SDS No.: IX0230 9236 **SAFETY DATA SHEET** KIN00635 **FLAMMABLE STORAGE CODE RED**

Section 1 Chemical Product and Company Identification

Nasco
901 Janesville Ave.
P.O. Box 901
Fort Atkinson, WI 53538-0901

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use

Product	**ISOPROPYL ALCOHOL, 70% SOLUTION**
Synonyms	2-Propanol 70%, Isopropanol, Water Solution

Section 2 Hazards Identification

Signal word: DANGER
Pictograms: GHS02 / GHS07
Target organs: Central nervous system, Liver, Kidneys

GHS Classification:
Flammable liquid (Category 2)
Eye irritation (Category 2)
STOT-SE (Category 3)

GHS Label information, Hazard statement(s):
H225: Highly flammable liquid and vapour
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness

Precautionary statement(s):
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312: Call a POISON CENTER or doctor if you feel unwell.
P337+P313: If eye irritation persists: Get medical attention.
P370+P378: In case of fire: Use dry chemical, alcohol foam, carbon dioxide or water spray to extinguish.
P403+P235: Store in a well-ventilated place. Keep cool.
P405: Store locked up.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Isopropyl alcohol	67-63-0	70%	200-661-7
Water	7732-18-5	30%	231-791-2

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instantly. Flame may not be visible in daylight.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	Isopropanol	TWA: 200 ppm / STEL: 400 ppm	TWA: 400 ppm / 980 mg/m^3	TWA: 400 ppm / STEL: 500 ppm

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid
Odor: Aromatic odor.
Odor threshold: Data not available.
pH: Data not available
Melting / Freezing point: Approximately -50°C (-58°F)
Boiling point: Approximately 85-100°C (185-212°F)
Flash point: 21.7°C (71°F) TCC
Evaporation rate (Butyl acetate = 1): >1
Flammability (solid/gas): Data not available
Explosion limits: Lower / Upper: 2% / 12% [Pure IPA]
Vapor pressure (mm Hg): 33 mm @20°C [Pure IPA]
Vapor density (Air = 1): 2.1 [Pure IPA]
Relative density (Specific gravity): 0.8
Solubility(ies): Complete in water
Partition coefficient: (n-octanol / water) Data not available
Auto-ignition temperature: 399°C (750°F) ASTM-E659-78 [Pure IPA]
Decomposition temperature: Data not available
Viscosity: Data not available
Molecular formu la: Mixture
Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur
Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition.
Incompatible materials: Strong oxidizing materials, caustics, aluminums, metals, nitroform, oleum, chlorinated compounds can react vigorously with this alcohol.
Hazardous decomposition products: Oxides of carbon.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 4396 mg/kg ; Inhalation-rat LC50: 72.6 mg/L/4 hours ; Dermal-rat LD50: 12,000 mg/kg
Skin corrosion/irritation: Skin-rabbit - Slight irritant
Serious eye damage/irritation: Eyes-rabbit - Irritating
Respiratory or skin sensitization: Not sensitizing
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
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.
IARC classified: Group 3: Not classifiable as to its carcinogenicity to humans.
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.
Reproductive toxicity: Data not available
STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects
STOT-repeated exposure: Data not available
Aspiration hazard: Yes
Potential health effects:
Inhalation: Inhalation of high vapor concentrations may cause central nervous system depression resulting in dizziness, drowsiness, nausea, vomiting, inability to concentrate and irritation of the throat. Continued inhalation may result in unconsciousness and death.
Ingestion: Aspiration hazard. Liquid can directly enter the lungs (asprated) when swallowed or vomited. Serious lung damage and possible fatal chemical pneumonia can develop if this occurs.
Skin: Prolonged or repeated contact may cause irritation and drying, cracking and defatting of the skin which can lead to dermatitis.
Eyes: Contact causes burning sensation, redness, swelling, and/or blurred vision.
Signs and symptoms of exposure: See Potential health effects above
Additional information: RTECS #: NT8050000 [Isopropanol]

Section 12 Ecological Information

Toxicity to fish: Pimephales promelas (Fish, fresh water) LC50: 9640 mg/L/96 hours [Isopropanol]
Toxicity to daphnia and other aquatic invertebrates: Artemia salina (Crustacea), EC50 = > 10,000 mg/L/24 hours [Isopropanol]
Toxicity to algae: Scenedesmus quadricauda (Algae), LOEC50 = 1,800 mg/L/7 days [Isopropanol]
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: UN1219 **Shipping name:** Isopropanol solution
Hazard class: 3 **Packing group:** II **Reportable Quantity:** No **Marine pollutant:** No
Exceptions: Limited quantity equal to or less than 1 L **2016 ERG Guide #** 129

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Isopropyl alcohol	Listed	Not listed	Not listed	Listed	Not listed

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information 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 of these materials and the safety and health of employees. NTP: National Toxicology Program. IARC: International Agency for Research on Cancer. OSHA: Occupational Safety and Health Administration. STOT: Specific Target Organ Toxicity. SE: Single Exposure. RE: Repeated Exposure. ERG: Emergency Response Guidebook.

Revision Date: February 8, 2017 **Supercedes:** June 1, 2016