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

1.1. Product identifier

Kiehl Durator

UFI: DR10-90K0-100N-29JQ

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

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Muta. 2; H341
Acute Tox. 4; H302
Eye Dam. 1; H318
Skin Sens. 1A; H317
STOT RE 2; H373
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Trimethylolpropane tris(2-methyl-1-aziridine propionate)

Signal word: Danger

Pictograms:



Hazard statements

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe vapour.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection.
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.
P391	Collect spillage.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

crosslinking agents, additives

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
64265-57-2	Polyfunctional Aziridine cross-linking agent			95 - < 100 %
	264-763-3		01-2119963929-15	
	Muta. 2, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1A, STOT RE 2, Aquatic Chronic 2; H341 H302 H318 H317 H373 H411			

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		
64265-57-2	264-763-3	Polyfunctional Aziridine cross-linking agent	95 - < 100 %
	oral: ATE = 500 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Avoid contact with skin and eyes.

After inhalation

Move out of dangerous area.

If you feel unwell, seek medical advice (show the label where possible).

After contact with skin

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

After contact with eyes

Rinse thoroughly with plenty of water, also under the eyelids. Call a physician immediately.

After ingestion

Rinse mouth. Consult a physician.

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

This information is not available.

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

Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, Carbon dioxide (CO2), Dry chemical, Water spray

5.2. Special hazards arising from the substance or mixture

This information is not available.

5.3. Advice for firefighters

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

Additional information

In the event of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Avoid contact with skin and eyes.
In case of insufficient ventilation, wear suitable respiratory equipment.

For non-emergency personnel

Use personal protection equipment.

For emergency responders

Use personal protection equipment.

6.2. Environmental precautions

Do not flush into surface water.

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

Wipe up with absorbent material (e.g. cloth, fleece). After cleaning, flush away traces with water.

6.4. Reference to other sections

Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes.

Advice on protection against fire and explosion

Not required

Advice on general occupational hygiene

Handle in accordance with good industrial hygiene and safety practice.

Further information on handling

Use only in well-ventilated areas.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep tightly closed in a dry and cool place. Store in original container.
Store in a place accessible by authorized persons only.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep container tightly closed.
Never return unused material to storage receptacle.

7.3. Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

Use only in well-ventilated areas.
Do not breathe vapours or spray mist.
Wash off with soap and water.
Wash contaminated clothing before re-use.

Individual protection measures, such as personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166

Hand protection

Impervious butyl rubber gloves

Skin protection

Long sleeved clothing

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

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:	weakly yellow
Odour:	amine-like

Melting point/freezing point:	<0 °C
Flammability:	not applicable
Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Flash point:	>100 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value (at 25 °C):	approx. 10,5
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):	1,08 g/cm³
Relative vapour density:	not determined
Particle characteristics:	not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

Not explosive

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: (at 20 °C)	200 mPa·s
Flow time:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

This information is not available.

10.2. Chemical stability

This information is not available.

10.3. Possibility of hazardous reactions

This information is not available.

10.4. Conditions to avoid

Do not expose to temperatures above 35 °C.
Stable under recommended storage conditions.
Hydrolyses in presence of: water

10.5. Incompatible materials

Acids, Acid anhydrides, Strong oxidizing agents

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

Further information

Do not mix with other detergents or chemicals.

SECTION 11: Toxicological information

11.1. Information on hazard classes

Acute toxicity

Harmful if swallowed.
Possible risks of irreversible effects.
Ingestion or inhalation of vapours causes increased irritation and inflammation of mucous membranes, dependent on exposure period. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
May cause sensitization by inhalation. Effects of breathing high concentrations of vapour may include:: Allergic reactions

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64265-57-2	Polyfunctional Aziridine cross-linking agent				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

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

Sensitising effects

May cause an allergic skin reaction. (Polyfunctional Aziridine cross-linking agent)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (Polyfunctional Aziridine cross-linking agent)
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

May cause damage to organs through prolonged or repeated exposure. (Polyfunctional Aziridine cross-linking agent)

Aspiration hazard

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

Specific effects in experiment on an animal

LD50/oral/rat = 3038 mg/kg

11.2. Information on other hazards

Endocrine disrupting properties

This information is not available.

Further information

Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.
Should not be released into the environment.

12.3. Bioaccumulative potential

This information is not available.

12.4. Mobility in soil

This information is not 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

This information is not available.

Further information

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not dispose of waste into sewer.

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

Offer rinsed packaging material to local recycling facilities.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Trimethylolpropane tris(2-methyl-1-aziridine propionate))
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9



Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-

Marine transport (IMDG)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Trimethylolpropane tris(2-methyl-1-aziridine propionate))
14.3. Transport hazard class(es):	9
14.4. Packing group:	III

Hazard label:	9



Special Provisions:	274, 335, 969
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-A, S-F

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: Trimethylolpropane tris(2-methyl-1-aziridine propionate)

14.6. Special precautions for user

Not required

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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 3

National regulatory information

Water hazard class (D): 3 - highly 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): 2 / 3 / 6 / 7 / 8 / 12 / 15

Abbreviations and acronyms

Acute Tox. 4: Acute toxicity, hazard category 4
Eye Dam. 1: Serious eye damage, hazard category 1
Skin Sens. 1A: Skin sensitisation, hazard category 1A
Muta. 2: Germ cell mutagenicity, hazard category 2
STOT RE 2: Specific target organ toxicity - repeated exposure, hazard category 2
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard category: Chronic 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

Classification for mixtures and used evaluation method

Classification	Classification procedure
Muta. 2; H341	Calculation method
Acute Tox. 4; H302	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1A; H317	
STOT RE 2; H373	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

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