

# SAFETY DATA SHEET

Issue Date 08-Jun-2021 Revision Date 19-Feb-2024 Version 4 Page 1 / 13

## 1. IDENTIFICATION

Product identifier

Product Name Polyvinyl Alcohol Dispersing Agent

Other means of identification

Product Code(s) 2376526

Safety data sheet number M00527

Recommended use of the chemical and restrictions on use

**Recommended Use** Water Analysis. Dispersing Agent / Stabilizer.

Uses advised against Consumer use.

**Restrictions on use** For Laboratory Use Only.

## Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

#### Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

## 2. HAZARDS IDENTIFICATION

#### Classification

## **Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements

## Signal word

None

#### **Hazard statements**

The product contains no substances which at their given concentration, are considered to be hazardous to health

## Other Hazards Known

None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance Not applicable

**Mixture** 

Chemical Family Mixture.

**Chemical nature** aqueous solution.

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No.	Percent Range	HMRIC #
lodine	7553-56-2	<0.1%	-
Sodium iodide	7681-82-5	<0.1%	-

## 4. FIRST AID MEASURES

**Description of first aid measures** 

General advice No hazards which require special first aid measures. Use first aid treatment according to the

nature of the injury.

**Inhalation** Remove to fresh air.

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

**Skin contact** Wash skin with soap and water.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

**Symptoms** See Section 11 for additional Toxicological Information.

Indication of any immediate medical attention and special treatment needed

## 5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

No information available.

**Hazardous combustion products** This material will not burn.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

### 6. ACCIDENTAL RELEASE MEASURES

**U.S. Notice**Only persons properly qualified to respond to an emergency involving hazardous

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substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should

respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation.

Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## 7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

Flammability class Not applicable

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
lodine	TWA: 0.001 ppm I inhalable	(vacated) Ceiling: 0.1 ppm	IDLH: 2 ppm
CAS#: 7553-56-2	fraction and vapor	(vacated) Ceiling: 1 mg/m <sup>3</sup>	Ceiling: 0.1 ppm
	Sk*	Ceiling: 0.1 ppm	Ceiling: 1 mg/m <sup>3</sup>
		Ceiling: 1 mg/m <sup>3</sup>	
Sodium iodide	TWA: 0.01 mg/m <sup>3</sup> l inhalable	NDF	NDF
CAS#: 7681-82-5	particulate matter		
	Sk*		

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required. Ensure

adequate ventilation.

Hand Protection Wear suitable gloves.

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection**No special protective equipment required.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not allow

into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Physical state

Liquid

Appearance aqueous solution
Odor Slight iodine

Color Purple to brown

Odor threshold No information available

Property Values Remarks • Method

Molecular weight No data available

pH 5.4 @ 20 °C

Melting point / freezing point 0 °C / 32 °F

Initial boiling point and boiling range 98 °C / 208.4 °F

**Evaporation rate** 0.87 (water = 1)

**Vapor pressure** 23.552 mm Hg / 3.14 kPa at 25 °C / 77 °F

Relative vapor density 0.62

Specific gravity - VALUE 1 1.0042

Partition coefficient Not applicable

**Soil Organic Carbon-Water Partition** 

Coefficient
Autoignition temperature

Not applicable

No data available

**Decomposition temperature** 227.8 °C / 442 °F

**Dynamic viscosity**  $\sim 1.004 \text{ cP (mPa s)}$  at 20 °C / 68 °F

Kinematic viscosity ~ 1 cSt (mm²/s) at 20 °C / 68 °F

Solubility(ies)

Water solubility

Water solubility classification	Water solubility_	Water Solubility Temperature_
Soluble	> 1000 mg/L	25 °C / 77 °F

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#### Solubility in other solvents

Chemical Name_	Solubility classification	<u>Solubility</u>	Solubility Temperature_
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

## **Other information**

## **Metal Corrosivity**

Steel Corrosion Rate0.48 mm/yr/ 0.02 in/yrAluminum Corrosion Rate0.03 mm/yr/ 0 in/yr

## **Volatile Organic Compounds (VOC) Content**

Chemical name	chemical name CAS No.		CAA (Clean Air Act)	
lodine	7553-56-2	No data available	-	
Sodium iodide	7681-82-5	No data available	-	

### **Explosive properties**

Upper explosion limitNot applicableLower explosion limitNot applicable

## Flammable properties

Flash point No data available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
No data available
No data available

Oxidizing properties
No data available.

Bulk density
Not applicable

## 10. STABILITY AND REACTIVITY

#### Reactivity

Not applicable.

## Chemical stability

Stable under normal conditions.

## **Explosion data**

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

### Possibility of hazardous reactions

None under normal processing.

## **Hazardous polymerization**

None under normal processing.

#### Conditions to avoid

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None known based on information supplied.

## **Incompatible materials**

Strong oxidizing agents, strong acids, and strong bases.

## Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

#### **Product Information**

**Inhalation** No known effect based on information supplied.

Eye contact No known effect based on information supplied.

**Skin contact** No known effect based on information supplied.

**Ingestion** No known effect based on information supplied.

**Symptoms** No information available.

#### Acute toxicity

Based on available data, the classification criteria are not met

#### Mixture

No data available.

## **Ingredient Acute Toxicity Data**

Test data reported below.

## **Oral Exposure Route**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium iodide (<0.1%) CAS#: 7681-82-5	Rat LD <sub>50</sub>	4340 mg/kg	None reported	None reported	RTECS

## **Unknown Acute Toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity.

## **Acute Toxicity Estimations (ATE)**

## The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

## **Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

## Mixture

No data available.

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### Ingredient Skin Corrosion/Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
lodine (<0.1%) CAS#: 7553-56-2	OECD Test 439: In Vitro Skin Irritation: Reconstructed Human Epidermis (Rhe) Test Method	reported	10 mg	15 minutes	Not corrosive or irritating to skin	ECHA
Sodium iodide (<0.1%) CAS#: 7681-82-5	Standard Draize Test	Rabbit	500 mg	24 hours	Skin irritant	RTECS

## Serious eye damage/irritation

Based on available data, the classification criteria are not met.

#### **Mixture**

No data available.

## Ingredient Eye Damage/Eye Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
lodine (<0.1%) CAS#: 7553-56-2	Existing human experience	Human	None reported	None reported	Eye irritant	ChemADVISOR
Sodium iodide (<0.1%) CAS#: 7681-82-5	Standard Draize Test	Rabbit	100 mg	24 hours	Eye irritant	RTECS

#### Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

#### **Mixture**

No data available.

## **Ingredient Sensitization Data**

No data available.

#### STOT - single exposure

Based on available data, the classification criteria are not met.

### Mixture

No data available.

## Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

## STOT - repeated exposure

Based on available data, the classification criteria are not met.

## Mixture

No data available.

## Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

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## **Carcinogenicity**

Based on available data, the classification criteria are not met.

### **Mixture**

No data available.

## **Ingredient Carcinogenicity Data**

No data available.

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Iodine	7553-56-2	-	-	-	-
Sodium iodide	7681-82-5	-	-	-	-

## Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Group 3 - Not classifiable as a human
	carcinogen
NTP (National Toxicology Program)	Does not apply
OSHA	Does not apply

### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

## Mixture invitro Data

No data available.

#### Substance invitro Data

Test data reported below.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
lodine (<0.1%) CAS#: 7553-56-2	Chromosomal abberation	Syrian hamster embryo	0.4 mmol/L	None reported	Positive test result for mutagenicity	CCRIS

## Mixture invivo Data

No data available.

## Substance invivo Data

No data available.

## Reproductive toxicity

Based on available data, the classification criteria are not met.

### Mixture

No data available.

## **Ingredient Reproductive Toxicity Data**

Test data reported below.

## **Oral Exposure Route**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
lodine (<0.1%) CAS#: 7553-56-2	Rat TD∟₀	2750 mg/kg	22 days	Effects on Newborn Delayed effects Growth statistics (e.g. stunted fetus)	RTECS
Sodium iodide	Woman	9240 mg/kg	43 weeks	Effects on Newborn	RTECS

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(<0.1%)	TDLo	Other neonatal measures or	
CAS#: 7681-82-5		effects	
		Specific Developmental	
		Abnormalities	
		Endocrine System	

### **Aspiration hazard**

Based on available data, the classification criteria are not met.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Based on available data, the classification criteria are not met.

0% of the mixture consists of components(s) of unknown hazards to the aquatic Unknown aquatic toxicity

environment.

**Mixture** 

**Aquatic Acute Toxicity** 

No data available.

**Aquatic Chronic Toxicity** 

No data available.

**Substance** 

**Aquatic Acute Toxicity** 

Test data reported below.

## Fish

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium iodide (<0.1%) CAS#: 7681-82-5	96 hours	Oncorhynchus mykiss	LC50	3780 mg/L	EPA

## Crustacea

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium iodide (<0.1%) CAS#: 7681-82-5	48 Hours	Daphnia magna	EC50	0.17 mg/L	EPA

## **Aquatic Chronic Toxicity**

No data available.

### Persistence and degradability

**Mixture** 

No data available.

**Mixture** 

No data available.

Partition coefficient Not applicable

**Mobility** 

**Soil Organic Carbon-Water Partition Coefficient** Not applicable

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### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Do not reuse empty containers. Contaminated packaging

**US EPA Waste Number** Not applicable

Special instructions for disposal If permitted by regulation. Dilute to 3 to 5 times the volume with cold water. Adjust to a pH

between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain. Dispose of material in an

E.P.A. approved hazardous waste facility.

## 14. TRANSPORT INFORMATION

Not regulated DOT

Not regulated TDG

Not regulated <u>IATA</u>

Not regulated IMDG

No special precautions necessary. Note:

#### Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

## 15. REGULATORY INFORMATION

**National Inventories** 

Complies **TSCA** DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**International Inventories** 

**EINECS/ELINCS** Complies **ENCS** Complies Complies **IECSC** Complies **KECL PICCS** Complies **TCSI** Complies **AICS** Complies Complies **NZIoC** 

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

**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

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

### **US Federal Regulations**

### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

## SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

## **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

## **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

## U.S. - DEA (Drug Enforcement Administration) List I & List II

Chemical name	U.S DEA (Drug Enforcement Administration) - List I or Precursor Chemicals	U.S DEA (Drug Enforcement Administration) - List II or Essential Chemicals
lodine (<0.1%) CAS#: 7553-56-2	No threshold has been established	Not Listed

## **US State Regulations**

### California Proposition 65

This product does not contain any Proposition 65 chemicals

IMERC: Not applicable

### U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania
lodine	X	X	X
7553-56-2			

## **U.S. EPA Label Information**

Chemical name	FIFRA	FDA
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Chemical name	FIFRA	FDA
lodine	180.0940	-
Sodium iodide	180.0940	-

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

#### **Special Comments**

None

#### **Additional information**

#### Global Automotive Declarable Substance List (GADSL)

Chemical name	Global Automotive Declarable Substance List Classifications	Global Automotive Declarable Substance List Thersholds
lodine 7553-56-2	Declarable Substance (LR) Prohibited Substance (LR)	None reported

### NFPA and HMIS Classifications

NFPA	Health hazards - 0	Flammability - 0	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - 0	Flammability - 0	Physical hazards - 0	Personal protection -
		-	_	X
				- I

## Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)

ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS (Chemical Carcinogenesis Research Information System)

CDC (Center for Disease Control)

CEPA CEPA (Canadian Environmental Protection Agency)

CICAD CICAD (Concise International Chemical Assessment Documents)

ECHA ECHA (The European Chemicals Agency)
EEA (European Environment Agency)
EPA EPA (Environmental Protection Agency)

ERMA ERMA (New Zealands Environmental Risk Management Authority)

ECOSARS Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

FDA FDA (Food & Drug Administration)

GESTIS GESTIS (Information System on Hazardous Substances of the German Social Accident

Insurance)

HSDB (Hazardous Substances Data Bank)

INERISINERIS (The National Industrial Environment and Risks Institute)IPCS INCHEMIPCS INCHEM (International Programme on Chemical Safety)IUCLIDIUCLID (The International Uniform Chemical Information Database)NITEJapan National Institute of Technology and Evaluation (NITE)

NIH (National Institutes of Health)

NIOSH NIOSH (National Institute for Occupational Safety and Health)
LOLI LOLI (List of Lists - An International Chemical Regulatory Database)

NDF no data

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH IDLH Immediately Dangerous to Life or Health

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEEN (Pan European Ecological Network)

RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS (Screening Information Dataset) for High Volume Chemicals

SYKE The Finnish Environment Institute (SYKE)

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USDA USDA (United States Department of Agriculture)
USDC (United States Department of Commerce)

WHO (World Health Organization)

### <u>Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION</u>

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state

regulations.

SKN\* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization \*\* Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

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Revision Note None

## **Disclaimer**

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

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**End of Safety Data Sheet** 

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