

SAFETY DATA SHEET

North American Version

INTEROX[®] SOLV-X PLUS

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Identification of the substance or preparation

Product name : INTEROX[®] SOLV-X PLUS

1.2. Use of the Substance/Preparation

Recommended use : - Pulp and paper

1.3. Company/Undertaking Identification

Address : SOLVAY CHEMICALS, INC.
3333 RICHMOND AVENUE
HOUSTON TX 77098-3099
United States

1.4. Emergency and contact telephone numbers

Emergency telephone : 1 (800) 424-9300 CHEMTREC[®] (USA & Canada)
01-800-00-214-00 (MEX. REPUBLIC)

Contact telephone number : US: +1-800-765-8292 (Product information)
(product information): US: +1-713-525-6500 (Product information)

2. HAZARDS IDENTIFICATION

2.1. Emergency Overview:

NFPA : H= 0 F= 0 I= 0 S= None
HMIS : H= 0 F= 0 R= 0 PPE = Supplied by User; dependent on local conditions

General Information

Appearance : liquid
Colour : yellow, brown
Odour : slight

Main effects

- Irritating to eyes and skin.

2.2. Potential Health Effects:

Inhalation

- May cause nose, throat, and lung irritation.

Eye contact

- Severe eye irritation
- Lachrymation
- Redness
- Risk of temporary eye lesions.

Skin contact

- Irritation
- Itching
- Repeated exposure may cause skin dryness or cracking.

Ingestion

- Irritation of the mouth and throat.
- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Other toxicity effects

- See section 11: Toxicological Information

2.3. Environmental Effects:

- See section 12: Ecological Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No. : Proprietary
Concentration : $\geq 10.0 - \leq 20.0 \%$

CAS-No. : Proprietary
Concentration : $\geq 5.0 - \leq 10.0 \%$

Sodium hydroxide

CAS-No. : 1310-73-2
Concentration : $\geq 0.5 - \leq 1.0 \%$

4. FIRST AID MEASURES

4.1. Inhalation

- Remove to fresh air.

4.2. Eye contact

- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine).
- Immediate medical attention is required.

4.3. Skin contact

- Remove and wash contaminated clothing before re-use.
- Wash off with plenty of water.
- If symptoms persist, call a physician.

4.4. Ingestion

- Consult a physician.

If victim is conscious:

- If swallowed, rinse mouth with water (only if the person is conscious).
- Do NOT induce vomiting.

If victim is unconscious but breathing:

- Artificial respiration and/or oxygen may be necessary.

5. FIRE-FIGHTING MEASURES

5.1. Suitable extinguishing media

- powder

- Foam
- Water
- Water spray
- Carbon dioxide (CO₂)

5.2. Extinguishing media which shall not be used for safety reasons

- None.

5.3. Special exposure hazards in a fire

- The product is not flammable.
- Heating can release hazardous gases.

5.4. Hazardous decomposition products

- Carbon monoxide

5.5. Special protective equipment for fire-fighters

- In the event of fire, wear self-contained breathing apparatus.

5.6. Other information

- Cool containers / tanks with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions

- Refer to protective measures listed in sections 7 and 8.

6.2. Environmental precautions

- Should not be released into the environment.

6.3. Methods for cleaning up

- Dam up.
- Soak up with inert absorbent material.
- Prevent product from entering drains.
- Keep in properly labelled containers.
- Keep in suitable, closed containers for disposal.
- Treat recovered material as described in the section "Disposal considerations".

7. HANDLING AND STORAGE

7.1. Handling

- Ensure adequate ventilation.
- Keep away from Incompatible products.

7.2. Storage

- Keep in a cool, well-ventilated place.
- Keep away from heat.
- Keep away from Incompatible products.
- Keep only in the original container at a temperature not exceeding 50 °C.
- Minimum storage temperature: - 10°C
- Keep in a bunded area.

7.3. Packaging material

- Stainless steel
- Approved grades of HDPE.

7.4. Other information

- Provide tight electrical equipment well protected against corrosion.

- Refer to protective measures listed in sections 7 and 8.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure Limit Values

Pentasodium (carboxylatomethyl)iminobis(ethylenitrilo)tetracetate

- US. ACGIH Threshold Limit Values
Remarks: none established

D-Gluconic acid

- US. ACGIH Threshold Limit Values
Remarks: none established

Sodium hydroxide

- US. ACGIH Threshold Limit Values 01 2006
Ceiling Limit Value = 2 mg/m³
- US. OSHA Table Z-1-A (29 CFR 1910.1000) 1989
Ceiling Limit Value = 2 mg/m³
- US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) 02 2006
Permissible exposure limit = 2 mg/m³

Sodium hydroxide

- US. ACGIH Threshold Limit Values 01 2006
Ceiling Limit Value = 2 mg/m³
- US. OSHA Table Z-1-A (29 CFR 1910.1000) 1989
Ceiling Limit Value = 2 mg/m³
- US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) 02 2006
Permissible exposure limit = 2 mg/m³

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SAEL = Solvay Acceptable Exposure Limit, Time Weighted Average for 8 hour workdays. No Specific TLV STEL (Short Term Exposure Level) has been set. Excursions in exposure level may exceed 3 times the TLV TWA for no more than a total of 30 minutes during a workday and under no circumstances should they exceed 5 times the TLV TWA.

8.2. Engineering controls

- Ensure adequate ventilation.
- Apply technical measures to comply with the occupational exposure limits.

8.3. Personal protective equipment

8.3.1. Respiratory protection

- Use only respiratory protection that conforms to international/ national standards.
- Recommended Filter type:
- Half mask with a particle filter P2 (EN 143).

8.3.2. Hand protection

- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Protective gloves - impervious chemical resistant:
- Suitable material: PVC, Neoprene, Natural Rubber

8.3.3. Eye protection

- Chemical resistant goggles must be worn.
- If splashes are likely to occur, wear:
- Face-shield

8.3.4. Skin and body protection

- long sleeved clothing
- In case of contact through splashing:

- Rubber or plastic boots.
- Rubber or plastic apron

8.3.5. Hygiene measures

- Use only in an area equipped with a safety shower.
- When using do not eat, drink or smoke.
- Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General Information

Appearance	: liquid
Colour	: yellow, brown
Odour	: slight

9.2. Important health safety and environmental information

pH	: from 8.8 - 9.6
Boiling point/boiling range	: ca. 100 °C (212 °F)
Flash point	: > 100 °C (212 °F)
Flammability	: <i>Remarks:</i> The product is not flammable.
Explosive properties	: <u>Explosion danger</u> . <i>Remarks:</i> Not explosive
Relative density / Density	: 1.23 <i>Temperature:</i> 22 °C (72 °F)
Solubility	: <i>Remarks:</i> completely miscible
Viscosity	: from 75 - 115 mPa.s

9.3. Other data

Freezing point:	: < -10 °C (14 °F)
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10. STABILITY AND REACTIVITY

10.1. Stability

- Stable under recommended storage conditions.
- Gives off hydrogen by reaction with metals.

10.2. Conditions to avoid

- To avoid thermal decomposition, do not overheat.

10.3. Materials to avoid

- Aluminium, Copper, Copper alloys, Metals, Zinc

10.4. Hazardous decomposition products

- Carbon monoxide

11. TOXICOLOGICAL INFORMATION

Toxicological data

Remarks

- No toxicology information is available.
- Components influencing toxicology
- Irritating to eyes, respiratory system and skin.
- Other dangerous properties can not be excluded.

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity effects

Acute toxicity

- Remarks: no data available

12.2. Mobility

- Water, Soil
Remarks: Solubility, Mobility
- Soil/sediments
Remarks: considerable percolation

12.3. Persistence and degradability

Biodegradation

- Remarks: Readily biodegradable.

12.4. Bioaccumulative potential

- log Pow < 3
Result: Does not bioaccumulate.

12.5. Other adverse effects

- no data available

12.6. Remarks

- Ecological injuries are not known or expected under normal use.
- Other dangerous properties can not be excluded.

13. DISPOSAL CONSIDERATIONS

13.1. Waste from residues / unused products

- Refer to manufacturer/supplier for information on recovery/recycling.
- If recycling is not practicable, dispose of in compliance with local regulations.
- Can be landfilled, when in compliance with local regulations.
- In accordance with local and national regulations.

13.2. Packaging treatment

- Where possible recycling is preferred to disposal or incineration.
- In accordance with local and national regulations.

13.3. RCRA Hazardous Waste

- Listed RCRA Hazardous Waste (40 CFR 302) - No

14. TRANSPORT INFORMATION

- Sea (IMO/IMDG)

- not regulated
- Air (ICAO/IATA)
- not regulated
- U.S. Dept of Transportation
- not regulated
- It is recommended that ERG Guide number 111 be used for all non-regulated material.
- Canadian Transportation of Dangerous Goods
- not regulated

15. REGULATORY INFORMATION

15.1. Inventory Information

Toxic Substance Control Act list (TSCA)	: -	In compliance with inventory.
Australian Inventory of Chemical Substances (AICS)	: -	One or more components not listed on inventory.
Canadian Domestic Substances List (DSL)	: -	In compliance with inventory.
Korea Existing Chemicals Inv. (KECI) (KECI (KR))	: -	In compliance with inventory.
EU list of existing chemical substances (EINECS)	: -	In compliance with inventory.
Japan (ENCS) List (ENCS (JP))	: -	In compliance with inventory.
Inventory of Existing Chemical Substances (China) (IECS)	: -	In compliance with inventory.
Philippine Inventory of Chemicals and Chemical Substances (PICCS)	: -	In compliance with inventory.
New Zealand Inventory (in preparation) (NZ)	: -	One or more components not listed on inventory.

15.2. Other regulations

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

- not regulated.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

- not regulated.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

- not regulated.

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

- not regulated.

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

- not regulated.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

- not regulated.

15.3. Classification and labelling

Canada. Canadian Environmental Protection Act (CEPA). WHMIS Ingredient Disclosure List (Can. Gaz., Part II, Vol. 122, No. 2)

- Not listed

Remarks: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

Ratings :

NFPA (National Fire Protection Association)

Health = 0 Flammability = 0 Instability = 0 Special =None

HMIS (Hazardous Material Information System)

Health = 0 Fire = 0 Reactivity = 0 PPE : Supplied by User; dependent on local conditions

Further information

- Update
This data sheet contains changes from the previous version in section(s): 7.2, 9.3
- Distribute new edition to clients

Material Safety Data Sheets contain country specific regulatory information; therefore, the MSDS's provided are for use only by customers of the company mentioned in section 1 in North America. If you are located in a country other than Canada, Mexico or the United States, please contact the Solvay Group company in your country for MSDS information applicable to your location. The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. (Unless noted to the contrary, the technical information applies only to pure product). To our actual knowledge, the information contained herein is accurate as of the date of this document. However, neither the company mentioned in section 1 nor any of its affiliates makes any warranty, express or implied, including merchantability or fitness for use, or accepts any liability in connection with this information or its use. This information is for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right. The user alone must finally determine suitability of any information or material for any contemplated use, the manner of use and whether any patents are infringed. This information gives typical properties only and is not to be used for specification purposes. The company mentioned in section 1 reserves the right to make additions, deletions or modifications to the information at any time without prior notification. Trademarks and/or other products of the company mentioned in section 1 referenced herein are either trademarks or registered trademarks of the company mentioned in section 1 or its affiliates, unless otherwise indicated.

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