

Material Safety Data Sheet

Revision Date: 06/22/2007
Z20000000054/Version: 2.0
Print Date: 11/11/2010
Page: 1/7

1. Identification of the substance/mixture and of the company/undertaking

Product name: H-CLEANER ISOPROPYL ALCOHOL - EXP

Product code: SP1C8261

Supplier: Carestream Health, Inc., 150 Verona Street, Rochester, New York, 14608

For Emergency Health Information call, (800) 424-9300

For other information contact 800-328-2910.

Synonyms: None.

Product Use: Film or paper manufacturing chemical
For industrial use only.

2. Hazards identification

CONTAINS: Isopropanol (67-63-0)

DANGER!

FLAMMABLE LIQUID AND VAPOR

FORMS EXPLOSIVE PEROXIDES

CAN CAUSE CNS EFFECTS

CAUSES EYE IRRITATION

PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DRYING, CRACKING, OR IRRITATION

HIGH VAPOR CONCENTRATIONS MAY CAUSE DROWSINESS AND IRRITATION OF THE EYES OR RESPIRATORY TRACT

NFPA Hazard Ratings: Health - 1, Flammability - 3, Instability - 0

NOTE: NFPA 704 (2007) hazard indexes involves data review and interpretation that may vary among companies. It is intended only for rapid, general identification of the magnitude of the potential hazards. To adequately address safe handling, ALL information in this MSDS must be considered.

3. Composition/information on ingredients

Weight %	Components (CAS-No.)
100	Isopropanol (67-63-0)

4. First aid measures

Inhalation: If inhaled, move to fresh air. Get medical attention if symptoms occur.

Material Safety Data Sheet

Revision Date: 06/22/2007
Z20000000054/Version: 2.0
Print Date: 11/11/2010
Page: 2/7

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin: Wash off with soap and water. Get medical attention if symptoms occur.

Ingestion: Get medical attention if symptoms occur.

5. Fire-fighting measures

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

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Fire or excessive heat may produce hazardous decomposition products. Use water spray to cool unopened containers. Water may be ineffective.

Hazardous Combustion Products: Carbon oxides

Unusual Fire and Explosion Hazards: Flammable. Vapours may form explosive mixtures with air. Prevent buildup of vapours or gases to explosive concentrations. Material contains a flammable solvent that may accumulate in the container headspace.

6. Accidental release measures

Methods for cleaning up: Remove all sources of ignition. Absorb spill with inert material, then place in a chemical waste container. Clean surface thoroughly to remove residual contamination.

For Large Spills: Use water spray to disperse vapours and dilute spill to a nonflammable mixture. Prevent runoff from entering drains, sewers, or streams.

7. Handling and storage

Personal precautions: Avoid breathing mist or vapour at concentrations greater than the exposure limits. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep away from heat, light, sparks, and flame. Keep from contact with oxidizing materials. Use only with adequate ventilation. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids. If peroxide formation is suspected, do not open or move container. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Keep away from open flames, hot surfaces and sources of ignition. Do not distill or allow to evaporate to near dryness. Minimize exposure to air.

Storage: Store in cool place. Do not freeze. Protect against light. Protect from contamination. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls / personal protection

Occupational exposure controls

Material Safety Data Sheet

Revision Date: 06/22/2007
Z20000000054/Version: 2.0
Print Date: 11/11/2010
Page: 3/7

Chemical Name	Regulatory List	Value Type	Value
Isopropanol	ACGIH	time weighted average	200 ppm
	ACGIH	Short term exposure limit	400 ppm
	OSHA Z1	time weighted average	400 ppm 980 mg/m3
	OSHA Z1A	time weighted average	400 ppm 980 mg/m3
	OSHA Z1A	Short term exposure limit	500 ppm 1,225 mg/m3

Ventilation: Good general ventilation should be used. Ventilation should be sufficient so that applicable occupational exposure limits are not exceeded. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances.

Respiratory protection: None should be needed. If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

Eye protection: Wear safety glasses with side shields (or goggles).

Skin and body protection: For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

Recommended Decontamination Facilities: Safety shower, eye wash, washing facilities as appropriate to condition of use.

9. Physical and Chemical Properties

Physical form: liquid

Colour: clear

Odour: slight ether, acetone-like

Specific gravity: 0.782

Vapour pressure (at 24.0 °C (75.2 °F)) : 53 mbar (39.8 mm Hg)

Vapour density: No data available

Volatile fraction by weight: 100 %

Boiling point/range: 83.0 °C (181.4 °F)

Melting point/range: -89.0 °C (-128.2 °F)

Water solubility: complete

pH: No data available

Flash point: 12.7 °C (55.0 °F) (Tag closed cup)

Material Safety Data Sheet

Revision Date: 06/22/2007
Z20000000054/Version: 2.0
Print Date: 11/11/2010
Page: 4/7

10. Stability and reactivity

Stability: Stable; however, forms peroxides that may explode on concentration.

No exotherm to 420 °C by DSC

Incompatibility: Strong oxidizing agents.

Hazardous decomposition products: None under normal conditions of use.

Hazardous Polymerization: Hazardous polymerization does not occur.

11. Toxicological information

Effects of Exposure

General advice: Ingestion of large amounts of isopropyl alcohol may cause headache, dizziness, incoordination, vomiting, confusion, stupor, kidney injury coma and death. Prolonged exposure to high vapour concentrations of isopropyl alcohol may cause irritation of the eyes, nose, and throat and narcosis. Can cause CNS effects.

Inhalation: Expected to be a low hazard for recommended handling.

Eyes: Causes eye irritation.

Skin: Prolonged or repeated contact may cause drying, cracking, or irritation.

Ingestion: May cause irritation of the gastrointestinal tract.

Acute Toxicity Data:

- Oral LD50 (rat): 5,800 mg/kg
- Inhalation LC50 (rat): 12,000 mg/l / 8 hr
- Dermal LD50: > 2,000 mg/kg
- Skin irritation: slight
- Skin irritation: No skin irritation (repeated skin application)
- Eye irritation: slight to moderate

12. Ecological information

This section has not been completed.

13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

Material Safety Data Sheet

Revision Date: 06/22/2007
Z20000000054/Version: 2.0
Print Date: 11/11/2010
Page: 5/7

The information given below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions. Please consult the product packaging for further details.

IATA:	UN Number:	UN1219
	Proper shipping name:	Isopropanol
	Class:	3
	Packaging group:	II
IMDG:	UN Number:	UN1219
	Proper shipping name:	ISOPROPANOL
	Class:	3
	Packaging group:	II
US DOT:	UN Number:	UN1219
	Proper shipping name:	Isopropanol
	Class:	3
	Packaging group:	II

For more transportation information, go to: <http://ship.carestreamhealth.com>.

15. Regulatory information

Notification status

Regulatory List	Notification status	Other information	Not listed
EINECS	y (positive listing)	-	
TSCA	y (positive listing)	On TSCA Inventory	
AICS	y (positive listing)	-	
DSL	y (positive listing)	All components of this product are on the Canadian DSL list.	
ENCS (JP)	y (positive listing)	-	
KECI (KR)	y (positive listing)	-	
PICCS (PH)	y (positive listing)	-	
INV (CN)	y (positive listing)	-	

A N (Negative listing) indicates one or more component is either not on the public Inventory or is subject to exemption requirements. If additional information is needed contact Kodak.

Other regulations

American Conference of Governmental Industrial Hygienists (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.
International Agency for Research on Cancer (IARC):	No component of this product present at

Material Safety Data Sheet

Revision Date: 06/22/2007
Z20000000054/Version: 2.0
Print Date: 11/11/2010
Page: 6/7

	levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
U.S. National Toxicology Program (NTP):	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
U.S. Occupational Safety and Health Administration (OSHA):	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
U.S. California Prop. 65:	none
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Isopropanol
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	Isopropanol
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Isopropanol
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:	Isopropanol
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR355, Appendix A):	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

16. Other information

The data below reflects current legislative requirements whereas the product in your possession may carry a different version of the label depending on the date of manufacture.

US/Canadian Label Statements:

CONTAINS: Isopropanol (67-63-0)

DANGER!

FLAMMABLE LIQUID AND VAPOR

FORMS EXPLOSIVE PEROXIDES

CAN CAUSE CNS EFFECTS

CAUSES EYE IRRITATION

PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DRYING, CRACKING, OR IRRITATION

HIGH VAPOR CONCENTRATIONS MAY CAUSE DROWSINESS AND IRRITATION OF THE EYES OR RESPIRATORY TRACT

Avoid breathing vapour at concentrations greater than the exposure limits.

Avoid contact with eyes, skin, and clothing.

Keep container tightly closed.

Keep away from heat, light, sparks, and flame.

Material Safety Data Sheet

Revision Date: 06/22/2007
Z20000000054/Version: 2.0
Print Date: 11/11/2010
Page: 7/7

Do not allow to evaporate to near dryness.
Keep away from open flames, hot surfaces and sources of ignition.
Store in cool place.
Do not freeze.
Use only with adequate ventilation.
Wash thoroughly after handling.

FIRST AID: If inhaled, move to fresh air. Get medical attention if symptoms occur. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Keep out of reach of children.

Do not handle or use until safety precautions in Material Safety Data Sheet (MSDS) have been read and understood.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

IN CASE OF FIRE: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

IN CASE OF SPILL: Remove all sources of ignition. Absorb spill with inert material, then place in a chemical waste container. Clean surface thoroughly to remove residual contamination. For Large Spills: Use water spray to disperse vapours and dilute spill to a nonflammable mixture. Prevent runoff from entering drains, sewers, or streams.

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment. The information relating to the working solution is for guidance purposes only, and is based on correct mixing and use of the product according to instructions.

R-1, S-1, F-3, C-2E