Safety Data Sheet

according to Regulation (EC) No 1907/2006

Icon Infiltrant

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

1.1. Product identifier

Icon Infiltrant

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

Uses advised against

pregnant or breastfeeding people should not work with hazardous substances

1.3. Details of the supplier of the safety data sheet

Company name:	DMG Chemisch-Pharmazeutische Fabrik GmbH	
Street:	Elbgaustraße 248	
Place:	D-22547 Hamburg	
Telephone:	+49. (0) 40. 84006-0	Telefax: +49. (0) 40. 84006-222
E-mail:	info@dmg-dental.com	
Internet:	www.dmg-dental.com	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Eye Irrit. 2; H319
Skin Sens. 1; H317
Repr. 1B; H360

Full text of hazard statements: see SECTION 16.

2.2. Label elements

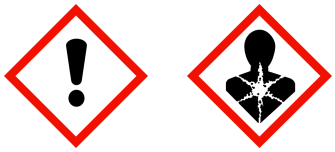
Regulation (EC) No 1272/2008

Hazard components for labelling

Triethylene glycol dimethacrylate
Propylidynetrimethanol, ethoxylated, esters with acrylic acid
2-Ethylhexyl 4-(dimethylamino)benzoate
methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate

Signal word: Danger

Pictograms:



Hazard statements

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H360	May damage fertility or the unborn child.

Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.

Special labelling of certain mixtures

Contains < 1 % of components with unknown hazards to the aquatic environment.
Restricted to professional users.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
109-16-0	Triethylene glycol dimethacrylate			75 - < 80 %
	203-652-6		01-2119969287-21	
	Skin Sens. 1B; H317			
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid			15 - < 20 %
	500-066-5		01-2119489900-30	
	Eye Irrit. 2, Skin Sens. 1B, Aquatic Chronic 3; H319 H317 H412			
21245-02-3	2-Ethylhexyl 4-(dimethylamino)benzoate			< 1 %
	244-289-3		01-2120766649-35	
	Repr. 1B; H360			
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate			< 1 %
	201-297-1	607-035-00-6	01-2119452498-28	
	Flam. Liq. 2, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H225 H315 H317 H335			
110-82-7	cyclohexane			< 0.1 %
	203-806-2	601-017-00-1		
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H225 H315 H336 H304 H400 H410			

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		
109-16-0	203-652-6	Triethylene glycol dimethacrylate	75 - < 80 %
	dermal: LD50 = >2000 mg/kg; oral: LD50 = >5000 mg/kg		
28961-43-5	500-066-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid	15 - < 20 %
	dermal: LD50 = >13200 mg/kg; oral: LD50 = >2000 mg/kg		
21245-02-3	244-289-3	2-Ethylhexyl 4-(dimethylamino)benzoate	< 1 %
	oral: LD50 = 14900 mg/kg		
80-62-6	201-297-1	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate	< 1 %
	inhalation: LC50 = 29,8 mg/l (vapours); dermal: LD50 = >5000 mg/kg; oral: LD50 = >5000 mg/kg		
110-82-7	203-806-2	cyclohexane	< 0.1 %
	inhalation: LC50 = >32,88 mg/l (dusts or mists); dermal: LD50 = >2000 mg/kg; oral: LD50 = >5000 mg/kg Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1		

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Do NOT induce vomiting. Call a physician immediately.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

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

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

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 cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid dust formation. Do not breathe dust.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Hints on joint storage

No special measures are necessary.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
128-37-0	2,6-Ditertiary-butyl-para-cresol	-	2		TWA (8 h)	
110-82-7	Cyclohexane	200	700		TWA (8 h)	
80-62-6	Methyl methacrylate	50	-		TWA (8 h)	
		100	-		STEL (15 min)	

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
109-16-0	Triethylene glycol dimethacrylate			
Worker DNEL, long-term		inhalation	systemic	48,5 mg/m³
Worker DNEL, long-term		dermal	systemic	13,9 mg/kg bw/day
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid			
Worker DNEL, long-term		inhalation	systemic	16,2 mg/m³
Worker DNEL, long-term		dermal	systemic	0,8 mg/kg bw/day
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate			
Worker DNEL, long-term		inhalation	local	208 mg/m³
Worker DNEL, long-term		dermal	systemic	13,7 mg/kg bw/day
Worker DNEL, long-term		dermal	local	1,5 mg/cm²
Worker DNEL, acute		inhalation	local	416 mg/m³
Worker DNEL, long-term		inhalation	systemic	348,4 mg/m³
Worker DNEL, acute		dermal	local	1,5 mg/cm²
128-37-0	2,6-Di-tert-butyl-4-methylphenol			
Worker DNEL, long-term		inhalation	systemic	3,5 mg/m³
Worker DNEL, long-term		dermal	systemic	0,5 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
109-16-0	Triethylene glycol dimethacrylate
Freshwater	0,016 mg/l
Marine water	0,002 mg/l
Freshwater sediment	0,002 mg/kg
Marine sediment	0,185 mg/kg
Micro-organisms in sewage treatment plants (STP)	1,7 mg/l
Soil	0,027 mg/kg
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid
Freshwater	0,002 mg/l
Marine water	0 mg/l
Freshwater sediment	0,008 mg/kg
Marine sediment	0,001 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	0,006 mg/kg
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate
Freshwater	0,94 mg/l
Marine water	0,094 mg/l
Freshwater sediment	10,2 mg/kg
Marine sediment	10,2 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	1,48 mg/kg
128-37-0	2,6-Di-tert-butyl-4-methylphenol
Freshwater	0,000199 mg/l
Freshwater (intermittent releases)	0,00199 mg/l
Marine water	0,000199 mg/l
Freshwater sediment	0,0996 mg/kg
Marine sediment	0,00996 mg/kg
Soil	0,04769 mg/kg

8.2. Exposure controls


Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly sealed safety glasses.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four

control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. 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.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	characteristic
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	Ingredient : 10 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value:	not determined
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	not determined
Relative vapour density:	not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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
109-16-0	Triethylene glycol dimethacrylate				
	oral	LD50 >5000 mg/kg	Rat	supplier SDS	
	dermal	LD50 >2000 mg/kg	Mouse	supplier SDS	
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid				
	oral	LD50 >2000 mg/kg	Rat	supplier SDS/ ECHA	
	dermal	LD50 >13200 mg/kg	Rabbit	supplier SDS/ ECHA	
21245-02-3	2-Ethylhexyl 4-(dimethylamino)benzoate				
	oral	LD50 14900 mg/kg	Rat	ECHA	OECD 401
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate				
	oral	LD50 >5000 mg/kg	Rat	supplier SDS	
	dermal	LD50 >5000 mg/kg	Rabbit	supplier SDS	
	inhalation (4 h) vapour	LC50 29,8 mg/l	Rat	supplier SDS	
110-82-7	cyclohexane				
	oral	LD50 >5000 mg/kg	Rat	ECHA	OECD 401
	dermal	LD50 >2000 mg/kg	Rabbit	ECHA	OECD 402
	inhalation (4 h) dust/mist	LC50 >32,88 mg/l	Rat	ECHA	OECD 403

Irritation and corrosivity

Serious eye damage/eye irritation: Causes serious eye irritation.

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

Sensitising effects

May cause an allergic skin reaction. (Triethylene glycol dimethacrylate; Propylidynetrimethanol, ethoxylated, esters with acrylic acid; methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate)

Carcinogenic/mutagenic/toxic effects for reproduction

May damage fertility or the unborn child. (2-Ethylhexyl 4-(dimethylamino)benzoate)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: 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

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

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
109-16-0	Triethylene glycol dimethacrylate						
	Acute algae toxicity	ErC50 mg/l	>100	72 h	Pseudokirchneriella subcapitata		OECD 201
	Crustacea toxicity	NOEC	32 mg/l	21 d	Daphnia magna (Big water flea)		
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid						
	Acute fish toxicity	LC50	1,95 mg/l	96 h	Brachydanio rerio	supplier SDS/ ECHA	
	Acute algae toxicity	ErC50	2,2 mg/l	72 h	Scenedesmus subspicatus	supplier SDS/ ECHA	
	Acute crustacea toxicity	EC50	70,7 mg/l	48 h	Daphnia magna (Big water flea)	supplier SDS/ ECHA	
	Acute bacteria toxicity	EC50 mg/l ( )	>1000	3 h	Activated sludge	supplier SDS/ ECHA	
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate						
	Acute fish toxicity	LC50 mg/l	>100	96 h		supplier SDS	OECD 203
	Acute algae toxicity	ErC50	110 mg/l	72 h	Selenastrum capricornutum	ECHA	
	Fish toxicity	NOEC	9,4 mg/l			supplier SDS	OECD 210
	Algae toxicity	NOEC mg/l	>110		Selenastrum capricornutum	supplier SDS	OECD 201
	Crustacea toxicity	NOEC	37 mg/l		Daphnia magna (Big water flea)	supplier SDS	OECD 202
110-82-7	cyclohexane						
	Acute algae toxicity	ErC50 mg/l	0,925	72 h	Pseudokirchneriella subcapitata	ECHA	
	Acute crustacea toxicity	EC50	0,9 mg/l	48 h	Daphnia magna (Big water flea)	ECHA	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
109-16-0	Triethylene glycol dimethacrylate			
	OECD 301B	85%		
	Readily biodegradable (according to OECD criteria).			
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate			
	OECD 301C	94%	14	
	Readily biodegradable (according to OECD criteria).			
110-82-7	cyclohexane			
		77%	28	
	Easily biodegradable (concerning to the criteria of the OECD)			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
109-16-0	Triethylene glycol dimethacrylate	2,3
28961-43-5	Propylidynetrimethanol, ethoxylated, esters with acrylic acid	2,89
21245-02-3	2-Ethylhexyl 4-(dimethylamino)benzoate	6,2
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate	1,38
110-82-7	cyclohexane	3,44

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
The product has not been tested.

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

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

180106 WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (EXCEPT KITCHEN AND RESTAURANT WASTES NOT ARISING FROM IMMEDIATE HEALTH CARE); wastes from natal care, diagnosis, treatment or prevention of disease in humans; chemicals consisting of or containing hazardous substances; hazardous waste

Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

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 75

Information according to Directive 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water hazard class (D):	1 - slightly hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

Flam. Liq: Flammable liquid
Asp. Tox: Aspiration hazard
Skin Irrit: Skin irritation
Eye Irrit: Eye irritation
Skin Sens: Skin sensitisation
Repr: Reproductive toxicity
STOT SE: Specific target organ toxicity - single exposure
Aquatic Acute: Acute aquatic hazard
Aquatic Chronic: Chronic aquatic hazard
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
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
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
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
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: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
Repr. 1B; H360	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360	May damage fertility or the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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