

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKINGIdentification of the substance or mixture

Product name: INDUSTREX Single Part Developer Starter

Product code: 8351413

Pure substance/mixture Mixture

Synonyms PCD 5607

Use of the Substance/Mixture

Product Use: Photographic chemical, Restricted to professional users.

Company/Undertaking Identification

Carestream Health Korea Ltd
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T: +82-2-3438-7300

For further information, please contact:

For environment, health and safety information, email: EMEAHS@carestream.com

Emergency telephone

Emergency Transportation/CHEMTREC (24 HOUR) 00-308-13-2549

2. HAZARDS IDENTIFICATIONClassification of the substance or mixture

This material is not classified as hazardous according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

GHS Label elements, including precautionary statements

This material is not classified as hazardous according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight %
Water	80-90
Sodium bromide	10-15

4. FIRST AID MEASURES

Description of necessary first-aid measures

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Main Symptoms	None known.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention immediately if irritation persists.
Skin contact	Wash off immediately with plenty of water. If skin irritation persists, call a physician .
Inhalation	Move to fresh air in case of accidental inhalation of vapors. Get medical attention immediately if symptoms occur.
Ingestion	Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed

Skin contact	None known.
Eye contact	May cause slight irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system effects.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Extinguishing media which shall not be used for safety reasons	None.

Specific hazards arising from the chemical

Special Hazard	Thermal decomposition can lead to release of irritating gases and vapors.
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Special protective actions for fire-fighters

Special protective equipment for fire-fighters	Wear self-contained breathing apparatus and protective suit.
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Other information

Other information

Keep containers and surroundings cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes. For personal protection see section 8.

Advice for emergency responders

For personal protection see section 8

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Other information

See Section 12 for additional Ecological information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep tightly closed in a dry and cool place.

Materials to Avoid

None under normal processing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Contains no substances with occupational exposure limit values

Biological standards

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

Appropriate engineering controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment (PPE)

Personal Protective Equipment

General Information

These recommendations apply to the product as supplied.

Respiratory protection

None under normal use conditions.

Eye Protection

Safety glasses with side-shields

Skin and body protection

Wear suitable protective clothing. Protective shoes or boots.

Hand Protection

Chemical resistant gloves. Avoid natural rubber gloves.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state liquid

ph 6.6

Flash point: > 93.400 °C

Boiling point/boiling range > 100 °C / >212 °F

Odor Odorless

Color colorless

Autoignition temperature: No information available

Vapor Pressure 24 mbar @ 20 °C

Vapor density 0.6

Density No information available

Water Solubility completely soluble

Melting point/range: No information available

Specific Gravity 1.106

Bulk Density: No information available

10. STABILITY AND REACTIVITY

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat.

Materials to Avoid

None under normal processing.

Hazardous Decomposition Products

Hydrogen bromide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity Product Information.

Skin contact	None known.
Eye contact	May cause slight irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system effects.
Acute toxicity	13.23% of the mixture consists of ingredient(s) of unknown toxicity
Oral	27,173.91 mg/kg
Dermal	20,000.00 mg/kg

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	90,000 mg/kg (Rat)		
Sodium bromide	3400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	
Chemical Name	Other applicable information		
Sodium bromide	Ingestion of bromide salts can cause nausea, vomiting, headache, irritability, delirium, memory loss, decreased appetite, joint pain, hallucinations, stupor, coma, and acne like rash on face, legs, and trunk.		

Aggravated Medical Conditions None known.

Subchronic toxicity
no data available

Chronic toxicity

Chronic toxicity Effects expected to be similar to those seen acutely.
Sensitization No information available.
Neurological effects No information available.
Target Organ Effects Gastrointestinal tract (GI), Central nervous system.

CMR Effects

Carcinogenicity Contains no ingredients above reportable quantities listed as a carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity Product Information
No information available

Acute aquatic toxicity Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
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Sodium bromide	5800 - 24000 mg/L EC50 96 h (Scenedesmus pannonicus)	LC50 24000 - 96000 mg/L Oryzias latipes 96 h LC50= 24000 mg/L Oryzias latipes 96 h LC50 16000 - 24000 mg/L Poecilia reticulata 96 h LC50= 16000 mg/L Poecilia reticulata 96 h LC50 15614 - 17428 mg/L Pimephales promelas 96 h LC50> 1000 mg/L Lepomis macrochirus 96 h LC50 0.054 - 0.081 mg/L Oncorhynchus mykiss 96 h LC50> 1000 mg/L Oncorhynchus mykiss 96 h	EC50 5800 - 48000 mg/L 48 h (Daphnia magna) EC50 5700 - 10800 mg/L 48 h (Daphnia magna)
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Persistence and degradability

Not readily biodegradable

Bioaccumulative potential

No information available

Mobility in soil

No information available

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste from Residues / Unused Products

Dispose of in accordance with local regulations.

Contaminated packaging

Do not re-use empty containers. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

The information given below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions. Please consult the product packaging for further details.

ADR/RID Not regulated

IMDG/IMO Not regulated

ICAO/IATA Not regulated

ADN Not regulated

TDG Not regulated

For transportation information, go to: <http://ship.carestreamhealth.com>.

15. REGULATORY INFORMATION

International Inventories

EINECS/ELINCS	Complies
TSCA	Complies
DSL/NDSL	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

Legend

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

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

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

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

National regulatory information

16. OTHER INFORMATION

Revision Date 2013-05-10
Revision Note Initial Release

Disclaimer

The information provided on this MSDS 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 Material Safety Data Sheet