

**Certified Translation from German into English**  
**Safety Data Sheet**



According to Ordinance (EC) No. 1907/2006 as per Article 31

Product Name: iglidur® IC-03

Amended on: 16.04.2019

Page: 1/10

---

## **SECTION 1: Description of the material or mixture and the company**

### **1.1 Product identifier**

Product name: iglidur® IC-03

### **1.2 Relevant identified use of material or mixture and uses which should be avoided**

Relevant identified uses: coating material, powder

Uses which should be avoided: direct contact with foodstuff

### **1.3 Details on supplier who provides the safety data sheet**

Company: igus® GmbH  
Spicher Str. 1a  
D-51147 Köln

Telephone: +49 2203/9649-0  
Fax: +49 2203/9649-222  
E-mail: info@igus.de

### **1.4 Emergency phone number**

Emergency phone number: +49 551/19240 (Poison Information Center North)

---

## **SECTION 2: Possible risks**

### **2.1 Classification of material or mixture**

Classification according to ordinance (EC) No. 1272/2008

Reproductive toxicity - category 1B-H360D

### **2.2 Labelling elements**

#### **Signal word**

Danger

#### **Hazard information**

H360D - May cause harm to the unborn child

#### **Safety information**

P201 - Seek special instructions before use

P202 – Read and understand all safety instructions before use

P280 – Protective gloves / protective clothing / eye protection

P501 – Dispose of content/container according to local regulations

#### **Contains**

N-methylpyrrolidone

**Certified Translation from German into English**  
**Safety Data Sheet**



According to Ordinance (EC) No. 1907/2006 as per Article 31

Product Name: iglidur® IC-03

Amended on: 16.04.2019

Page: 2/10

### 2.3 Other risks

No special risks are known if regulations/notes on proper storage and handling are respected.

In case of a secondary processing of the product appropriate prevention measures need to be taken. If dusts, fumes or mists occur during machining, use appropriate ventilation in order to keep the effects of air pollutants below the limit values. Dust can cause mechanical irritations.

In case of unintended release, remove mechanically in order to prevent the risk of slipping or tripping. Keep away from open fire since the product is combustible.

The thermal decomposition products of this polymere can cause polymer fever with flu-like symptoms in humans, especially after smoking contaminated tobacco products.

---

## SECTION 3: Composition / information about components

### 3.1 Substances

Not applicable.

### 3.2 Mixtures

The product is based on a thermoplastic polymer compound with additives and fillers.

Chemical Designation	EC No.	CAS No.	Weight %.	Classification 1272/2008/EC	Reach Registration Number
N-methyl-pyrrolidone	212-828-1	872-50-4	<0.05	Skin Irrit. 2 H315 Eye Irrit. H319 STOT SE 3 H335 Repr. 1B H360D	01-2119472430-46-XXXX

---

## SECTION 4: First-aid measures

### 4.1 Description of first-aid measures

General information: The first-aid workers must protect themselves. Move affected persons away from the danger zone. Let them rest. Do not leave affected person unattended.

Inhalation: After inhaling decomposition products, move affected person into the fresh air and position in such a way that breathing is facilitated. Seek medical treatment if complaints occur.

Skin contact: Irritations or injuries might occur due to mechanical contact. Rinse affected skin area with a lot of water. If symptoms occur, seek medical attention. Heated coating powder or coated moulded parts can cause thermal burns which could lead to pain, redness and the formation of

**Certified Translation from German into English**  
**Safety Data Sheet**



According to Ordinance (EC) No. 1907/2006 as per Article 31

Product Name: iglidur® IC-03

Amended on: 16.04.2019

Page: 3/10

blisters. Immediately cool affected skin areas with cold water after contact with the molten polymer. Seek immediate medical attention. Do not peel off the cooled product from the skin.

Eye contact: irritations or injuries might occur due to mechanical contact. In the case of irritations caused by dust or combustion products rinse the affected eyes for several minutes with clean water or an eyewash solution while keeping the eyelids pulled open. Check for contact lenses and remove them if applicable. Seek medical attention if complaints persist.

Ingestion: Risk of suffocation in case of small parts. Seek medical advice. Do not induce vomiting. No direct rescue breaths by first-aid workers.

#### **4.2 Most important acute and delayed symptoms and effects**

Inhalation: No special effects or risks are known.

Skin contact: No special effects or risks are known.

Eye contact: No special effects or risks are known.

Ingestion: No special effects or risks are known.

#### **4.3 Information on immediate medical assistance or special treatment**

Information for the medical doctor: Treat symptomatically.

Special treatment: No special treatment.

---

### **SECTION 5: Fire-fighting measures**

The product is combustible.

#### **5.1 Fire-extinguishing agents**

Suitable fire-extinguishing agents: Use water spray jet, extinguishing powder, alcohol-resistant foam or carbon dioxide

Unsuitable fire-extinguishing agents: water with full jet

#### **5.2 Special hazards due to substance or mixture**

Dangerous combustion products: in case of a fire hazardous decomposition products can occur: carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen cyanide, hydrogen fluorides, carbonyl fluorides, fluorocarbon compounds with low molecular-weight as well as toxic fumes, gases or particles. Combustion gases/decomposition products of organic materials must always be rated as toxic to breathing.

Under certain fire conditions traces of other poisonous products cannot be ruled out.

#### **5.3 Information on fire-fighting**

Only stay in the danger zone with a breathing apparatus that is independent of the environmental air.

Wear personal protective equipment.

Cool endangered containers from a safe distance with water spray jet.

Settle evolving vapours with water.

Prevent flashbacks.

Prevent penetration of fire-fighting water into surface, ground water and soil.

**Certified Translation from German into English**  
**Safety Data Sheet**



According to Ordinance (EC) No. 1907/2006 as per Article 31

Product Name: iglidur® IC-03

Amended on: 16.04.2019

Page: 4/10

Wear appropriate protective clothing and keep a safety distance to avoid skin contact.

---

## **SECTION 6: Measures after unintentional release**

### **6.1 Personal precautions, protective equipment and measures to be taken in the case of emergencies**

Remove mechanically in order to prevent the risk of slipping or tripping. Avoid the formation of dust. Keep away from open fire since product is combustible.

### **6.2 Environmental protection measures**

Do not allow to penetrate into soil, surface water, drains, drain pipes or into the sewage system. Inform authorities in charge if the product has caused environmental pollution.

### **6.3 Methods and material for retention and cleaning**

Small released quantities: remove mechanically.  
Large released quantities: remove mechanically.

### **6.4 References to other sections**

Refer to SECTION 1 for emergency contact information.

Refer to SECTION 7 for handling and storage.

Refer to SECTION 8 for information regarding suitable personal protective clothing.

Refer to SECTION 13 for further information on waste treatment.

---

## **SECTION 7: Handling and storage**

### **7.1 Protective measures for safe handling**

Notes on safe handling: Provide good ventilation or extraction systems at the processing machines when processing the powder and during secondary machining. Avoid the inhalation of dusts/mists/fumes. An accumulation of dust can lead to the risk of a dust explosion. Generally prevent the accumulation of dust. Take measures against electrostatic charging. Keep away from sources of ignition.

Do not inhale gases contained in the packaging.

Observe general hygiene measures for handling chemicals.

Do not heat the product to temperatures above 140°C.

### **7.2 Conditions for safe storage and taking into consideration incompatibilities**

Special storage conditions: Store in a cool, dry and well ventilated place. Do not store in passageways and staircases. Keep clear from sources of ignition. The product is combustible. Do not store together with strong acids, strong bases and oxidation agents. Protect from exposure to direct sunlight. Keep product packaging well sealed until use. Carefully close containers again tightly after initial opening.

Storage class according to TRGS 510: (10-13) thermoplastic polymer mixture with additives and fillers.

Observe the usual measures of preventive fire-fighting.

**Certified Translation from German into English**  
**Safety Data Sheet**



According to Ordinance (EC) No. 1907/2006 as per Article 31

Product Name: iglidur® IC-03

Amended on: 16.04.2019

Page: 5/10

**7.3 Specific final applications**

Recommendations: not applicable

Specific solutions for the industrial sector: not available

Remarks: Do not stack container packages on top of one another without securing them.

**SECTION 8: Limitation and monitoring of exposure/personal protective equipment**

**8.1 Parameters to be monitored**

Occupational exposure limit values:

<b>General dust limit value - TRGS 900</b>
alveolar fraction
1,25 mg/m <sup>3</sup>
<b>General dust limit value - TRGS 900</b>
alveolar fraction
1,25 mg/m <sup>3</sup>
Peak limit 2(II)

Chemical Designation	European Union	Spain	Germany	Portugal	The Netherlands
N-methylpyrrolidone	TWA: 40 mg/m <sup>3</sup> ind STEL: 80 mg/m <sup>3</sup> ind S*	VLA-ED: 40 mg/m <sup>3</sup> VLA-EC: 80 mg/m <sup>3</sup> S*	TWA: 82 mg/m <sup>3</sup> Ceiling / Peak: 164 mg/m <sup>3</sup>	TWA: 0.05 ppm	TGG: 40 mg/m <sup>3</sup> STEL: 80 mg/m <sup>3</sup> S*
Chemical Designation	Denmark	Poland	Belgium	Sweden	Finland
N-methylpyrrolidone	S* GV: 20 mg/m <sup>3</sup>	NDSch: 240 mg/m <sup>3</sup> NDS: 120 mg/m <sup>3</sup> S*	TGG: 40 mg/m <sup>3</sup> STEL: 80 mg/m <sup>3</sup> S*	NGV: 40 mg/m <sup>3</sup> KGV 80 mg/m <sup>3</sup> S*	HTP-arvot: 40 mg/m <sup>3</sup> STEL: 80 mg/m <sup>3</sup> S*

Legend: S\* Skin determination

DNEL/PNEC: no determined values available

**8.2 Limitation and monitoring of exposure**

A good normal ventilation of the work place should be sufficient to limit workers' exposure with regard to air pollutants. During machining good ventilation or extraction systems at the processing machines are required.

**Personal protective equipment**

**Breathing protection**

**Certified Translation from German into English**  
**Safety Data Sheet**



According to Ordinance (EC) No. 1907/2006 as per Article 31

Product Name: iglidur® IC-03

Amended on: 16.04.2019

Page: 6/10

If occupational exposure limit values are exceeded an appropriate breathing apparatus has to be used. If no occupational exposure limit values are present, appropriate breathing protection measures need to be taken if dust formation is present. Breathing protection mask with particle filter (filter category P3).

**Eye/face protection**

Protective goggles (DIN EN 166)

**Other protective measures**

Closed protective clothing made of flame-retarding material. Wear closed safety shoes ESD version (ESD version according to EN 61340-4-3 or equivalent).

---

**SECTION 9: Physical and chemical properties**

**9.1 Information on the basic physical and chemical properties**

Appearance:	coating powder
Colour:	yellow
Odour:	weak, product-specific
Odour threshold:	not determined (not required with regard to safety and application)
pH value:	not applicable
Melting point/freezing point:	not determined
Initial boiling point and boiling range:	not applicable, product decomposes
Flashpoint:	not applicable
Evaporation rate:	not applicable
Flammability (solid, gaseous):	not determined
Upper/lower flammability or explosion limits	not applicable
Vapour pressure:	not applicable
Vapour density:	not applicable
Relative density:	not determined
Solubility(ies):	insoluble in water
Distribution coefficient: n-octanol/water:	not applicable
Self-ignition temperature:	not determined
Decomposition temperature:	as of 300°C
Viscosity:	not applicable
Explosive properties:	not applicable
Oxidizing properties:	not applicable

**Certified Translation from German into English**  
**Safety Data Sheet**



According to Ordinance (EC) No. 1907/2006 as per Article 31

Product Name: iglidur® IC-03

Amended on: 16.04.2019

Page: 7/10

## **9.2 Additional information**

For further technical information on the solid please refer to the respective material data sheet/product information sheet.

---

## **SECTION 10: Stability and Reactivity**

### **10.1 Reactivity**

When the regulations/notes on the storage and handling are observed, this material is not deemed to have any dangerous reactions.

### **10.2 Chemical stability**

The product is chemically stable during appropriate use. Do not heat the product to temperatures above [refer to point 7.1].

### **10.3 Possible hazardous reactions**

Under normal storage conditions and appropriate use there will be no hazardous reactions.

### **10.4 Conditions to be avoided**

The thermal decomposition of the product starts as of 300°C.

### **10.5 Incompatible materials**

Avoid the contact with strong acids, strong bases, strong oxidizing agents, metal powder, finely distributed aluminium and magnesium at temperatures above 425°C.

### **10.6 Dangerous decomposition products**

No dangerous decomposition products are known if product is appropriately used, stored and handled and when maximum operating temperatures are adhered to (see Section 7.1). Dangerous combustion products are listed in Section 5.

---

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

During proper handling and appropriate use the product does not have any acute detrimental health effects according to our current knowledge.

During processing good ventilation or extraction systems at the processing machines are required.

Thermal decomposition products of fluorinated polymers can cause polymer fever with flu-like symptoms, especially after smoking contaminated tobacco products.

---

## **SECTION 12: Environmentally relevant information**

**Certified Translation from German into English**  
**Safety Data Sheet**



According to Ordinance (EC) No. 1907/2006 as per Article 31

Product Name: iglidur® IC-03

Amended on: 16.04.2019

Page: 8/10

### **12.1 Toxicity**

Conclusion / Summary: not available

### **12.2 Persistence and degradation**

Conclusion / Summary: not/poorly degradable

### **12.3 Bioaccumulation potential**

No bio-availability

### **12.4 Mobility in the soil**

Distribution coefficient soil/water (Koc): not applicable

Mobility: not applicable

### **12.5 Results of PBT and vPvB assessment**

PBT: not applicable

vPvB: not applicable

### **12.6 Other detrimental effects**

No special effects or dangers are known. However, do not allow to penetrate into the environment, ground waters, surface waters or the sewage system.

---

## **SECTION 13: Disposal information**

### **13.1 Procedures of waste disposal**

The product can be incinerated in an approved plant in compliance with technical guidelines or stored together with domestic waste in an appropriate landfill site. Hydrogen fluoride must be removed by flue gas scrubbing.

Waste name: Fluorine-containing plastic waste.

EC waste key no.: The waste keys are linked to the intended uses of this product.

Contaminated packaging: Packaging that cannot be cleaned has to be disposed of in the same way as the product itself.

General: Prevent the release into the environment. Dispose of in compliance with regional respectively national safety instructions.

---

## **SECTION 14: Transport information**

Not deemed to be hazardous goods according to the transport regulations

### **14.1 UN number**

Not applicable

### **14.2 Appropriate UN shipping name**



**Certified Translation from German into English**  
**Safety Data Sheet**



According to Ordinance (EC) No. 1907/2006 as per Article 31

Product Name: iglidur® IC-03

Amended on: 16.04.2019

Page: 9/10

Not applicable

**14.3 Transport hazard class**

Not applicable

**14.4 Packaging group**

Not applicable

**14.5 Environmental risks**

None known

**14.6 Special precautions for the user**

None known

**14.7 Bulk transport according to Annex II of the MARPOL – Convention and according to the IBC Code**

Not applicable

---

**SECTION 15: Legal regulations**

**15.1 Regulations on safety, health and the protection of the environment/ specific legal regulations for the product or mixture**

This product contains one or several reportable EU-listed substances of very high concern (SVHC) (Regulation (EC) No. 1907/2006 (Reach), Article 59): CAS# 872-50-4 (NMP). (Reproduction toxicity).

**Water hazard class:** not hazardous to water

**15.2 Chemical safety assessment**

No chemical safety assessment is necessary.

The product is not classified as dangerous.

---

**SECTION 16: Other information**

**The full text on hazard notes can be found in Section 2 and 3**

- H315 - Causes skin irritations.
- H319 - Causes severe eye irritation.
- H335 - Can irritate the respiratory tracts.
- H360D - Can damage the unborn child.

**Abbreviations and acronyms**

EK: European Commission

**Certified Translation from German into English**  
**Safety Data Sheet**



According to Ordinance (EC) No. 1907/2006 as per Article 31

Product Name: iglidur® IC-03

Amended on: 16.04.2019

Page: 10/10

REACH: Registration, Evaluation, Authorisation and Restriction of Chemical substances

STOT: Specific Target Organ Toxicity

PBT: Persistent, bioaccumulating, toxic

vPvB: very Persistent and very Bioaccumulating

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulations for the International Transport of Dangerous Goods by Rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Dangerous Goods Code

ICAO: International Civil Aviation Organization

---

The information provided above in this Safety Data Sheet is based on the current state of our knowledge and experience and describes the product with regard to safety requirements. The information does not provide any analysis certificate or technical data sheet respectively a description of the quality of the goods. A quality agreement or the suitability of the product for a concrete intended use purpose may not be derived from the intended use listed in the safety data sheet. The recipient of our product is responsible for compliance with existing laws and regulations and possible property rights.

This document is not subject to a change service.

---

This is to certify that the above translation from German into English is complete and correct.

Sabine Bartsch  
Königswinter,  
14.6.2019

Certified translator for the Higher Regional Court of Cologne/Germany