SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier
Trade name: Isopropyl Alcohol (Anhydrous)

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: Industrial or Commercial Use only.
Uses advised against: All other uses.

1.3 Details of the supplier of the Safety Data Sheet
USA Lab Inc.
12400 Belden Ct., Livonia,
MI 48150,
USA

Hazard emergency contact: Chemtrec 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to OSHA Hazardous Communication Standard 29 CFR 1910.1200.
Flammable liquid, category 2
Eye irritation, category 2
Specific target organ toxicity -single exposure, category 3

2.2 Label elements
Labelling according to OSHA Hazardous Communication Standard 29 CFR 1910.1200:

Signal word: Danger

Hazard statements:
H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P330 Rinse mouth.
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.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

2.3 Other hazards
None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture meeting the criteria for classification in accordance with OSHA Hazardous Communication Standard 29 CFR 1910.1200.

Ingredients:

Name	CAS No.	GHS classification	% (w/v)
Isopropyl Alcohol	67-63-0	Flamm. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	<99

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Following inhalation: After inhalation: fresh air. Call in physician.

Following skin contact: In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Following eye contact: After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

Following ingestion: After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

Protection of first aider: Not applicable.

4.2 Most important symptoms and effects

Symptoms: The known symptoms and effects are described in section 2.2 of this SDS.

Risks: Untreated symptoms may result in additional health risks.

4.3 Indication of any immediate medical and special treatment
The physician may contact the national poison center for advice.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use dry chemicals, CO2, water spray or alcohol resistant foam.

Unsuitable extinguishing media: Water may be ineffective unless used under favorable conditions by experienced fire fighters trained in fighting all types of flammable liquid fires. Water can be used to cool and protect exposed material.

5.2 Specific hazards arising from mixture
Releases flammable vapors below normal ambient temperatures.

5.3 Advice for fire fighters

Special protective equipment for firefighters:
As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

5.4 Other information
No other information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
Avoid direct contact with released material. Stay upwind. Eliminate all sources of ignition. Evacuate personnel to safe areas. Prevent further leakage or spillage if safe to do so.

6.2 Environmental precautions:
Do not allow contact with soil, surface or ground water.
Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up:
Extremely flammable liquid.
Release causes immediate fire/explosion hazard.
Liquids/vapors may ignite.
Extinguish all ignition sources.
All equipment used when handling this product must be grounded.
Do not touch or walk through spilled material.
Stop leak if you can do it without risk.
Prevent entry into waterways, sewers, basements or confined areas.
A vapor suppressing foam may be used to reduce vapors.
Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Use clean non-sparking tools to collect absorbed material.

Dike large spills and place materials in salvage containers.
Water spray may reduce vapor; but may not prevent ignition in closed spaces.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

For industrial use only.
Keep container tightly closed when not in use.
Check atmosphere for explosiveness and oxygen deficiencies.
Extinguish all ignition sources.
Containers must be properly grounded before beginning trans-fer.
Use only non-sparking tools.
Carefully vent any internal pressure before removing closure.
Wear recommended personal protective equipment.
All equipment must conform to applicable electrical code.
Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair.
Handle empty containers with care; vapor residue may be flammable/explosive.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions: Steel drums are recommended for packaging. Store only in tightly closed, properly vented containers away from heat, sparks, open flame and strong oxidizing agents. Store closed drums with bung in up position. Do not store this material in aluminium containers. Material may attack some forms of plastic, aluminium, rubber and coatings.

Incompatible materials: See section 10.

7.3 Specific end uses

See section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Isopropyl Alcohol	67-63-0	STEL	400 ppm	US (ACGIH)
		TWA	200 ppm	US (ACGIH)
		IDLH	2,000 ppm	NIOSH
		TWA	400 ppm 980 mg/m3	98/24/EC

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sam-pling time	Permissible concentration	Basis
Isopropyl Alcohol	67-63-0	Acetone	urine	end of shift at end of work-week	40 mg/l	

8.2 Exposure controls

Engineering controls:
No special ventilation is recommended under anticipated conditions of normal use beyond that needed for normal com- fort control.

Personal Protective equipment:

Hand: Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

Body protection: Appropriate protective clothing should be worn to prevent skin contact.

Eye: Use safety goggle with side protection.

Respiratory: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Other measures: No statement available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid
Color: Colorless
Odor: Alcohol like
Odor threshold: ~ 200 ppm
pH: No data available
Melting point/range: -88 °C
Boiling point/range: 82 – 83 °C at 1.013 hPa
Flash point: 12 °C
Evaporation rate: No data available
Flammability: flammable liquid in accordance with GHS criteria
Upper/lower flammability or explosive limits: No data available
Vapor pressure: 43 hPa at 20 °C
Vapor density: No data available
Relative Density: 0.79 g /cm³ at 20 °C
Solubility(ies): miscible in any proportion (water)
Partition coefficient (n-octanol/water): 0.05
Auto-ignition temperature: 425 °C
Decomposition temperature: No data available

Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Will not occur.

10.4 Conditions to avoid
Heat, sparks, open flame, other ignition sources, and oxidizing conditions.

10.5 Incompatible materials
Strong acids
Aldehydes
Oxidizing agents
Rubber
Oils
Plastics
Amines
Metals
Halogenated compounds
Peroxides
Bases

10.6 Hazardous decomposition products
Carbon oxides
Sulphur oxides

SECTION 11: TOXICOLOGICAL INFORMATION

General information:
This product does not contain known human carcinogens.

11.1 Information on toxicological effects

Acute Toxicity:
No statements available for any of the ingredients.

Skin corrosion/irritation:
No statements available for any of the ingredients.

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitization:
No statements available for any of the ingredients.

Germ cell mutagenicity:
No statements available for any of the ingredients.

Carcinogenicity:
This product does not contain known human carcinogens.

Reproductive toxicity:
No statements available for any of the ingredients.

STOT – single exposure:
May cause drowsiness or dizziness.

STOT – repeated exposure:
No statements available for any of the ingredients.

Aspiration hazard:
No statements available for any of the ingredients.

Likely route(s) of exposure:
Skin exposure and eye exposure are the most likely to occur. Accidental ingestion is also possible.

SECTION 12: ECOLOGICAL INFORMATION

General information:
No statements available for any of the ingredients.

12.1 Toxicity

Toxicity to fish :	Remarks: Low acute toxicity to fish LC50 (Pimephales promelas): >= 9,640 mg/l Exposure time: 96 HOURS
Toxicity to daphnia: and other aquatic invertebrates	Remarks: Low acute toxicity to aquatic invertebrates. EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 HOURS
Toxicity to: algae/aquatic plants	Remarks: Low toxicity to algae. NOEC (Scenedesmus subspicatus): > 1,000 mg/l Exposure time: 72 HOURS
Toxicity to fish: (Chronic tox- icity)	Remarks: Low chronic toxicity to fish. NOEC (Oryzias latipes): > 100 mg/l Exposure time: 14 d

12.2 Persistence and degradability

Physical- and photochemical elimination:
No statements available for any of the ingredients.

Biodegradation:
Result: rapidly degradable
Biodegradation: 86 - 94 %

12.3 Bioaccumulative potential
Bioconcentration factor (BCF): 3.16

12.4 Mobility in soil

Known/Predicted environmental distribution:
No statements available for any of the ingredients.

Surface tension:
No statements available for any of the ingredients.

Adsorption/Desorption:
Low potential for soil adsorption expected

12.5 Results of PBT and vPvB assessment
This product does not contain components which are considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No statements available for any of the ingredients.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product:
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Waste material:
Dispose according to Federal, State, Provincial and Local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number
ADR/RID/IDMG/IATA: UN 1219

14.2 UN proper shipping name
ADR/RID/IDMG/IATA: Isopropanol

14.3 Transport hazard class(es)
ADR/RID/IDMG/IATA: 3

14.4 Packing group
ADR/RID/IDMG/IATA: II

14.5 Environmental hazards
ADR/RID/IDMG/IATA: Non-regulated

14.6 Special precautions for user
No statements available.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable, as product is not shipped in bulk.

SECTION 15: REGULATORY INFORMATION

International Inventories
TSCA: Complies
DSL: All components are listed either on the DSL or NDSL.

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

US Federal Regulations
SARA 313: This product contains the following chemicals subject to the reporting requirements of SARA Title III, Section 313 and 40 CFR 372:
Isopropyl Alcohol

SARA 311/312 Hazard Categories
Acute health hazard: Yes
Chronic Health Hazard: Yes
Fire hazard: Yes
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. State Regulations
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canada
WHMIS Hazard Class
Not determined.

SECTION 16: OTHER INFORMATION

Further information
The information presented in this Safety Data Sheet (SDS) is accurate to the best of our knowledge at the date of publication. The information given within the SDS is meant solely as a guide for safe handling, use, transportation, processing, storage, release and disposal. In no means can the information within the SDS be considered as a warranty or specification for quality.