Safety Data Sheet

according to Regulation (EC) No 1907/2006

FCA-TS001

Print date: 07.05.2015 Product code:

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

1.1. Product identifier

FCA-TS001

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

Use of the substance/mixture

Washing and cleaning products (including solvent based products)

Uses advised against

not known

1.3. Details of the supplier of the safety data sheet

Company name:	Thierry GmbH	
Street:	Motorstrasse 30	
Place:	D-70499 Stuttgart	
Telephone:	+49 (0)711 8399 7470	Telefax: +49 (0)711 8399 7480
e-mail:	info@thierry-gmbh.de	
Contact person:	Veronika Krieger	Telephone: 0711/839974-0
Internet:	www.thierry-gmbh.de	
Responsible Department:	Dr. Timo Gans-Eichler Chemieberatung Raesfeldstr. 22 D-48149 Münster	e-mail: info@tge-consult.de Tel.: +49 (0)251/924520-60 www.tge-consult.de

1.4. Emergency telephone number: Emergency medical information: Poison Information Center Mainz - Tel: +49 (6131) 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Indications of danger: F - Highly flammable, Xi - Irritant
R phrases:
Highly flammable.
Irritating to eyes.
Vapours may cause drowsiness and dizziness.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:
Flammable liquid: Flam. Liq. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Hazard Statements:
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.

2.2. Label elements

Hazardous components which must be listed on the label

propan-2-ol; isopropyl alcohol; isopropanol
ethyl acetate
n-butyl acetate

Signal word:	Danger
Pictograms:	GHS02-GHS07

Hazard statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P312	Call a POISON CENTER/doctor if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to in accordance with official regulations.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
265-148-2	Distillates (petroleum), hydrotreated middle, Gasoil - unspecified	55 - < 60 %
64742-46-7	Carc. Cat. 2 R45	
649-221-00-X	Carc. 1B; H350	
01-2119489867-12		
200-578-6	ethanol, ethyl alcohol	15 - < 20 %
64-17-5	F - Highly flammable R11	
603-002-00-5	Flam. Liq. 2; H225	
200-661-7	propan-2-ol; isopropyl alcohol; isopropanol	15 - < 20 %
67-63-0	F - Highly flammable, Xi - Irritant R11-36-67	
603-117-00-0	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336	
205-500-4	ethyl acetate	1 - < 5 %
141-78-6	F - Highly flammable, Xi - Irritant R11-36-66-67	
607-022-00-5	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066	
203-905-0	2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether	1 - < 5 %
111-76-2	Xn - Harmful, Xi - Irritant R20/21/22-36/38	
603-014-00-0	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2; H332 H312 H302 H319 H315	
204-658-1	n-butyl acetate	1 - < 5 %
123-86-4	R10-66-67	
607-025-00-1	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066	

Full text of R-, H- and EUH-phrases: see section 16.

Further Information

Product does not contain listed SVHC substances.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. In case of skin irritation, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). In all cases of doubt, or when symptoms persist, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation causes narcotic effects/intoxication.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray. Carbon dioxide. Extinguishing powder. Dry extinguishing powder. alcohol resistant foam.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air. Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. In case of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. (See section 8.) Remove all sources of ignition. Remove persons to safety. Ventilate affected area. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

6.2. Environmental precautions

Cover drains.
Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Take precautionary measures against static discharges. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Heating causes rise in pressure with risk of bursting.

Further information on handling

Keep container tightly closed in a cool, well-ventilated place. Protect against: UV-radiation/sunlight.
Flammable vapours can accumulate in head space of closed systems.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Advice on storage compatibility

Do not store together with: Radioactive substances. Infectious substances. Explosives Non-combustible toxic substances. ammonium nitrate. Organic peroxides. Self-reactive substances and mixtures: Substances and mixtures which, in contact with water, emit flammable gases Pyrophoric substances. Flammable solids. Oxidizing liquids. Oxidizing solids. Gas.

Further information on storage conditions

Recommended storage temperature: 20°C
Protect against: Light. heat. Cold. moisture.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
111-76-2	2-Butoxyethanol	25	123		TWA (8 h)	WEL
		50	246		STEL (15 min)	WEL
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
141-78-6	Ethyl acetate	200	-		TWA (8 h)	WEL
		400	-		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
111-76-2	2-Butoxyethanol	butoxyacetic acid	240 mmol/mol	urine	Post shift

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.
If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses. DIN EN 166

Hand protection

Pull-over gloves of rubber. DIN EN 374
Suitable material:
(penetration time (maximum wearing period): > 4 h)
Butyl rubber. (0,5 mm)
In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.
Respiratory protection necessary at:
exceeding exposure limit values
insufficient ventilation.
Suitable respiratory protective equipment: gas filtering equipment (EN 141). Type A
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	characteristic

		Test method
pH-Value:	N/A	
Changes in the physical state		
Initial boiling point and boiling range:	78 (Ethanol.) °C	
Flash point:	17,4 °C	Abel-Pensky

Explosive properties

In use, may form flammable/explosive vapour-air mixture.

Lower explosion limits:	2 (Isopropyl alcohol.) vol. %
Upper explosion limits:	15 (Ethanol.) vol. %
Ignition temperature:	400 (Ethanol.) °C

Oxidizing properties

none

Vapour pressure: (at 20 °C)	58 (Ethanol.) hPa
Density:	0,91 g/cm³
Water solubility:	partially miscible
Viscosity / dynamic:	not determined
Solvent content:	41,25 % - Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Ignition hazard. Keep away from heat.

10.5. Incompatible materials

Hydrogen peroxide, bromine trifluoride, Difluordioxid, 2-methyl-1,3-butadiene, nitromethane, nitrosyl chloride (catalyst), Nitrosylperchlorat, alkali hydroxide, bromine, fluorine, sodium, strong reducing agents, nitric acid, chromic acid, chromium trioxide, chromyl chloride, ethanolamine, Potassium tert-butoxide. Oxidizing agents, strong.

10.6. Hazardous decomposition products

In use, may form flammable/explosive vapour-air mixture. Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No information available.

Acute toxicity

Based on available data, the classification criteria are not met.

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
64-17-5	ethanol, ethyl alcohol				
	oral	LD50	>5000 mg/kg	Rat.	ECHA Dossier
	inhalative (4 h) vapour	LC50	124,7 mg/l	Rat.	ECHA Dossier
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50	>5000 mg/kg	Rat	ECHA Dossier
	dermal	LD50	>5000 mg/kg	Rabbit	RTECS
141-78-6	ethyl acetate				
	dermal	LD50	>20000 mg/kg	Rabbit.	ECHA Dossier
111-76-2	2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether				
	oral	LD50	1519 mg/kg	Mouse.	(ECHA)
	dermal	LD50	567 mg/kg	Rabbit	(ECHA)
	inhalative (4 h) vapour	LC50	>4,26 mg/l	Rat	(ECHA)
	inhalative aerosol	ATE	1,5 mg/l		
123-86-4	n-butyl acetate				
	oral	LD50	>2000 mg/kg	Rat.	ECHA Dossier
	dermal	LD50	>5000 mg/kg	Rat.	ECHA Dossier
	inhalative (4 h) vapour	LC50	>21 mg/l	Rat.	ECHA Dossier

Irritation and corrosivity

Causes serious eye irritation.

Irritant effect on the skin: Not an irritant.

Sensitising effects

Based on available data, the classification criteria are not met.
no danger of sensitization.
The statement is derived from the properties of the single components.

STOT-single exposure

May cause drowsiness or dizziness. (propan-2-ol; isopropyl alcohol; isopropanol), (ethyl acetate), (n-butyl acetate)

Severe effects after repeated or prolonged exposure

Based on available data, the classification criteria are not met.
n-butyl acetate:
Subchronic inhalative toxicity (Rat.) NOAEC = 500 ppm (90d, EPA OTS 798.2450)
ethyl acetate:
Subchronic inhalative toxicity (Rat.) NOAEC = 350 ppm (90d, EPA OTS 798.2450)
ethanol, ethyl alcohol:
NOAEL (oral.) = 2400 mg/kg ; Toxicology and Applied Pharmacology. Vol. 16, Pg. 718,
NOAEC (inhalation.) = 16000 ppm ; Fundam Appl Toxicol 5:727-736.
propan-2-ol; isopropyl alcohol; isopropanol:
Chronic inhalative toxicity (Rat): NOAEC = 5000 ppm (OECD 451)
2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether:
Subchronic oral toxicity: LOAEL = 69 mg/kg (Rat male.)
Subchronic oral toxicity: LOAEL = 82 mg/kg (Rat female.)
Chronic inhalative toxicity: LOAEC = 31 ppm
2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
n-butyl acetate:
No experimental indications of mutagenicity in-vitro exist.
ethyl acetate:
No experimental indications of mutagenicity in-vitro exist.
propan-2-ol; isopropyl alcohol; isopropanol:
In-vitro mutagenicity: negative.
Developmental toxicity/teratogenicity: NOAEL = 240 mg/kg (IUCLID)
Reproductive toxicity: NOAEL = 500 mg/kg (IUCLID)
2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether: Ames test negative.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No information available.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] | [d]	Species	Source
64-17-5	ethanol, ethyl alcohol					
	Acute fish toxicity	LC50	14200 mg/l	96 h	Pimephales promelas	ECHA Dossier
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris	ECHA Dossier
	Acute crustacea toxicity	EC50	5012 mg/l	48 h	Ceriodaphnia dubia	ECHA Dossier
	Crustacea toxicity	NOEC	9,6 mg/l	9 d	daphnia magna	ECHA Dossier
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50	9640 mg/l	96 h	Pimephales promelas	ECHA Dossier
	Acute crustacea toxicity	EC50	1400 mg/l	48 h	Daphnia magna	GESTIS
141-78-6	ethyl acetate					
	Acute fish toxicity	LC50	>100 mg/l	96 h	Pimephales promelas	ECHA Dossier
	Acute algae toxicity	ErC50	>100 mg/l	72 h	Green algae	ECHA Dossier
111-76-2	2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether					
	Acute fish toxicity	LC50	1464 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	(ECHA Dossier)
	Acute algae toxicity	ErC50	911 mg/l	72 h	Pseudokirchneriella subcapitata	(ECHA Dossier)
	Acute crustacea toxicity	EC50	1800 mg/l	48 h	Daphnia magna	(ECHA Dossier)
	Fish toxicity	NOEC	>100 mg/l	21 d	Brachydanio rerio (zebra-fish)	(ECHA Dossier)
	Algea toxicity	NOEC	88 mg/l	3 d	Pseudokirchneriella subcapitata	(ECHA Dossier)
	Crustacea toxicity	NOEC	100 mg/l	21 d	Daphnia magna	(ECHA Dossier)
123-86-4	n-butyl acetate					
	Acute algae toxicity	ErC50	674,7 mg/l	72 h	Desmodesmus subspicatus	
	Acute crustacea toxicity	EC50	44 mg/l	48 h	Daphnia sp.	

12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64-17-5	ethanol, ethyl alcohol			
	other guideline	84%	20	ECHA Dossier
	Product is biodegradable.			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
	EU Method C.5/ EU Method C.6	53%	5	ECHA Dossier
	Product is biodegradable.			
141-78-6	ethyl acetate			
	other guideline	>60%	10	ECHA Dossier
	Product is biodegradable.			
111-76-2	2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether			
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C	90,4%	28	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			
123-86-4	n-butyl acetate			
	OECD 301D / EEC 92/69 annex V, C.4-E	83%	28	
	Easily biodegradable (concerning to the criteria of the OECD)			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,31
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05
141-78-6	ethyl acetate	0,73
111-76-2	2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether	0,81
123-86-4	n-butyl acetate	2,3

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Waste disposal number of waste from residues/unused products

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing dangerous substances
Classified as hazardous waste.

Waste disposal number of used product

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing dangerous substances
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Ethanol., Isopropyl alcohol.)

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 3

Classification code: F1

Special Provisions: 274 601 640D

Limited quantity: 1 L
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Other applicable information (land transport)

Excepted quantity: E2

Inland waterways transport (ADN)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Ethanol., Isopropyl alcohol.)

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 3

Classification code: F1
Special Provisions: 274 601 640D
Limited quantity: 1 L

Other applicable information (inland waterways transport)

Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Ethanol, Isopropanol)

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 3

Special Provisions: 274
Limited quantity: 1 L
EmS: F-E, S-E

Other applicable information (marine transport)

Excepted quantity: E2

Air transport (ICAO)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Ethanol, Isopropanol)

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Hazard label: 3

Special Provisions: A3
Limited quantity Passenger: 1 L
IATA-packing instructions - Passenger: 353

IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

Other applicable information (air transport)

Passenger-LQ: Y341
Excepted quantity: E2

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

refer to chapter 6-8

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

2004/42/EC (VOC): 41,75 % ; VOC Directive 2004/42/EC: (379,925 g/l)

Additional information

The preparation is dangerous in the sense of Directive 1999/45/EC.
This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].
Directive 96/82/EC for danger control following severe accidents with dangerous substances: Appendix I, Part 2, No 7b (Seveso II)

National regulatory information

Employment restrictions:	Observe employment restrictions for young people.
Water contaminating class (D):	1 - slightly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

Rev. 1.0 Initial release 19.05.14

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)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations
Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
OSHA: Concerning the International Transport of Dangerous Goods by Rail)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
LOAEL: Lowest observed adverse effect level

NOAEC: No observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
DNEL: Derived No Effect Level
PNEC: predicted no effect concentration
TSCA: Toxic Substances Control Act
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
NTP: National Toxicology Program
SARA: Superfund Amendments and Reauthorization Act
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
PBT: Persistent bioaccumulative toxic
SVHC: substance of very high concern

Relevant R-phrases (Number and full text)

10	Flammable.
11	Highly flammable.
20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
36	Irritating to eyes.
36/38	Irritating to eyes and skin.
45	May cause cancer.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

Relevant H- and EUH-phrases (Number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)