

Revision Date 03-May-2012

Revision Number 2

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product Identifier

Product Description:  
Cat No.

Cesium perchlorate  
389760000; 389760100; 389760500

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

Recommended Use Laboratory chemicals  
Uses advised against No Information available

### Details of the supplier of the safety data sheet

#### Company

Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

### Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01  
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300  
CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture REGULATION (EC) No 1272/2008

Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity - (single exposure)	Category 3
Oxidizing solids.	Category 2

### Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

#### Symbol(s)

O - Oxidizing  
Xi - Irritant

#### R-phrases

R 8 - Contact with combustible material may cause fire

#### Risk Combination Phrases

R36/37/38 - Irritating to eyes, respiratory system and skin

Cesium perchlorate

Revision Date 03-May-2012

## SECTION 2. HAZARDS IDENTIFICATION

### Label Elements



### Signal Word

**Danger**

### Hazard Statements

H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H272 - May intensify fire; oxidizer

### Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
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

### Other Hazards

No information available.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Perchloric acid, cesium salt 13454-84-7	EEC No. 236-643-0	99	13454-84-7	O; R8 Xi; R36/37/38;	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Ox. Sol. 2 (H272)	-

Cesium perchlorate

Revision Date 03-May-2012

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

## SECTION 4. FIRST AID MEASURES

### Description of first aid measures

#### **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

#### **Skin Contact**

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

#### **Ingestion**

Clean mouth with water. Get medical attention.

#### **Inhalation**

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.

#### **Notes to Physician**

Treat symptomatically

## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

Carbon dioxide (CO<sub>2</sub>). Dry chemical. chemical foam.

#### **Extinguishing media which must not be used for safety reasons**

No information available.

### Special hazards arising from the substance or mixture

Oxidizer: Contact with combustible/organic material may cause fire.

### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

### Environmental precautions

Prevent further leakage or spillage if safe to do so

Cesium perchlorate

Revision Date 03-May-2012

## Methods and material for containment and cleaning up

Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Do not ingest. Use only in area provided with appropriate exhaust ventilation.

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Do not store near combustible materials. Store under an inert atmosphere.

### Specific End Uses

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### Derived No Effect Level (DNEL)

No information available.

#### Predicted No Effect Concentration (PNEC)

No information available.

### Exposure controls

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

#### Personal protective equipment

##### Eye Protection

Goggles

##### Hand Protection

Protective gloves

##### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

##### Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

#### Environmental exposure controls

No information available.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Cesium perchlorate

Revision Date 03-May-2012

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Powder, Solid
Appearance	White
odor	odorless
pH	No information available.
Vapor Density	No information available.
Boiling Point/Range	No information available.
Melting Point/Range	250°C / 482°F
Decomposition temperature	> 224°C
Flash Point	No information available.
Autoignition Temperature	No information available.
Water Solubility	1.9g/100ml
Molecular Formula	Cl Cs O4
Molecular Weight	232.36

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

### Chemical Stability

Stable under normal conditions. Hygroscopic.

### Possibility of Hazardous Reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	No information available.

### Conditions to Avoid

Incompatible products, Exposure to moist air or water, Combustible material.

### Incompatible Materials

Strong oxidizing agents, Strong acids, Strong reducing agents, Metals, Powdered metals.

### Hazardous Decomposition Products

Hydrogen chloride gas.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

### **Component Information**

Cesium perchlorate

Revision Date 03-May-2012

**SECTION 11. TOXICOLOGICAL INFORMATION****Chronic Toxicity****Carcinogenicity**

There are no known carcinogenic chemicals in this product

**Sensitization**

No information available.

**Mutagenic Effects**

No information available

**Reproductive Effects**

No information available.

**Developmental Effects**

No information available.

**Target Organs**

No information available.

**Other Adverse Effects**

The toxicological properties have not been fully investigated.

**Endocrine Disruptor Information**

None known

**SECTION 12. ECOLOGICAL INFORMATION****Toxicity****Ecotoxicity effects**

Do not empty into drains

**Persistence and degradability**

No information available

**Bioaccumulative potential**

No information available.

**Mobility in soil**

No information available.

**Results of PBT and vPvB assessment****Other adverse effects**

No information available

**SECTION 13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

**Contaminated Packaging**

Empty containers should be taken to local recyclers for disposal

Cesium perchlorate

Revision Date 03-May-2012

## SECTION 14. TRANSPORT INFORMATION

### IMDG/IMO

UN-No 1481  
Hazard Class 5.1  
Packing Group II  
Proper Shipping Name PERCHLORATES, INORGANIC, N.O.S.

### ADR

UN-No 1481  
Hazard Class 5.1  
Packing Group II  
Proper Shipping Name PERCHLORATES, INORGANIC, N.O.S.

### IATA

UN-No 1481  
Hazard Class 5.1  
Packing Group II  
Proper Shipping Name PERCHLORATES, INORGANIC, N.O.S.

## SECTION 15. REGULATORY INFORMATION

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

#### International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Perchloric acid, cesium salt	236-643-0	-		X	-	X	-	-	-	-	X

#### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

#### Chemical Safety Assessment

Cesium perchlorate

Revision Date 03-May-2012

**SECTION 16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R 8 - Contact with combustible material may cause fire

R36/37/38 - Irritating to eyes, respiratory system and skin

Revision Date 03-May-2012

**Revision Summary**

Reason for revision Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet