


 Marsh
 Solvent
 NP Solvent

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : NP Solvent

Synonyms : Product Code : IJ-NP-S-G5, IJ-NP-S-Q, 20749, 20794

Material uses : Industrial applications: Use for cleaning the Marsh printer and printer components only.

Emergency phone : Medical: CALL RMPDC, USA (303) 623-5716
Transporters: CHEMTREC, USA (800)-424-9300

Supplier : Martek Industries Ltd
Unit 12b, Ridings Park Ind. Estate
Eastern Way, Cannock, Staffs WS11 7FJ, UK
Tel: +44(0)1543 502202 Fax: +44(0)1543-467726

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation : Preparation

Information on Hazardous Ingredients

CAS No.	Percent (%)	Chemical name	R-Phrases
1) 67-63-0	65 - 80	Propan-2-ol	Xi R11, 36, 67

* Occupational Exposure Limit(s), if available, are listed in Section 8

3. HAZARDS IDENTIFICATION

Classification : Highly flammable, Irritant

Reclassification : R11- Highly flammable.
R36- Irritating to eyes.
R67- Vapours may cause drowsiness and dizziness.

Safety phrases : None.

Effects and symptoms

Chemical name	Effects and symptoms
1) Propan-2-ol	May cause irritation of respiratory tract, coughing, shortness of breath. Slightly irritating to the skin. Absorbed through skin. Moderately irritating to eyes. Ingestion : Exposure can cause nausea, headache and vomiting. Inhalation and Ingestion : Can cause CNS depression. Can cause dizziness, lightheadedness, headache, nausea and blurred vision. May cause loss of consciousness/coma and death . Repeated or prolonged contact with irritants may cause dermatitis.

4. FIRST AID MEASURES

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Skin contact : Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Eye contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Cold water may be used. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

- Extinguishing media** : Flammable liquid, soluble or dispersed in water.
 . SMALL FIRE: Use DRY chemical powder.
 . LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water et in order to prevent pressure build-up, autoignition or explosion
- Special fire-fighting procedures** : Fire fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.
- Hazardous thermal decomposition products** : These products are carbon oxides (CO, CO₂).
- Protection of fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Splash goggles. Full suit. Vapour respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Environmental precautions and cleanup methods** : Flammable liquid.
 Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with dry earth, sand or other noncombustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE

- Handling** : Keep locked up. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, reducing agents.
- Storage** : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
- Packaging materials** : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value. Ensure that eyewash stations and safety showers are close to the workstation location.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Occupational Exposure Limits

Chemical name

1) Propan-2-ol

Exposure limits

- 1) Austria MAK (TWA) 8 hours 400 ppm
- 2) Denmark DK-Arbejdstilsynet TWA 8 hours 200 ppm
- 3) Belgium TWA 8 hours 400 ppm
- 4) Belgium STEL 15 minutes 500 ppm
- 5) France INRS VLE 8 hours 400 ppm
- 6) Germany BAUA MAK (TWA) 8 hours 500 ppm
- 7) Ireland TWA 8 hours 400 ppm (Skin)
- 8) Ireland STEL 15 minutes 500 ppm (Skin)
- 9) Italy TWA 8 hours 400 ppm
- 10) Italy STEL 15 minutes 500 ppm
- 11) Netherlands Arbeidsinspectie MAC-TGG (TWA) 8 hours 250 ppm (Skin)
- 12) Norway N-Arbejdstilsynet TWA 8 hours 100 ppm
- 13) Spain VLA-ED (TWA) 8 hours 400 ppm
- 14) Spain VLA-EC 15 minutes 500 ppm
- 15) Sweden AFS NGV (TWA) 8 hours 150 ppm
- 16) Sweden AFS KTV (STEL) 15 minutes 250 ppm
- 17) Switzerland SUVA MAK-W (TWA) 8 hours 200 ppm
- 18) Switzerland SUVA KZG-W (STEL) 15 minutes 400 ppm

Personal Protective Equipment

- Respiratory system** : Vapour respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
- Skin and body** : Lab coat.
- Hands** : Gloves.
- Eyes** : Splash goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance	: Liquid.
Colour	: Clear.
Odour threshold	: The highest known value is 35 ppm. Weighted average: 35 ppm.
Boiling point	: The lowest known value is 82 °C. Weighted average: 86 °C.
Melting point	: May start to solidify at 0 °C. Weighted average: -71 °C.
Specific gravity	: 0.83 (Water = 1)
Vapour density	: The highest known value is 2.1. The lowest known value is 0.6. (Air = 1)
Vapor pressure	: The highest known value is 33 mmHg at 20°C. Weighted average: 30 mmHg at 20°C.
Evaporation rate (butyl acetate = 1)	: The highest known value is 1.7. Weighted average: 1.4.
Solubility	: Easily soluble in hot water, methanol. Soluble in cold water, diethyl ether, acetone. Partially soluble in n-octanol.
Octanol/water partition coefficient	: The product is more soluble in water.
pH	: Neutral.
Flash point	: 20 °C.
Autoignition temperature	: The lowest known value is 399 °C. Weighted average: 399 °C.
Flammable limits	: The lowest known value is 2.0%. The highest known value is 13.0%.
Volatility (w/w)	: 100 %.
VOC Volatility (w/w)	: 79 %.

10. STABILITY AND REACTIVITY

Stability	: The product is stable.
Conditions and materials to avoid	: Not available.
Hazardous reactions	: Reactive with oxidizing agents, reducing agents. Slightly reactive with acids, alkalis.
Hazardous decomposition products	: These products are carbon oxides (CO, CO2).

11. TOXICOLOGICAL INFORMATION

<u>Chemical name</u>	<u>Toxicological Information</u>
1) Propan-2-ol	1) LD50 Oral Rat: 5045 mg/kg 2) LD50 Oral Rabbit: 6410 mg/kg 3) LD50 Oral Mouse: 3600 mg/kg 4) LD50 Dermal Rabbit: 12800 mg/kg

12. ECOLOGICAL INFORMATION

Persistence/degradability	: Not available.
Ecotoxicity	: Not available.
Germany water class (WGK)	: Wassergefährdungsklasse = 1

13. DISPOSAL CONSIDERATIONS

Disposal methods	: Waste must be disposed of in accordance with federal, state and local environmental control regulations.
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14. TRANSPORT INFORMATION

UN number	: UN1219
Proper shipping name	: Isopropanol Solution
ADR/RID class	: 3
ADR/RID item number	: Not available.
Packing group	: II

15. REGULATORY INFORMATION



Risk phrases : R11- Highly flammable.
R36- Irritating to eyes.
R67- Vapours may cause drowsiness and dizziness.

Safety phrases : None.

Other EU Regulations

Child protection : Not applicable.

Tactile warning of danger : Not applicable.

National Regulations

Not available.

16. OTHER INFORMATION

Date of issue : May 28, 2002
Prepared by : Garth Studebaker, CSP
Version : 4

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