

**SECTION 1: Identification****1.1. Product identifier**

Product form : Mixture
Product name : Ironsave-S

1.2. Recommended use and restrictions on use

Corrosion inhibitor to be used with sulphuric acid based pickling.

1.3. Supplier

SOPRIN S.r.l.
Via dell'Industria 106
31052 Maserada Sul Piave (TV) - Italy
T (+39) 0422 521025 - F (+39) 0422 521060
soprin@soprin.it (Alessandro Padovan)

1.4. Emergency telephone number

Emergency number : CHEMTREC 800 424 9300

SECTION 2: Hazard identification**2.1. Classification of the substance or mixture****Classification (GHS-US/CAN)**

Eye Irrit. 2 H319

Full text of classification categories and H statements : see section 16

2.2. Label elements**GHS-US/CAN labeling**

Hazard pictograms :



GHS07

Signal word : Warning
Hazard statements : H319 - Causes serious eye irritation
Precautionary statements : P264 - Wash thoroughly after handling
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
P337+P313 - If eye irritation persists: Get medical advice/attention

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US/CAN)

No data available

SECTION 3: Composition/Information on ingredients**3.1. Substances**

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification (GHS-CA)	Classification (GHS-US)
2,4-Pentanediol, 2-methyl-	(CAS No) 107-41-5	2 - 2.5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Compound, prop-2-yn-1-ol with methyloxirane	(CAS No) 38172-91-7	< 1	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures**4.1. Description of first aid measures**

First-aid measures after inhalation : Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

First-aid measures after skin contact : Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

First-aid measures after eye contact : Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

First-aid measures after ingestion : Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

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4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Vapour inhalation may moderately irritate the upper respiratory tract.
Symptoms/injuries after skin contact	: Contact with skin may cause slight irritation.
Symptoms/injuries after eye contact	: May cause stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation.
Symptoms/injuries after ingestion	: Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide, foam, powder and water spray.
Unsuitable extinguishing media	: None.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: None.
Explosion hazard	: None known.

5.3. Advice for firefighters

Firefighting instructions	: Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
Protection during firefighting	: Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Stop the flow of material, if this is without risk.
Methods for cleaning up	: Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.
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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2,4-Pentandiol, 2-methyl- (107-41-5)		
USA - ACGIH	ACGIH TWA (ppm)	25 ppm (vapor fraction)

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2,4-Pentanediol, 2-methyl- (107-41-5)		
USA - ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
USA - ACGIH	ACGIH STEL (ppm)	50 ppm (vapor fraction)
Canada (Quebec)	PLAFOND (mg/m ³)	121 mg/m ³
Canada (Quebec)	PLAFOND (ppm)	25 ppm
Alberta	OEL Ceiling (mg/m ³)	121 mg/m ³
Alberta	OEL Ceiling (ppm)	25 ppm
British Columbia	OEL Ceiling (ppm)	25 ppm
Manitoba	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Manitoba	OEL STEL (ppm)	50 ppm (vapor fraction)
Manitoba	OEL TWA (ppm)	25 ppm (vapor fraction)
New Brunswick	OEL Ceiling (mg/m ³)	121 mg/m ³
New Brunswick	OEL Ceiling (ppm)	25 ppm
New Foundland & Labrador	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
New Foundland & Labrador	OEL STEL (ppm)	50 ppm (vapor fraction)
New Foundland & Labrador	OEL TWA (ppm)	25 ppm (vapor fraction)
Nova Scotia	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Nova Scotia	OEL STEL (ppm)	50 ppm (vapor fraction)
Nova Scotia	OEL TWA (ppm)	25 ppm (vapor fraction)
Nunavut	OEL Ceiling (ppm)	25 ppm
Northwest Territories	OEL Ceiling (ppm)	25 ppm
Ontario	OEL Ceiling (ppm)	25 ppm
Prince Edward Island	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Prince Edward Island	OEL STEL (ppm)	50 ppm (vapor fraction)
Prince Edward Island	OEL TWA (ppm)	25 ppm (vapor fraction)
Saskatchewan	OEL Ceiling (ppm)	25 ppm

8.2. Exposure controls

Appropriate engineering controls	: Local exhaust and general ventilation must be adequate to meet exposure standards.
Hand protection	: Use impervious gloves such as neoprene, nitrile, or rubber for hand protection.
Eye protection	: Wear airtight protective goggles
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Odor	: No data available
Odor threshold	: No data available
pH	: 5.5
Melting point	: No data available
Freezing point	: < 0 °C
Boiling point	: 100 °C
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1000 kg/m ³

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Solubility	: Soluble
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

Avoid exposure to sources of heat and naked flames. Avoid moisture.

10.5. Incompatible materials

Strong acids and strong oxidizers.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

2,4-Pentanediol, 2-methyl- (107-41-5)

LD50 oral rat	3700 mg/kg
LC50 inhalation rat (mg/l)	> 310 mg/m ³ (Exposure time: 1 h)

Skin corrosion/irritation	: Not classified pH: 5.5
Serious eye damage/irritation	: Causes serious eye irritation. pH: 5.5
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Aquatic acute	: Not classified
Aquatic chronic	: Not classified

2,4-Pentanediol, 2-methyl- (107-41-5)

LC50 fish 1	10500 - 11000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	2700 - 3700 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Log Pow	< 0.14

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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

2,4-Pentanediol, 2-methyl- (107-41-5)

Log Pow	< 0.14
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12.4. Mobility in soil

2,4-Pentanediol, 2-methyl- (107-41-5)

Log Pow	< 0.14
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12.5. Other adverse effects

Ozone : Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

TDG

Not regulated for transport

14.2. Transport information/DOT

DOT

Not regulated for transport

14.3. Air and sea transport

IMDG

Not regulated for transport

IATA

Not regulated for transport

SECTION 15: Regulatory information

15.1. Canada National regulations

2,4-Pentanediol, 2-methyl- (107-41-5)

Listed on the Canadian DSL (Domestic Substances List)

Compound, prop-2-yn-1-ol with methyloxirane (38172-91-7)

Listed on the Canadian DSL (Domestic Substances List)

15.2. US Federal regulations

2,4-Pentanediol, 2-methyl- (107-41-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.3. US State regulations

2,4-Pentanediol, 2-methyl- (107-41-5)

U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases:

H319	Causes serious eye irritation
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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product