

1. PRODUCT AND COMPANY IDENTIFICATION
1.1 Product identifiers

Product name : Iodine

Product Number : I2400

Brand : ACP

Index-No. : 053-001-00-3

CAS-No. : 7553-56-2

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : ACP Chemicals Inc.
 4601, boul Des Grandes Prairies
 St Leonard, Qc, H1R 1A5
 CANADA

Telephone : +1 5143270323
 Fax : +1 5143278474


1.4 Emergency telephone number

Emergency Phone # : +1-613-996-6666 (CANUTEC)

2. HAZARDS IDENTIFICATION
2.1 Classification of the substance or mixture
GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Acute toxicity, Inhalation (Category 4), H332
 Acute toxicity, Dermal (Category 4), H312
 Skin irritation (Category 2), H315
 Eye irritation (Category 2A), H319
 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
 Specific target organ toxicity - repeated exposure, Oral (Category 1), Thyroid, H372
 Acute aquatic toxicity (Category 1), H400

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H312 + H332 Harmful in contact with skin or if inhaled.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H372 Causes damage to organs (Thyroid) through prolonged or repeated exposure if swallowed.
 H400 Very toxic to aquatic life.

Precautionary statement(s)	
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352 + P312	IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/ attention if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula	:	I ₂
Molecular weight	:	253.81 g/mol
CAS-No.	:	7553-56-2
EC-No.	:	231-442-4
Index-No.	:	053-001-00-3
Registration number	:	01-2119485285-30-XXXX

Hazardous components

Component	Classification	Concentration*
Iodine	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; STOT RE 1; Aquatic Acute 1; H312 + H332, H315, H319, H335, H372, H400, H312 + H332, H315, H319, H335, H372, H400	90 - 100 %
* Weight percent		

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Handle and store under inert gas. Hygroscopic.

Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

Components with workplace control parameters

Components	CAS-No.	Value	Control	Basis

			parameters	
Iodine	7553-56-2	(c)	0.1 ppm 1 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		C	0.1 ppm 1 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	A substance which may not be recirculated in accordance with section 108			
		TWA	0.01 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	0.1 ppm	USA. ACGIH Threshold Limit Values (TLV)

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

10.5 Incompatible materials

Rubber, Plastics, Iron and iron salts., Sulphur compounds, Ammonia, Magnesium, Zinc, Aluminum, Metals, Alkalis, Antimony salts, Arsenites, bromides, chlorides, iodides, thiocyanates, ferrous salts, hypophosphites, morphine salts, oils, creosote, phosphates, tannins, tartrates, Mixing iodine, antimony, and ammonia resulted in an explosion. A violent reaction occurs between iodine and acetaldehyde., Acetylene, Acetaldehyde, Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen iodide

Other decomposition products - No data available

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 14,000 mg/kg

Remarks: Diarrhoea

LC50 Inhalation - Rat - 4 h - > 4.588 mg/l

(OECD Test Guideline 403)

Remarks: Cough Respiratory disorder

LC50 Dermal - Rat - male - 1,425 mg/kg

(OPPTS 870.1200)

No data available

Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE)

Result: Moderate skin irritation

Serious eye damage/eye irritation

Moderate eye irritation

Respiratory or skin sensitisation

- Mouse

Result: Does not cause skin sensitisation.

(OECD Test Guideline 429)

Germ cell mutagenicity

Hamster

Embryo

Result: negative

Mutagenicity (micronucleus test)

Mouse - male and female

Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation. - Respiratory system

Specific target organ toxicity - repeated exposure

Oral - Causes damage to organs through prolonged or repeated exposure. - Thyroid

Aspiration hazard

No data available

Á

5 XX|HcbU`bZfa UHcb`

ÜVÖÖUkPbFííí€€€Á

U:|[|]`*^áÁc|[]`|^ÁÁ Á áã^•Á æÁ|:á`&Á áã{ Á Á^}•áá^Á áãã`æ ÉU`{|d{|•Á-Ác|[]`|^ÁÁ &`á^Á\á Áæ @Á
!`})á*Á|•^É@ææ@Á)áÁ|áãá}Á-Á@Á`&`•Á ^{á:á^É|Á^ç^!^Áæ^•Á@Á\á Á æÁ@, Áá]|^•É[á ÉÁ
@^•Éá|á^•Á)áÁ|ááÁ)áÁ|^Á|[|]ÉQáã^•Á^Á^áãá Áá~•^áÁá|[••Á@Á|áá}æÁ^[]æáÁ^æ@Á[{|Á
!^]ááá!`Áá^•Á^Á&|áá^Á Á[á^Á@Á^Á^Á]Á|[|]áÉQáã^•Á@Á^Á^Á)Á[|]Á Áæ^•ÁÁ!`Éá á`&áÁ^ç^!•ÉÁ
@Á^Á^Á~æ|Á-Á@|á^!áá}ÉÁ

Uq { æ@ÉQ^*`|ááá•ÁÉOæ^áÁ}Á~{æ ÁÖçá^}&Á

Á

%&"97C@; 75@-B: CFA5HCB`

%&% Hcl J]mi

Á V| çãç Á Á @ SÔI €ÉÁ) &|@}&@•Á ^`ã•Áçæ à|, Á|`DÉÉ Á *ÉÁÉÁ ÉÉÁ

Á V| çãç Á Áæ @ áá)áÁ ÖÓÍ €ÉÖæ @ áá æ}æY æ^Á^æDÉÉÁ *ÉÁÉÁ Á@
[@!Áæ`æáÁ

Á á ç^!á:áæ•Á

Á V| çãç Á Áæ*æÁ Ö|[, çá @áá}ÁÖÓÍ €ÉÖ^•{ |á^•{`•Á`á}ææ•Áç|^Á)Áæ*æDÉÉÉÁ *ÉÁ
ÜÖÖÖÁ^•Ö`á^á^ÁÉFDÁ

FGÉÁ Ú^!•á^•&^Á)áÁ^!ááááá Á
P| Ááááááááá|^Á

%&" 6]cUWV a i`UHj YdchYbh]U`

P| Ááááááááá|^Á

%&' AcV]]mi]b`gc`

P| Ááááááááá|^Á

%&' F Ygi`hg`cZD6 H`UbX`j Dj 6`UggYgga Ybhi

ÜÖVÜçÓÁæ•^••{ ^}á|[|]áááá|^Áæ&@{ááÁæ^çÁæ•^••{ ^}á|[|]á^~á^áÉ[|]á}á`&áÁ

%&" CH Yf`UXj YfgYZZYWg`

X^!`Á çãç Áæ`æáÁá^Á

ÇÁ}çá[|] ^}æÁ@æáÁæ}[|]á^ç&`á^áÁ Á@Áç^}á-Á]|^••á}æÁ@áá}á^!Áá|[|]á

% "8-GDCG5 @7 CBG-8 9F5H-CBG`

% "% K UghY`fYUra Ybia YH cXg`

DfcXi Wñ

U~!Á`|]`•Á)áÁ[|]É^& &áá|^Á[|]á}•Á Ááá^•^áÁá|[|]ááá|[|]á^ÉÖ[|]ááááá^•^áÁ|[|]á^•á}æÁ æ^çÁ
áá|[|]á^!çááÁ Áá|[|]á-Á@Á Áæ|^ááá

7 cbHLa]bUHYX`dUW U]]b[`

Öá|[|]á-Á Á)^•^áÁ|[|]á`&ÉÁ

% "HF5BGDCFH`-B: CFA5HCB`

H8; 17 UbUXULÁ

WpÁ`{ á^!KHI JÍ Á Ö|æ•KÁ ÁÉFDÁ

Úæá á*Á|[|]KÖÁ

U:|^!Á @]á*Áæ ^KÜÖÖÓÁ

Á

Á

-A 8; Á

WpÁ`{ á^!KHI JÍ Á Ö|æ•KÁ ÁÉFDÁ

Úæá á*Á|[|]KÖÁ

ÖT ÜÉ-[|]KÖÉÁÜÉÖÁ

U:|^!Á @]á*Áæ ^KÜÖÖÓÁ

T æá^Á[|]æ çK^•Á ÁÁ

Á

-5 H5 Á

WpÁ`{ á^!KHI JÍ Á Ö|æ•KÁ ÁÉFDÁ

Úæá á*Á|[|]KÖÁ

U:|^!Á @]á*Áæ ^KÜáá^Á

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Eye Irrit.	Eye irritation
H312	Harmful in contact with skin.
H312 + H332	Harmful in contact with skin or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
Skin Irrit.	Skin irritation
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

Further information

Copyright 2016 ACP Chemicals Inc. License granted to make unlimited paper copies for internal use only.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. ACP Chemicals Inc. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

Version: 4.18

Revision Date: 07/12/2018

Print Date: 08/17/2018