SAFETY DATA SHEET

Revision Date 17-Jan-2013 **Revision Number** 5

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

Product Identifier

Product Description: **Mercury**
Cat No. **193480000; 193480500**
Synonyms Quicksilver

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 Pharmaceuticalaan 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

Acute Inhalation Toxicity - Vapors	Category 2
Reproductive Toxicity	Category 1B
Specific target organ toxicity - (repeated exposure)	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

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) T+ - Very toxic
N - Dangerous for the environment

R-phrase(s) R61 - May cause harm to the unborn child
R26 - Very toxic by inhalation

Risk Combination Phrases R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

SECTION 2. HAZARDS IDENTIFICATION

Label Elements

Signal Word **Danger**

Hazard Statements

H410 - Very toxic to aquatic life with long lasting effects
H330 - Fatal if inhaled
H360D - May damage the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure

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

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P308 + P313 - IF exposed or concerned: Get medical advice/ attention
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P273 - Avoid release to the environment

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.
Mercury 7439-97-6	EEC No. 231-106-7	100	7439-97-6	T+; R26 T; R48/23 N; R50-53 Repr.Cat.2; R61	Acute Tox. 2 (H330) Repr. 1B (H360D) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-

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

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

Ingestion Call a physician immediately. Clean mouth with water.

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

Notes to Physician Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media
Water spray. Carbon dioxide (CO_2). 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

Thermal decomposition can lead to release of irritating gases and vapors

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

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.. Wear self-contained breathing apparatus and protective suit. Do not let this chemical enter the environment.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. 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. Keep locked-up.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Component	European Union	The United Kingdom	France	Belgium	Spain
Mercury	TWA: 0.02 mg/m³ 8 hr	TWA: 0.02 mg/m³ 8 hr	TWA: 0.02 mg/m³ 8 heures. VME Skin	TWA: 0.02 mg/m³ 8 uren Huid	Skin TWA: 0.025 mg/m³ 8 horas

Component	Italy	Germany	Portugal	The Netherlands	Finland
Mercury		TWA: 0.02 mg/m³ 8 Stunden. MAK Skin Peak: 0.16 mg/m³ TWA: 0.1 mg/m³ 8 Stunden. AGW	TWA: 0.025 mg/m³ 8 horas Pele		TWA: 0.05 mg/m³ 8 tunteina Skin

Component	Austria	Denmark	Switzerland	Poland	Norway
Mercury	Skin STEL: 0.05 ppm 15 Minuten STEL: 0.5 mg/m³ 15 Minuten TWA: 0.005 ppm 8 Stunden TWA: 0.05 mg/m³ 8 Stunden	TWA: 0.025 mg/m³ 8 timer Skin	Skin STEL: 0.04 ppm 15 Minuten STEL: 0.4 mg/m³ 15 Minuten TWA: 0.005 ppm 8 Stunden TWA: 0.05 mg/m³ 8 Stunden	TWA: 0.02 mg/m³ 8 godzinach Skóra	TWA: 0.02 mg/m³ 8 timer STEL: 0.06 mg/m³ 15 minutter.

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Mercury	TWA: 0.05 mg/m³	TWA: 0.05 mg/m³ 8 satima. GVI	TWA: 0.025 mg/m³ 8 hr.		TWA: 0.05 mg/m³ 8 hodinách. Potential for cutaneous absorption Ceiling: 0.15 mg/m³

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Mercury	Skin notation TWA: 0.03 mg/m^3 8 tundides. fume		skin - potential for cutaneous absorption TWA: 0.1 mg/m^3	STEL: 0.32 mg/m^3 15 percekben. CK TWA: 0.08 mg/m^3 8 órában. AK potential for cutaneous absorption	TWA: 0.025 mg/m^3 8 klukkustundum. vapor Skin notation Ceiling: 0.05 mg/m^3 vapor

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Mercury	TWA: 0.02 mg/m^3	TWA: 0.03 mg/m^3 vapor IPRD			Skin notation TWA: 0.05 mg/m^3 8 ore STEL: 0.15 mg/m^3 15 minute

Component	Russia - TWA	Slovak Republic	Slovenia	Sweden	Turkey
Mercury	TWA: 0.005 mg/m^3 STEL: 0.01 mg/m^3 vapor	Ceiling: 0.8 mg/m^3 TWA: 0.1 mg/m^3	TWA: 0.02 mg/m^3 8 urah	LLV: 0.03 mg/m^3 8 timmar. Skin notation	

Biological limit values

Component	European Union	United Kingdom	France	Spain	Germany
Mercury		Mercury: 20 µmol/mol creatinine urine random	Total inorganic Mercury: 0.015 mg/L blood end of shift at end of workweek Total inorganic Mercury: 0.050 mg/g creatinine urine prior to shift	Total inorganic mercury: 35 µg/g Creatinine urine pre-shift Total inorganic mercury: 15 µg/L blood end of workweek	Mercury: 25 µg/L whole blood no restriction Mercury: 100 µg/L urine no restriction

Component	Italy	Portugal	Netherlands	Finland	Denmark
Mercury				Mercury: 140 nmol/L urine prior to shift. Mercury: 50 nmol/L blood end of workweek.	

Component	Bulgaria	Gibraltar	Latvia	Luxembourg	Romania
Mercury	Mercury: 100 mg/L urine		Mercury: 15 µg/L blood Mercury: 35 µg/g creatinine urine Mercury: 50 µg/L urine		Mercury: 10 µg/L blood end of shift Mercury: 35 µg/g creatinine urine beginning of shift

Component	Slovak Republic	Turkey
Mercury	Mercury: 25 µg/L blood not critical	

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
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

Physical State	Liquid
Appearance	Silver
odor	odorless
pH	No information available.
Vapor Pressure	0.01 hPa @ 20 °C
Vapor Density	
Viscosity	1.554 cP at 20 °C
Boiling Point/Range	356.5°C / 673.7°F
Melting Point/Range	-38.9°C / -38°F
Flash Point	No information available.
Autoignition Temperature	No information available.
Water Solubility	Insoluble
Specific Gravity	13.540
Molecular Formula	Hg
Molecular Weight	200.59

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

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

Conditions to Avoid

Incompatible products.

Incompatible Materials

Strong oxidizing agents, Halogens.

Hazardous Decomposition Products

Highly toxic fumes.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component 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 See actual entry in RTECS for complete information
Endocrine Disruptor Information None known

SECTION 12. ECOLOGICAL INFORMATION

Toxicity
Ecotoxicity effects Do not empty into drains

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Mercury		0.16 mg/L LC50 96 h 0.18 mg/L LC50 96 h 0.5 mg/L LC50 96 h 0.9 mg/L LC50 96 h		5.0 µg/L EC50 = 96 h

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

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

UN-No	2809
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III
Proper Shipping Name	MERCURY

ADR

UN-No	2809
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III
Proper Shipping Name	MERCURY

IATA

UN-No	2809
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III
Proper Shipping Name	MERCURY

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
Mercury	231-106-7	-		S	X	-	X	-	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

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3
R26 - Very toxic by inhalation
R61 - May cause harm to the unborn child
R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Revision Date 17-Jan-2013
Revision Summary
Reason for revision (M)SDS sections updated, 14.
This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
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End of Safety Data Sheet