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

1.1. Product identifier

Torvan-Concentrate

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

Use of the substance/mixture

Product for professional cleaning and maintenance

1.3. Details of the supplier of the safety data sheet

Company name:	Johannes Kiehl KG	
Street:	Robert-Bosch-Str. 9	
Place:	D-85235 Odelzhausen	
Telephone:	+49 8134 9305-0	Telefax: +49 8134 6466
E-mail:	info@kiehl-group.com	
Contact person:	Laboratory department	
Internet:	www.kiehl-group.com	
Responsible Department:	Notrufnummer für deutsch- und englischsprachige Länder: +49/89/19240 Vergiftungsinformationszentrale (VIZ) Österreich: +43 1 406 43 43 Nationale Notrufnummer für die Schweiz (Tox-Zentrum Zürich): 145 Numéro d'urgence France: INRS: +33 (0) 1 45 42 59 59 Numero d' emergenza Italia: Centro Antiveleni - 20162 Milano: 02/66101029 ETTSZ /Egészségügyi Toxikológiai Tájékoztató Szolgálat/, 1096 Budapest, Nagyvárad tér 2. Ügyeleti telefonszám: +36 80 201-199 Eesti: Häirekeskuse number: 112 / Mürgistusteabekeskuse number: 16662 Emergency telephone number for all other countries: +49/8134/9305-169	

KIEHL Austria GmbH	Perfektastr. 57;	A-1230 Wien	Tel. +43 (0) 1 / 604 99 93
KIEHL FRANCE SAS	5, rue de Londres;	F-67670 Mommenheim	Tél. +33 (0) 3.88.59.52.25
KIEHL Italia s.r.l.	Via San Rocco, 101;	I-16036 Recco (GE)	Tel. +39 / 0185 730 008
KIEHL Schweiz AG	St. Dionys-Str. 33;	CH-8645 Jona	Tel. +41 (0) 55 / 254 74 74
KIEHL Hungary Kft.	Felsöipari körút 3/ D	HU-2142 Nagytarcsa	Tel. +36 (0) 1 / 348-08 41
KIEHL Middle East LLC	A8-LIU 48/49 - KIZAD	Abu Dhabi, U.A.E.	Tel. +971 2 550 33 96

1.4. Emergency telephone number:

+49/89/19240 (germanophone and anglophone)
For Belgium: +32 70 245 245 (free, 24/7) or +32 2 264 96 30 (normal rate)

SECTION 2: Hazards identification

2.2. Label elements

Additional advice on labelling

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

according to 648/2004/CE: nonionic surfactants 5-15%, water-soluble solvents, potassium-citrate, dyes, fragrances (Linalool, Citronellol, Hexyl Cinnamal, Benzyl Salicylate)

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
112-34-5	2-(2-Butoxyethoxy)ethanol			1 - < 5 %
	203-961-6	603-096-00-8	01-2119475104-44	
	Eye Irrit. 2; H319			
69011-36-5	i-C13-Fatty alcohol polyglycol ethers 5-12 EO			1 - < 5 %
	500-241-6			
	Acute Tox. 4, Eye Dam. 1; H302 H318			
Polymer	Butanol, propoxylated, ethoxylated			1 - < 5 %
	Acute Tox. 4; H302			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
112-34-5	203-961-6	2-(2-Butoxyethoxy)ethanol	1 - < 5 %
	dermal: LD50 = 4120 mg/kg; oral: LD50 = 5660 mg/kg		
69011-36-5	500-241-6	i-C13-Fatty alcohol polyglycol ethers 5-12 EO	1 - < 5 %
	oral: ATE = 500 mg/kg Eye Dam. 1; H318: >= 10 - 100 Eye Irrit. 2; H319: >= 6 - < 10		
Polymer		Butanol, propoxylated, ethoxylated	1 - < 5 %
	oral: ATE = 500 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No special measures are necessary.

After inhalation

No special measures are necessary.

After contact with skin

Wash with plenty of water.

After contact with eyes

Rinse cautiously with water for several minutes.

After ingestion

Rinse mouth immediately and drink 1 glass of of water. Do NOT induce vomiting.
Call a doctor if you feel unwell.

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

No information available.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

no restriction

Unsuitable extinguishing media

No information available.

5.2. Special hazards arising from the substance or mixture

No information available.

5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings.
The product itself does not burn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Avoid contact with skin, eyes and clothes.

For non-emergency personnel

No special measures are necessary.

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Stop leak if safe to do so. Cover drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Wipe up with absorbent material (e.g. cloth, fleece).
Clean contaminated articles and floor according to the environmental legislation.

Other information

Never return spills in original containers for re-use.

6.4. Reference to other sections

Safe handling: see section 7

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

No special measures are necessary.

Further information on handling

No special handling advices are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place.
Store in a place accessible by authorized persons only.

Hints on joint storage

No special measures are necessary.

Further information on storage conditions

Keep container tightly closed.

Never return unused material to storage receptacle.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	WEL
		15	101.2		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

No information available.

Individual protection measures, such as personal protective equipment

Skin protection

No special measures are necessary.

Respiratory protection

No special measures are necessary.

Environmental exposure controls

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	violet
Odour:	pleasant

		Test method
Melting point/freezing point:	<-8 °C	
Boiling point or initial boiling point and boiling range:	>98 °C	
Flammability:	not applicable	
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Flash point:	>100 °C	
Auto-ignition temperature:	>250 °C	
Decomposition temperature:	not determined	
pH-Value (at 20 °C):	approx. 9,5	K-QP1012C
Viscosity / kinematic:	not determined	
Water solubility: (at 20 °C)	completely miscible	
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	1,04 g/cm³	K-QP1012E
Relative vapour density:	not determined	
Particle characteristics:	not applicable	

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not relevant

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable

Oxidizing properties

not relevant

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
Viscosity / dynamic:	not determined
Flow time:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Do not store at temperatures above 35°C

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No information available.

Further information

Do not mix with other detergents or chemicals.

SECTION 11: Toxicological information

11.1. Information on hazard classes

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-34-5	2-(2-Butoxyethoxy)ethanol				
	oral	LD50 5660 mg/kg	Rat		
	dermal	LD50 4120 mg/kg	Rabbit		
69011-36-5	i-C13-Fatty alcohol polyglycol ethers 5-12 EO				
	oral	ATE 500 mg/kg			
Polymer	Butanol, propoxylated, ethoxylated				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

Further information

Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1. Toxicity

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

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
112-34-5	2-(2-Butoxyethoxy)ethanol					
	Acute algae toxicity	ErC50 > 100 mg/l		Scenedesmus sp.		
	Acute crustacea toxicity	EC50 > 100 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. The surfactants in the product meet all requirements of the detergents regulation 648/2004/EC.

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-34-5	2-(2-Butoxyethoxy)ethanol	0,56 (25°C)

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Chemical Oxygen Demand (COD) 360 mg O2/g.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains.

List of Wastes Code - residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

List of Wastes Code - used product

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

Contaminated packaging

Clean container with water. Return cleaned containers to the company for recycling.
Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: not applicable
14.2. UN proper shipping name: not applicable
14.3. Transport hazard class(es): not applicable
14.4. Packing group: not applicable

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No special measures are necessary.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

Other applicable information

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 55, Entry 75

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 3 / 6 / 7 / 8 / 12

Abbreviations and acronyms

Acute Tox. 4: Acute toxicity, hazard category 4
Eye Dam. 1: Serious eye damage, hazard category 1
Eye Irrit. 2: Eye irritation, hazard category 2
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

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