ha'Ayin
Israel

e-mail: guy@scodix.com

e-mail (competent person)	guy@scodix.com (Guy Alon)

1.4 Emergency telephone number

Emergency telephone numbers				
Country	**Name**	**Postal code/city**	**Telephone**	**Telefax**
	CHEMTREC International		1-800-424-9300 or +1 703-741-5970 - 24h/7d	

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute Tox. 4	H312
Skin Irrit. 2	H315
Eye Dam. 1	H318
Skin Sens. 1	H317
Repr. 2	H361
STOT RE 2	H373

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects
Delayed or immediate effects can be expected after short or long-term exposure.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word danger

- Pictograms

GHS05, GHS07, GHS08 

- Hazard statements

H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

- Precautionary statements

P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing.
P302+P352	If on skin: Wash with plenty of water.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a poison center/doctor.
P321	Specific treatment (see on this label).
P362	Take off contaminated clothing and wash before reuse.
P362+P364	Take off contaminated clothing and wash it before reuse.
P362+P364	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container to industrial combustion plant.

- Hazardous ingredients for labelling

Oxybis(methyl-2,1-ethanediyl) diacrylate, diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, 2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one, 2-(2-Ethoxyethoxy)ethyl acrylate, 3-Methyl-1,5-pentanediyl diacrylate, amine-multifunctional acrylate based oligomer, Propylidynetrimethanol, ethoxylated, esters with acrylic acid, 2-hydroxy-3-phenoxypropyl acrylate, Glycerol, Propoxylated esters with acrylic acid, 2,6-bis(1,1-dimethylethyl)-4-(phenylenemethylene)cyclohexa-2,5-dien-1-one, hexamethylene diacrylate

2.3 Other hazards

Hazards not otherwise classified

May be harmful if swallowed (GHS category 5: acutely toxic - oral).
Toxic to aquatic life with long lasting effects (GHS category 2: aquatic toxicity - acute and/or chronic).

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0.1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier		Wt%	Classification acc. to GHS
Oxybis(methyl-2,1-ethanediyl) diacrylate	CAS No	57472-68-1	20 – 40	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Skin Sens. 1 / H317
2-(2-Ethoxyethoxy)ethyl acrylate	CAS No	7328-17-8	20 – 30	Acute Tox. 4 / H302 Acute Tox. 3 / H311 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1A / H317
Oligoamine resin			1.8 – 7.2	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319
amine-multifunctional acrylate based oligomer			3.5 – 7	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1 / H317
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	CAS No	75980-60-8	1 – 5	Skin Sens. 1B / H317 Repr. 2 / H361f
2-[[(butylamino)carbonyl]oxy]ethyl acrylate	CAS No	63225-53-6	1.25 – 5	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319
2-hydroxy-1-(4-(4-(2-hydroxy-2-methylpropionyl)benzyl)phenyl)-2-methylpropan-1-one	CAS No	474510-57-1	1 – 3	STOT RE 2 / H373
2-hydroxy-3-phenoxypropyl acrylate	CAS No	16969-10-1	1 – 3	Eye Dam. 1 / H318 Skin Sens. 1B / H317
3-Methyl-1,5-pentanediyl diacrylate	CAS No	64194-22-5	1.25 – 3	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1A / H317
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	CAS No	28961-43-5	0.35 – 1.35	Eye Irrit. 2 / H319 Skin Sens. 1 / H317
Glycerol, Propoxylated esters with acrylic acid	CAS No	52408-84-1	0.101 – 0.7	Eye Irrit. 2 / H319 Skin Sens. 1 / H317
hexamethylene diacrylate	CAS No	13048-33-4	0.02 – 0.4	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1 / H317
2,6-bis(1,1-dimethylethyl)-4-(phenylenemethylene)cyclohexa-2,5-dien-1-one	CAS No	7078-98-0	0.01 – 0.12	Skin Sens. 1 / H317

Remarks

For full text of abbreviations: see SECTION 16

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air. Get medical advice/attention.

Following skin contact

Take off immediately all contaminated clothing. Get medical advice/attention. Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Get medical advice/attention. Get medical advice/attention.

Following ingestion

Do NOT induce vomiting. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Rinse mouth with water (only if the person is conscious).

4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed: See section 11: Toxicological information.

4.3 Indication of any immediate medical attention and special treatment needed

this information is not available

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2), Irrritating and toxic fumes, Irrritating and toxic fumes

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus. Wear self-contained breathing apparatus. Wear protective clothing for protection against heat and flame. Wear protective clothing for protection against heat and flame.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Avoid breathing dust/fume/gas/mist/vapors/spray. Provision of sufficient ventilation.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases. Keep away from sources of ignition - No smoking.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Avoid contact with skin and eyes. Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Do not breathe mist/vapors/spray. Keep away from sources of ignition - No smoking. Keep away from sources of ignition - No smoking.

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a closed container. Keep container tightly closed and in a well-ventilated place. Store at temperatures not exceeding 35 °C. Protect from sunlight.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Occupational exposure limit values (Workplace Exposure Limits)

this information is not available

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

Wear appropriate long-sleeved clothing to minimize skin contact. Wear appropriate long-sleeved clothing to minimize skin contact.

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Type of material

NBR: acrylonitrile-butadiene rubber

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	clear-light yellow

Particle	not relevant (liquid)

Odor	characteristic

Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	not determined
Flash point	>100 °C
Evaporation rate	Not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	not determined
Density	1.08 $^{g}/_{cm^3}$ at 25 °C
Vapor density	this information is not available
Solubility(ies)	Soluble in ketone (acetone). Insoluble in water and isopropyl alcohol

Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	not determined

Viscosity

- Kinematic viscosity	46.3 $^{mm^2}/_{s}$ at 25 °C
- Dynamic viscosity	20 – 50 mPa s at 25 °C
Explosive properties	none
Oxidizing properties	none

9.2 Other information

there is no additional information

There is no additional information. There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

If heated:

Exothermic polymerization

If exposed to light:

Exothermic polymerization.

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat. UV-radiation/sunlight.

10.5 Incompatible materials

Oxidizers, Reducing agents, Radical-forming initiators, Radical-forming initiators, Peroxides, Peroxides, Alkalis, Alkalis

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Harmful in contact with skin.

GHS of the United Nations, annex 4: May be harmful if swallowed.

- Acute toxicity estimate (ATE)
  Dermal ≥1,553 $^{mg}/_{kg}$

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	oral	1,860 $^{mg}/_{kg}$
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	dermal	≥400 $^{mg}/_{kg}$

Acute toxicity of components

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	oral	LD50	1,860 $^{mg}/_{kg}$	rat
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	dermal	LD50	≥400 – ≤2,000 $^{mg}/_{kg}$	rat
hexamethylene diacrylate	13048-33-4	oral	LD50	>5,000 $^{mg}/_{kg}$	rat
hexamethylene diacrylate	13048-33-4	dermal	LD50	3,650 $^{mg}/_{kg}$	rabbit

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitization
May cause an allergic skin reaction.

Germ cell mutagenicity
Shall not be classified as germ cell mutagenic.

Carcinogenicity
Shall not be classified as carcinogenic.

Reproductive toxicity
Suspected of damaging the unborn child. Suspected of damaging fertility.

Specific target organ toxicity - single exposure
Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure
May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity
Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	LC50	>2.5 $^{mg}/_{l}$	fish	96 h
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	EC50	90 $^{mg}/_{l}$	aquatic invertebrates	48 h
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	ErC50	<10 $^{mg}/_{l}$	algae	72 h
hexamethylene diacrylate	13048-33-4	LC50	0.38 $^{mg}/_{l}$	fish	96 h
hexamethylene diacrylate	13048-33-4	EC50	8.3 $^{mg}/_{l}$	aquatic invertebrates	24 h
hexamethylene diacrylate	13048-33-4	ErC50	2.33 $^{mg}/_{l}$	algae	72 h

Aquatic toxicity (chronic) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-(2-Ethoxyethoxy)ethyl acrylate	7328-17-8	EC50	770 $^{mg}/_{l}$	microorganisms	3 h
hexamethylene diac-	13048-33-4	LC50	0.47 $^{mg}/_{l}$	aquatic invertebrates	21 d

Aquatic toxicity (chronic) of components					
Name of substance	**CAS No**	**Endpoint**	**Value**	**Species**	**Exposure time**
rylate					
hexamethylene diacrylate	13048-33-4	EC50	0.15 $^{mg}/_{l}$	aquatic invertebrates	21 d

12.2 Persistence and degradability
Data are not available.

12.3 Bioaccumulative potential
Data are not available.

12.4 Mobility in soil
Data are not available.

12.5 Results of PBT and vPvB assessment
According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0.1%.

12.6 Endocrine disrupting properties
Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

12.7 Other adverse effects
Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number

DOT	UN 3082
IMDG-Code	UN 3082
ICAO-TI	UN 3082

14.2 UN proper shipping name

DOT	Environmentally hazardous substance, liquid, n.o.s.
IMDG-Code	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
ICAO-TI	Environmentally hazardous substance, liquid, n.o.s.
Technical name (hazardous ingredients)	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide,

	2-(2-Ethoxyethoxy)ethyl acrylate

14.3 Transport hazard class(es)

DOT	9
IMDG-Code	9
ICAO-TI	9

14.4 Packing group

DOT	III
IMDG-Code	III
ICAO-TI	III

14.5 Environmental hazards	hazardous to the aquatic environment
Environmentally hazardous substance (aquatic environment)	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, 2-(2-Ethoxyethoxy)ethyl acrylate

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Particulars in the shipper's declaration	UN3082, Environmentally hazardous substance, liquid, n.o.s., (contains: diphenyl(2,4,6-trimethyl-benzoyl)phosphine oxide, 2-(2-Ethoxyethoxy)ethyl acrylate), 9, III
Danger label(s)	9, fish and tree

Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	8, 146, 173, 335, 441, IB3, T4, TP1, TP29
ERG No	171

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	yes (hazardous to the aquatic environment) (2-(2-Ethoxyethoxy)ethyl acrylate)
Danger label(s)	9, fish and tree

Special provisions (SP)	274, 335, 969
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-F
Stowage category	A

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	9, fish and tree

Special provisions (SP)	A97, A158, A197, A215
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA) not all ingredients are listed (ACTIVE)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
2-(2-Ethoxyethoxy)ethyl acrylate			CA TACs

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concentration Threshold
2-(2-Ethoxyethoxy)ethyl acrylate		1022			1.0 %

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
2-(2-Ethoxyethoxy)ethyl acrylate			

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory	CAS No	Classification
GLYCOL ETHERS		E

Legend

E Environmental hazard

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	1	material that must be preheated before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	1	material that must be preheated before ignition can occur
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DEP CODE	Department of Environmental Protection Code
DGR	Dangerous Goods Regulations (see IATA/DGR)
DOT	Department of Transportation (USA)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
ED	Endocrine disruptor
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control

Abbr.	Descriptions of used abbreviations
ERG No	Emergency Response Guidebook - Number
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HHS	Higher hazard substance
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LHS	Lower hazard substance
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
Repr.	Reproductive toxicity
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.

Code	Text
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.