

# Material Safety Data Sheet

Revision date: Mar. 18<sup>th</sup>, 2014

Version: A

MSDS number: 10071855

## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Name:	iCtP Deletion Pen
Product Code:	10071850 and 10071851
Relevant identified uses of the substance or mixture and uses advised against:	No further relevant information available.
Application of the substance / the preparation:	Additive
Manufacturer:	Glunz & Jensen A/S Selandia Park 1 DK - 4100 Ringsted Denmark
Phone:	+45 5768 8181
Fax:	+45 5768 8340
E-mail:	gjhq@glunz-jensen.com
Emergency phone number:	For Chemical Emergency Spill Leak Fire Exposure or Accident Call CHEMTOX-TROTTERS day or night: International call: 0045 4011 4300, +45 4011 4300, or 011 45 4011 4300 (US and Canada).

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture:

#### Classification according to Regulation (EC) No 1272/2008:

Physical and chemical hazards: Acute Tox. 3 H311- Toxic in contact with skin.



GHS06

Human health:

Acute Tox. 4 H302 Harmful if swallowed.  
Eye Irrit. 2 H319 Causes serious eye irritation.



GHS07

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



Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.



Xi; Irritant

R36: Irritating to eyes.

## Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

## Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## Label elements:

### Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

## Code letter and hazard designation of product:



Xn Harmful

## Hazard-determining components of labelling:

gamma-butyrolactone

hydrogen fluoride

## Risk phrases:

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

R36 - Irritating to eyes.

## Safety phrases:

S9 - Keep container in a well-ventilated place.

S23 - Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

S36/37 - Wear suitable protective clothing and gloves.

S60 - This material and its container must be disposed of as hazardous waste.





## Other hazards:

## Results of PBT and vPvB assessment:

**PBT:** Not applicable.

**vPvB:** Not applicable.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	EC No	CAS-No	Content	Classification (EC 1272/2008)	Classification (67/548/EEC)
phosphoric acid 75%	231-633-2	7664-38-2	1 -< 2.5%	⚠ Skin Corr. 1B - H314	 C; R34
gamma-butyrolactone	202-509-5	96-48-0	50 - 70%	⚠ Acute tox. 4 - H302 Eye irrit. 2 - H319	 Xn; R22  Xi; R36
hydrogen fluoride	231-634-8	7664-39-3	0.3-< 1%	Acute Tox. 2, H300 Acute Tox. 1, H310 ⚠ Skin corr. 1B - H314	 C R35; T+ R26/27/28

The full text for all risk phrases and hazard statements is displayed in section 16.

### 4. FIRST AID MEASURES

#### Description of first aid measures:

##### **General:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

##### **Inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

##### **Ingestion:**

Call for a doctor immediately.

##### **Skin contact:**

Generally the product does not irritate the skin.

##### **Eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

#### Information for doctor:

##### **Most important symptoms and effects, both acute and delayed:**

No further relevant information available.

##### **Indication of any immediatemedical attention and special treatment needed:**

No further relevant information available.

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## 5. FIREFIGHTING MEASURES

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**Extinguishing media:**

**Extinguishing media:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards arising from the substance or mixture:**

No further relevant information available.

**Advice for firefighters:**

**Protective measures in fire:**

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

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## 6. ACCIDENTAL RELEASE MEASURE

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**Personal precautions, protective equipment and emergency procedures:**

Not required.

**Environmental precautions:**

Dilute with plenty of water.

**Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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## 7. HANDLING AND STORAGE

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**Precautions for safe handling:**

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

**Information about fire - and explosion protection:**

No special measures required.

**Conditions for safe storage, including any incompatibilities:**

**Requirements to be met by storerooms and receptacles:**

No special requirements.

**Information about storage in one common storage facility:**

Not required.

**Further information about storage conditions:**

Keep container tightly sealed.

**Specific end use(s):**

No further relevant information available.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Control parameters:**

Component	WEL
phosphoric acid 75%	Short-term value: 2 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>
hydrogen fluoride	Short-term value: 2.5 mg/m <sup>3</sup> , 3 ppm Long-term value: 1.5mg/m <sup>3</sup> , 1.8 ppm

Ingredient comments:

WEL = Workplace Exposure Limits

**Exposure controls:**

**Protective equipment:**

**General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

**Respiratory equipment:**

No specific recommendations.

**Hand protection:**



Impervious gloves  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Material of gloves:**

- Butyl rubber (BR)
- Fluorocarbon rubber (Viton)
- Recommended thickness of the material:  $\geq 0.7\text{mm}$
- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**For the permanent contact gloves made of the following materials are suitable:**

- Butyl rubber (BR)
- Fluorocarbon rubber (Viton)

**For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

- Natural rubber (NR)
- Chloroprene rubber (CR)
- PVC gloves

Eye protection:



Tightly sealed goggles.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Information on basic physical and chemical properties:

<b>Appearance:</b>	Plastic pen.
<b>Form:</b>	Liquid.
<b>Colour:</b>	Colorless.
<b>Odour:</b>	Characteristic.
<b>Odour threshold:</b>	Not determined.
<b>Boiling point (°C):</b>	100 °C.
<b>Melting point (°C):</b>	Undetermined.
<b>pH-value:</b>	Not determined.
<b>Flash point:</b>	95 °C
<b>Flammability (solid, gaseous):</b>	Not applicable.
<b>Ignition temperature:</b>	445 °C
<b>Decomposition temperature:</b>	Not determined.
<b>Self-igniting:</b>	Product is not selfigniting.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.
<b>Explosion limits:</b>	
<b>Lower:</b>	2.7 Vol %
<b>Upper:</b>	15.6 Vol %
<b>Vapour pressure at 20 °C:</b>	1 hPa
<b>Density:</b>	Not determined.
<b>Relative density:</b>	Not determined.
<b>Vapour density:</b>	Not determined.
<b>Evaporation rate:</b>	Not determined.
<b>Solubility in / Miscibility with water:</b>	Fully miscible.
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>Solvent content:</b>	
<b>VOC (EC):</b>	81.00 %
<b>Other information:</b>	
No further relevant information available.	

## 10. STABILITY AND REACTIVITY

**Reactivity:**

**Chemical stability:**

**Thermal decomposition /conditions to be avoided:**  
No decomposition if used according to specifications.

**Possibility of hazardous reactions:**  
No dangerous reactions known.

**Conditions to avoid:**  
No further relevant information available.

**Incompatible materials:**  
No further relevant information available.

**Hazardous decomposition products:**  
No dangerous decomposition products known.

## 11. TOXICOLOGICAL INFORMATION

**Information on toxicological effects:**

**Acute toxicity:**

**LD/LC50 values relevant for classification:**

Components	Oral	Dermal
gamma-butyrolactone	LD50 1540 mg/kg (rat)	LD50 5000 mg/kg (gui)
hydrogen fluoride	LD50 1276 mg/kg (rat)	-

**Primary irritant effect:**  
**on the skin:** No irritant effect.  
**on the eye:** Irritating effect.

**Sensitization:**  
No sensitizing effects known.

**Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful,  
Irritant.

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## 12. ECOLOGICAL INFORMATION

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**Toxicity:**

**Aquatic toxicity:**

No further relevant information available.

**Persistence and degradability:**

No further relevant information available.

**Behaviour in environmental systems:**

**Bioaccumulative potential:**

No further relevant information available.

**Mobility in soil:**

No further relevant information available.

**Additional ecological information:**

**General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**Results of PBT and vPvB assessment:**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects:**

No further relevant information available.

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## 13. DISPOSAL CONSIDERATIONS

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**Waste treatment methods:**

**Recommendation:**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:**

**Recommendation:**

Disposal must be made according to official regulations.

**Recommended cleansing agents:**

Water, if necessary together with cleansing agents.



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## 14. TRANSPORT INFORMATION

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**UN number:**

ADR, ADN, IMDG, IATA: Void

**UN proper shipping name:**

ADR, ADN, IMDG, IATA: Void

**Transport hazard class(es):**

ADR, ADN, IMDG, IATA: Void

**Packing group:**

ADR, IMDG, IATA: Void

**Environmental hazards:**

Marine pollutant: No

**Special precautions for user:**

Not applicable.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**

Not applicable.

**UN "Model Regulation":**

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## 15. REGULATORY INFORMATION

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**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

**Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

**Code letter and hazard designation of product:**



Xn Harmful

**Hazard-determining components of labelling:**

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hydrogen fluoride

**Risk phrases:**

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

R36 - Irritating to eyes.

**Safety phrases:**

S9 - Keep container in a well-ventilated place.

S23 - Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

S36/37 - Wear suitable protective clothing and gloves.

S60 - This material and its container must be disposed of as hazardous waste.

**Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

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**16. OTHER INFORMATION**

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**Information sources:** Material Safety Data Sheet, miscellaneous manufacturers.

**Prepared by:** Glunz & Jensen external documentation department.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Hazard statements in full:**

H300 - Fatal if swallowed.  
H302 - Harmful if swallowed.  
H310 - Fatal in contact with skin.  
H314 - Causes severe skin burns and eye damage.  
H319 - Causes serious eye irritation.  
H330 - Fatal if inhaled.

**Relevant phrases:**

R22 - Harmful if swallowed.  
R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed.  
R34 - Causes burns.  
R35 - Causes severe burns.  
R36 - Irritating to eyes.

**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).*

**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 (division of the American Chemical Society).*

**VOC:**

*Volatile Organic Compounds (USA, EU).*

**LC50:**

*Lethal concentration, 50 percent.*

**LD50:**

*Lethal dose, 50 percent.*

**DISCLAIMER:**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.