

Safety Data Sheet

in accordance with Regulation (EC) No. 1907/2006 (REACH)

38 Dyne Prefilled Test Pen

Product no.: 40.55100.0

Revision date: 01/01/2023

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1. Identification of the substance or mixture and of the company

1.1 Product identifier:

Trade name / designation:

38 Dyne Prefilled Test Pen

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

1.2.1 Uses of the substance or mixture:

Determination of the surface tension and surface cleanliness of solids (films / moulded parts) made of plastic, metal, glass etc.

1.2.2 Uses advised against: Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

1.3 Details of the supplier of the safety data sheet

Company name

Corona Supplies Ltd

Address

Unit G, Howland Road

Thame, Oxon. UK.

Phone

+44 1844 261779

Fax

+44 01844 358187

E-mail

sales@coronasupplies.co.uk

Website

www.coronasupplies.co.uk

1.4 EMERGENCY TELEPHONE NUMBER:

+49 170 5351 781

(24h English)

2. Possible Dangers

2.1 Classification of the mixture:

Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquids: Flam. Fl. 2

H225

Serious eye damage

H318

Hazardous to watercourses: Aqu. chron. 2

H411

Additional information:

Full text of H and EUH phrases: see under section 16.

2.2 Labelling elements

Labelling in accordance with Regulation (EG) No. 1272/2008 [CLP]

Product identifier: 38 Dyne Prefilled Test Pen

Hazard pictograms:



Signal word:

Danger

Hazard statements:

H225 Highly flammable liquid and vapour.

H318 Causes severe eye irritation.

H411 Toxic to aquatic organisms with long-lasting effects.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames as well as other ignition sources. No smoking.
P233	Keep containers tightly closed.
P280	Wear protective gloves / protective clothing / eye protection / face 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	Call a POISON CENTRE or doctor/physician immediately.
P370+P378	In case of fire: use water spray, alcohol-resistant foam, carbon dioxide (CO ₂); extinguishing powder to extinguish it.
P403+P235	Store in a well-ventilated place. Keep cool.
P273	Avoid release to the environment.
P501	Dispose of content / container according to local / regional / national / international regulations.

Only intended for commercial users.

2.3 Other hazards:

Results of PBT and vPvB assessment: SECTION 12: Ecological Information

Note: Please note that the information contained in our Safety Data Sheets refers to the ink.

Since our pens contain a comparatively small quantity of ink, most of this information will not be relevant to you.

3. Composition / Information on Ingredients**3.1 Mixtures****Hazardous ingredients**

Designation				
CAS No.	EC No.	REACH No.	Index No.	%
Classification in accordance with Regulation (EG) No. 1272 [CLP]				MG in g/mol

Ethanol				
64-17-5	200-578-6	01-2119457610-43		85 - <90 %
Flam. liq. 2, eye irrit. 2; H225 H319				

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride				
989-38-8	213-584-9			1 - <5 %
Acute tox. 3, eye dam. 1, aquatic acute 1, aquatic chronic 1; H301 H318 H400 H410				

Additional information:

Full text of H and EUH phrases: see under section 16.

4. First Aid Measures**4.1 Description of first aid measures**

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

If the person is likely to become unconscious, place and transport in stable sideways position.

Do not administer anything if the person is unconscious or having convulsions.

Take-off all contaminated clothing immediately.

After inhalation:

Bring the person concerned into fresh air. Move the person concerned into a relaxed position and keep warm.

Call a doctor if feeling unwell.

After skin contact:

IF ON SKIN (or hair): Remove/take off all contaminated clothing immediately. Rinse skin with water/shower.

If skin irritation occurs: get medical advice/attention.

After eye contact:

In case of contact with eyes, rinse immediately for 10 to 15 minutes with running water with the eyelids open and consult an ophthalmologist

After ingestion:

Rinse mouth immediately and drink large quantities of water.

Do NOT induce vomiting. Call a doctor if feeling unwell.

 4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation.

 4.3 Indication of any immediate medical attention or special treatment needed

Treat symptomatically.

5. Fire-fighting Measures **5.1 Extinguishing agents:**

Water spray, carbon dioxide (CO₂), alcohol-resistant foam, extinguishing powder.

Unsuitable: full water jet

 5.2 Specific hazards arising from the substance or mixture

Flammable. Vapours may form an explosive mixture with air. Vapours are heavier than air and spread over the floor.

In case of fire: Hazardous decomposition products: Carbon dioxide (CO₂). Carbon monoxide. Gases, vapours, harmful.

 5.3 Advice for fire-fighters

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

Adapt extinguishing measures to suit the environment.

Additional information:

Use water spray to protect people and to cool containers in the danger zone.

Damp down gases/vapours/mist with a water spray jet.

Collect contaminated extinguishing water separately. Do not empty into drains or watercourses.

6. Accidental Release Measures **6.1 Personal precautions, protective equipment and emergency procedures**

Eliminate all ignition sources.

Bring people to safety.

Ensure adequate ventilation.

Do not breathe gas/fumes/vapour/spray.

Avoid contact with skin, eyes and clothing.

Wear personal protective equipment.

 6.2 Environmental precautions:

Do not empty into drains or watercourses.

Do not allow to enter the ground/soil.

Inform the respective authorities in case of gas leaks or seepage into watercourses, soil or drains.

 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid binders, universal binders). Treat the recovered material as prescribed in the "Disposal" section.

 6.4 Reference to other sections

Safe handling: see section 7

Personal protective equipment: see section 8

Disposal: see section 13.

7. Handling and Storage **7.1 Precautions for safe handling****Advice on safe handling:**

Avoid contact with skin and eyes.

Wear personal protective equipment.

Provide for sufficient ventilation and punctiform suction at critical points.

Avoid: Generation/formation of aerosols

Do not inhale vapour/aerosol.

Vapours/aerosols should be extracted directly at source.

Explosive / highly flammable mixtures may develop in case of insufficient ventilation and/or through use.

Only use the material in places where open light, fire and other flammable sources can be kept away.

Take precautionary measures against static discharges.

(Provide grounding of containers, equipment, pumps and extraction units).

Only use antistatic (non-sparking) tools.

Precautions against fire and explosion

Keep away from sources of ignition – no smoking.

Take precautionary measures against static discharges.

Vapours may form an explosive mixture with air.

Ignitable mixtures may form in empty containers.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage facilities and containers:

Store in a place that is only accessible to authorised persons.

Keep away from sources of ignition – no smoking.

Keep containers tightly closed and store in a cool, well-ventilated place.

Keep only in the original container.

Use explosion-proof machinery, equipment, extraction units, instruments, etc.

Floors should be impervious, waterproof and easy to clean.

Information on storage with other products

Do not store together with: oxidising agents, acid, concentrated; alkalis (lyes), concentrated

Observe regulations for storage of flammable liquids.

Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place.

Keep away from heat, hot surfaces, sparks, open flames as well as other ignition sources. No smoking.

Protect from direct sunlight.

(Heating causes an increase in pressure and a risk of bursting.)

Storage class in accordance with TRGS 510: 3 (Flammable liquids)

7.3 Specific end uses:

There are no other specific end uses other than those referred to in section 1.

8. Exposure Limitation and Control / Personal Protective Equipment

8.1 Control parameters

Workplace limit values (TRGS 900)

CAS No.	Designation	ppm	mg/m ³	F/m ³	Peak limit	Art
64-17-5	Ethanol	200	380		2(II)	

DNEL/DMEL values

CAS No.	Designation	Exposure route	Effect	Value
64-17-5	Ethanol			
	Workers DNEL, acute	Inhalation	Local	1900 mg/m ³
	Workers DNEL, long-term	Dermal	Systemic	343 mg/kg KG/d
	Workers DNEL, long-term	Inhalation	Systemic	950 mg/m ³
	Consumers DNEL, acute	Inhalation	Local	950 mg/m ³
	Consumers DNEL, long-term	Dermal	Systemic	206 mg/kg KG/d
	Consumers DNEL, long-term	Inhalation	Systemic	114 mg/m ³
	Consumers DNEL, long-term	Oral	Systemic	87 mg/kg KG/d

PNEC values

CAS No.	Designation	Value
	Environmental compartment	
64-17-5	Ethanol	
	Fresh water	0.96 mg/l
	Sea water	0.79 mg/l
	Fresh water sediment	3.6 mg/kg
	Marine sediment	2.9 mg/kg
	Soil	0.63 mg/kg
	Micro-organisms in waste water treatment plants	580 mg/l

Additional information on limit values

Ethanol:

TRGS 900, AGW (Germany): DFG Y: There is no need to be concerned about the risk of foetal damage when complying with the workplace limit values (AGW) and the biological limit values (BGW).

□ **8.2 Exposure limitation and control****8.2.1 Appropriate engineering controls:**

Adequate technical ventilation must be provided for the whole working area if local extraction is not possible or is inadequate.

8.2.2 Personal protective equipment:**Protective and hygiene measures**

Do not breathe gas/vapour/spray.

Change contaminated clothing.

Wash hands before breaks and at the end of the working day.

When using do not eat or drink.

Cloths contaminated with product should not be kept in trouser pockets.

Replace gloves immediately if you notice any cracks or other changes in size, colour, elasticity etc.! Prepare a skin protection plan.

Eye protection:

Tightly fitting safety goggles.

Eye baths must be provided and their location must be clearly marked.

Hand protection:

Only chemical protective gloves with a CE mark and four-digit test number must be worn when handling chemical agents. (See DIN EN 374).

Prepare and observe a skin protection plan!

Chemical gloves need to be selected specifically for the workplace based on the concentration and volume of hazardous substances.

It is recommended to check the chemical resistance of the above-mentioned protective gloves for special applications with the glove manufacturer.

Protective gloves should be replaced immediately in case of damage or wear

Recommended material: Butyl rubber.

Information on the breakthrough times for the substances referred to in section 3 of this safety data sheet should be obtained from the glove manufacturer.

Body protection:

Flame-proof protective clothing. Wear antistatic shoes and work clothing.

The wearing of closed chemical-resistant protective work clothing is required in addition to personal protective equipment.

After contact with skin, take off all contaminated clothing immediately and wash right away with plenty of water and soap.

Everyday clothing should be stored separately from work clothing.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Required when vapours and aerosols are generated.

Required when vapours and aerosols are generated.

Recommended respiratory protection: combined filter device (EN 14387) type A-P2.

8.2.3 Environmental exposure limitation and control

Do not empty into drains or watercourses.

Avoid seepage into the ground. Inform the respective authorities if the product contaminates watercourses or drains. Inform the respective authorities if the product penetrates into the soil.

9. Physical and Chemical Properties□ **9.1 Information on basic physical and chemical properties**

Physical form: liquid

Colour: red

Odour: solvent

Status changes

Initial boiling point and boiling range: 78 °C estimated

Flash point: 12 °C estimated

Test standard**Explosion hazards**

Vapours may form an explosive mixture with air. Vapours are heavier than air and spread over the floor.

Lower explosion limit: 3.5 % vol. estimated

Upper explosion limit: 15 % vol. estimated

Ignition temperature: 425 °C estimated
 Density: not specified
 Partition coefficient: not specified

9.2 Other information

Solids content: not specified
 Particle characteristics: not relevant (liquid)

10. Stability and Reactivity

10.1 Reactivity:

Flammable, risk of ignition.

10.2 Chemical stability:

The mixture is chemically stable under the recommended storage, operating and temperature conditions.

10.3 Possibility of hazardous reactions:

May form explosive/flammable vapour/air mixtures when in use.

Empty, uncleaned containers may contain product gases that form explosive mixtures with air.

10.4 Conditions to avoid:

UV radiation/sunlight.

Keep away from heat, hot surfaces, sparks, open flames as well as other ignition sources. No smoking.

Take precautionary measures against static discharges.

10.5 Incompatible materials:

Oxidising agents, alkalis (lyes), concentrated. Acid, concentrated.

10.6 Hazardous decomposition products:

The following may be produced in case of fire: Carbon dioxide (CO₂). Carbon monoxide. Nitrogen oxide (NO_x). Formaldehyde. Gases/vapours that are harmful to health.

11. Toxicological Information

11.1 Information on toxicological effects

11.1.1 Substances

Acute toxicity

The classification criteria are not met based on the data available.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

Rat (inhalation): 8h (IRT)

No mortality within the stated exposure time in animal testing. Assessment was derived from products of a similar chemical structure.

CAS No.	Designation				
	Exposure routes	Method	Dose	Species	Source
64-17-5	Ethanol				
	Oral	LD50	>10000 mg/kg	Rat	OECD 401
	Dermal	LD50	>2000 mg/kg	Rabbit	OECD 402
	Inhalation (4 h) vapour	LC50	>20 mg/l	Rat	
989-38-8	9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride				
	Oral	LD50	250 mg/kg	Rat	
	Dermal	LD50	>2500 mg/kg	Rat	

Irritant and corrosive effect

Causes serious eye irritation.

Ethanol:

Irritant effect on the skin: causes no irritation.

Irritant effect on the eye: irritating to eyes.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

Irritant effect on the skin: causes no irritation.

Irritant effect on the eye: risk of serious damage to eyes.

Sensitising effects

The classification criteria are not met based on the data available.

Ethanol:

No sensitising effect.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:
no data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The classification criteria are not met based on the data available.

Ethanol:

Carcinogenicity: none

Germ cell mutagenicity: none

Reproductive toxicity: none

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

Carcinogenicity: no data available

Germ cell mutagenicity: no data available

Reproductive toxicity: no data available

Specific target organ toxicity (single exposure)

The classification criteria are not met based on the data available.

Ethanol:none

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride: no data available

Specific target organ toxicity (repeated exposure)

The classification criteria are not met based on the data available.

Ethanol: none

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride: no data available

Risk of aspiration

The classification criteria are not met based on the data available.

Ethanol: none

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:Not applicable

Further information:

Systemic effects: After absorption of large quantities: tiredness, CNS disorders, headache, dizziness, convulsions, unconsciousness, drop in blood pressure, tachycardia

Further information:

The mixture is classified as hazardous in accordance with Regulation (EC) No. 1272/2008 [CLP].

Practical experience

Observations relevant for classification

Prolonged or repeated skin contact may lead to skin degreasing and therefore to skin irritation.

Liquid splashed in the eye may cause irritation and reversible damage.

11.2 Endocrine disrupting properties

Not listed.

11.3 Information on other hazards

There is no additional information.

12. Ecological Information

□ **12.1 Ecotoxicity:**

Toxic to aquatic organisms with long-lasting effects.

Ethanol (cf. ethyl alcohol):

Acute toxicity has been evaluated in a variety of species under standard operating conditions.

The criteria for classification as "acute aquatic toxic" are not met.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

Very toxic to aquatic organisms with long-lasting effects.

Microorganisms / effect on activated sludge:

EC10: 7 mg/l, Pseudomonas putida (DIN 38412 Part 27 (draft))

CAS No.	Designation					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
64-17-5	Ethanol					
	Acute fish toxicity	LC50	15300 mg/l	96 h	Pimephales promelas (Fathead minnow)	Flow test US-EP
	Acute crustacean toxicity	EC50	>10000 mg/l	48 h	Daphnia magna (water flea)	
	Acute algal toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris	OECD 201

CAS No.	Designation					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
989-38-8	9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride					
	Acute fish toxicity	LC50	>2.2 - <4.6 96 hmg/l		Leuciscus idus (golden orfe)	

12.2 Persistence and degradability

The product was not tested.

Ethanol:

Degree of elimination: > 70 %

Other information:

CSB: 1600 g O₂/kg

BSB5: 1350 gO₂/g

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

The product is readily biodegradable.

Behaviour in waste water treatment plants (adsorption of activated sludge): moderate/partial elimination from the water.

CAS No.	Designation			
	Method	Value	d	Source
	Assessment			
64-17-5	Ethanol			
	Biodegradability	97%	28	
	Readily biodegradable.			

12.3 Bioaccumulation potential:

The product was not tested.

Ethanol:

Bioaccumulation potential: none

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

no data available

Partition coefficient in n-Octanol/water

CAS No.	Designation	Log Pow
64-17-5	Ethanol	-0.3

BCF

CAS No.	Designation	BCF	Species	Source
64-17-5	Ethanol	0.66		

12.4 Mobility in soil

The product was not tested.

Ethanol:

The product is mobile in an aqueous environment.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

no data available

12.5 Results of PBT and vPvB assessment

The product was not tested.

Ethanol:

This substance does not meet the criteria for classification as PBT or vPvB.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

no data available

12.6 Other harmful effects:

The product was not tested.

9-[2-(Ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7-dimethylxanthylium chloride:

The product contains organically bound halogen in accordance with the formulation. It can contribute to the AOX value in the effluent from waste water treatment plants or in watercourses.

Additional ecotoxicological information:

Do not discharge product unmonitored into the environment.

12.7 Endocrine disrupting properties

Not listed.

12.8 Other adverse effects

Data are not available.

13. Disposal Considerations**13.1 Waste management process**

This product and its container must be disposed of as hazardous waste. Disposal of contents and containers in accordance with local/regional/international regulations.

Information relevant for waste water disposal

Do not allow to enter sewerage system.

13.2 Relevant waste legislation

The assignment of the waste code numbers /waste designations shall be carried out in accordance with EAKV in a sector- and process-specific manner.

13.3 Notes

Waste shall be separated in such a way that it can be treated separately by municipal or national waste facilities. Please observe the relevant national or regional regulations.

13.4 Further information

Ink that is no longer usable can be returned for disposal.

14. Transport Information**14.1 UN number or ID number**

ADR/RID/ADN UN 3175

IMDG-Code UN 3175

ICAO-TI UN 3175

14.2 UN proper shipping name

ADR/RID/ADN Solids containing flammable liquid, n.o.s. or mixtures of solid substances (such as preparations and wastes)

IMDG-Code Solids containing flammable liquid, n.o.s. or mixtures of solid substances (such as preparations and wastes)

ICAO-TI Solids containing flammable liquid, n.o.s. or mixtures of solid substances (such as preparations and wastes)

14.3 Transport hazard class(es)

ADR/RID/ADN 4.1

IMDG-Code 4.1

ICAO-TI 4.1

14.4 Packing group

ADR/RID/ADN II

IMDG-Code II

ICAO-TI II

14.5 Environmental hazards non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk

 14.8 Special precautions for users

Not classified as a hazardous material according to the ADR/RID, IATA transport regulations

Overland transport (ADR/RID)

UN number UN 3175

Proper UN Shipping Ref. Solids containing flammable liquid, n.o.s. or mixtures of solid substances (such as preparations and wastes)

Special regulations 216

Air transport (IATA)

UN number : UN 3175

Proper UN Shipping Ref. Solids containing flammable liquid, n.o.s. or mixtures of solid substances (such as preparations and wastes)

Special regulations: A46

Classification: "not restricted"

Special precautions for users

Caution: Flammable liquid substance

The transport regulations are cited in accordance with the international regulations and in the form in which they are applied in Germany. Possible deviations in other countries are not taken into considerations.

 14.9 Transport in bulk according to Annex II of the MARPOL 73/78 Convention and the IBC Code

Not applicable

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

15.1.1 EU regulations

Relevant European Union (EU) regulations**Regulation 649/2012/EU on the export and import of dangerous chemicals (PIC).**

Not listed.

Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS).

Not listed.

Regulation 850/2004/EC on Persistent Organic Pollutants (POP)

Not listed.

Restrictions according to REACH, Annex VIII

None

List of substances subject to authorisation (REACH, Annex XIV) /SVHC - candidate list

not listed

Directive on industrial emissions (VOCs, 2010/75/EU) Deco-Paint Directive (2004/42/EC)**VOC content:** 100 %**Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) - Annex II**

Not listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Pollutant Release and Transfer Register (PRTR)

not listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

Not listed.

Regulation 98/2013/EU on the marketing and use of explosives precursors

Not listed

Regulation 111/2005/EC laying down rules for the monitoring of trade between the Community and third countries in drug precursors

Not listed

Substance is listed in the following national inventories:

Country	National Directories	Substance status
AU	AICS	Ethanol is listed
CA	DSL	Ethanol is listed
CN	IECSC	Ethanol is listed
EU	ECSI	Ethanol is listed
EU	EINECS/ELINCS/NLP	Ethanol is listed
JP	CSCS-ENCS	Ethanol is listed
KR	KECI	Ethanol is listed
MX	INSQ	Ethanol is listed
NZ	NSQ	Ethanol is listed
PH	PICCS	Ethanol is listed
TR	CICR	Ethanol is listed
TW	TCSI	Ethanol is listed
US	TSCA	Ethanol is listed

Legende

AICS Australian Inventory of Chemical Substances

CICR Chemical Inventory and Control Regulation

CSCS-ENCS List of Existing and New Chemical Substances (CSCS-ENCS)

DSL Domestic Substances List (DSL)

ECSI EG-Stoffverzeichnis (EINECS, ELINCS, NLP)

IECSC Inventory of Existing Chemical Substances Produced or Imported in China

INSQ National Inventory of Chemical Substances

KECI Korea Existing Chemicals Inventory

NZIoC New Zealand Inventory of Chemicals

PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)

REACH Reg. REACH registrierte Stoffe

TCSI Taiwan Chemical Substance Inventory

TSCA Toxic Substance Control Act

15.1.2 National regulations (Germany)

Water hazard class: 2 - hazardous to water

Status: rule of mixture in accordance with the General Administrative Regulation under the Federal Water Act on the Classification of Substances Hazardous to Water in Water Hazard Classes (VwVws), Annex 4, No. 3

 15.2 Chemical safety assessment:

A chemical safety assessment was carried out for the following substances in this mixture: Ethanol

16. Other Information**16.1 Changes made (revised safety data sheet)**

Notice of changes: Section 9 Section 11 Section 12 Section 14

 16.2 Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG Code	International Maritime Code for Dangerous Goods
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
OECD	Organisation for Economic Co-operation and Development
EINECS	European Inventory of Existing Commercial Chemical Substances in the European Union Inventory of Existing Chemical Substances (waste materials)
ELINCS	European List of Notified Chemical Substances (in German: Europäisches Verzeichnis der auf dem Markt vorhandenen chemischen Stoffe)
CAS	Chemical Abstracts Service
LC	Lethal Concentration
LL	Lethal Load
LD	Lethal Dose
EC	Effective Concentration
EL	Effective Load
ATE	Acute Toxicity Estimate
DNEL	Derived No-effect Level
PNEC	Predicted No-effect Concentration
PBT	Persistent, Bioaccumulative, Toxic
vPvB	very Persistent and very Bioaccumulative
NOAEL	Highest dose at which there was not an observed toxic or adverse effect.
LOAEL	Lowest dose at which there was an observed toxic or adverse effect.
DFG	Senate Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area of the DFG (MAK Commission) [=German Research Foundation]

 16.3 Most important literature references and data sources

The data for the ingredients was taken from the most recent version of the pre-supplier's safety data sheet.

 16.4 Classification of mixtures and evaluation methods used in accordance with Regulation (EC) No. 1272/2008 [CLP]

See section 2.1 (classification).

 16.5 Wording of H and EUH phrases (number and full text):

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H318	Causes severe eye irritation.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic organisms.
H410	Very toxic to aquatic organisms with long-lasting effects.
H411	Toxic to aquatic organisms with long-lasting effects.

 16.6 Training advice:

Provide appropriate information, instructions and training for users.

 16.7 Other information:

The information contained in this safety data sheet reflects the latest findings, to the best of our knowledge, at the time of printing. 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. If the the product is mixed, blended or processed with other materials or undergoes processing, the information in this safety data sheet may not be valid for the new material produced in this way, unless expressly stated otherwise.

The information contained herein is based on our present knowledge and characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product described.