

Printing date 02/22/2024

Version 1

Reviewed on 02/22/2024

1 Identification**Product identifier****Trade name:** NovaHol**Product code(s):** NH1-G, NH1-Q**Application of the substance / the mixture:** Cleanroom Surface Cleaner**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Micronova Manufacturing
3431 West Lomita Boulevard
Torrance, CA, 90505, USA
Tel: +1 (310)784-6990
Fax: +1 (310)784-6980
Email: dleonard@micronova-mfg.com
www.micronova-mfg.com

Emergency telephone number: CHEMTREC: +1 703-741-5970 (24h)**2 Hazard(s) identification****Classification of the substance or mixture**

Flammable Liquids 3 H226 Flammable liquid and vapor.
Eye Irritation 2A H319 Causes serious eye irritation.
Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

Label elements**GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS02 GHS07

Signal word Warning**Hazard-determining components of labeling:**

Propan-2-ol

Hazard statements

Flammable liquid and vapor.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary statements:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Safety Data Sheet

According to OSHA HazCom Standard [2012]

Printing date 02/22/2024

Version 1

Reviewed on 02/22/2024

Trade name: NovaHol

Classification system:
NFPA ratings (scale 0 - 4)



HMIS-ratings (scale 0 - 4)



Other hazards

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Description: Mixture: consisting of the following components.

Hazardous Components:

67-63-0	Propan-2-ol Flammable Liquids 2, H225; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	≥20-≤25%
---------	---	----------

Information on components:

7732-18-5	Water USP	50-100%
-----------	-----------	---------

4 First-aid measures

Description of first aid measures

After inhalation: Move patient to fresh air, if symptom arise consult a doctor.

After skin contact: Generally the product does not irritate the skin.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: Carbon dioxide (CO2). Dry chemical. Foam.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions: Dilute with plenty of water.

Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Safety Data Sheet

According to OSHA HazCom Standard [2012]

Printing date 02/22/2024

Version 1

Reviewed on 02/22/2024

Trade name: NovaHol

Dispose contaminated material as waste according to section 13.

Reference to other sections

See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

Protective Action Criteria for Chemicals

PAC-1:		
67-63-0	Propan-2-ol	400 ppm
PAC-2:		
67-63-0	Propan-2-ol	2000* ppm
PAC-3:		
67-63-0	Propan-2-ol	12000** ppm

7 Handling and storage

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters No further information available

Components with limit values that require monitoring at the workplace:	
67-63-0 Propan-2-ol	
PEL	Long-term value: 980 mg/m ³ , 400 ppm
REL	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV	Short-term value: 400 ppm Long-term value: 200 ppm BEI, A4

Ingredients with biological limit values:

67-63-0 Propan-2-ol	
BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Avoid contact with the eyes.
 Avoid contact with the eyes and skin.

Safety Data Sheet
According to OSHA HazCom Standard [2012]

Printing date 02/22/2024

Version 1

Reviewed on 02/22/2024

Trade name: NovaHol**Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:

Protective gloves

The glove material must be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles

Goggles recommended during refilling.

Body protection: Protective work clothing**9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:****Form:** Liquid.**Color:** Clear**Odor:** Alcohol-like**Odor threshold:** Not determined.**pH-value at 20 °C (68 °F):** 7**Melting point/Melting range:** Not determined.**Boiling point/Boiling range:** Not determined.**Flash point:** 25.6 °C (78.1 °F)**Flammability (solid, gaseous):** Not determined.**Auto-ignition temperature:** Not determined.**Decomposition temperature:** Not determined.**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.**Flammability Limits:****Lower:** Not Determined.**Upper:** Not Determined.

Safety Data Sheet

According to OSHA HazCom Standard [2012]

Printing date 02/22/2024

Version 1

Reviewed on 02/22/2024

Trade name: NovaHol

Explosion limits:

Lower: Not determined.
Upper: Not determined.

Oxidizing properties Not determined.

Vapor pressure: Not determined.

Density: Not determined.

Relative density 0.8

Vapor density Not determined.

Evaporation rate at 20 °C (68 °F) >1

Solubility in / Miscibility with Water: Fully miscible.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic: Not determined.
Kinematic: Not determined.
VOC content: 10-24 %

Other information No further relevant information available.

10 Stability and reactivity

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided:
 No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No further relevant information available.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:		
67-63-0 Propan-2-ol		
Oral	LD50	5,840 mg/kg (Rat)
Dermal	LD50	12,800 mg/kg (rabbit)
Inhalative	LC50/4h	30 mg/L (Rat)

Primary irritant effect:
on the eye: Irritating effect.

Additional toxicological information:
 The product shows the following dangers according to internally approved calculation methods for preparations:
 Irritant

Carcinogenic categories

IARC (International Agency for Research on Cancer)		
67-63-0	Propan-2-ol	3

Safety Data Sheet

According to OSHA HazCom Standard [2012]

Printing date 02/22/2024

Version 1

Reviewed on 02/22/2024

Trade name: NovaHol

NTP (National Toxicology Program)
None of the ingredients are listed.
OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity:	
67-63-0 Propan-2-ol	
LC50/96h	9,640 mg/L (Fish)
NOEC	1,050 mg/L (Microorganisms)
LC50/24h	>10,000 mg/L (Daphnia)

Persistence and degradability No further relevant information available.

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation: Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.
 Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

UN-Number

DOT, ADR, IMDG, IATA Not applicable.

UN proper shipping name

DOT, ADR, IMDG, IATA Not applicable.

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA
 Class Not applicable.

Packing group

DOT, ADR, IMDG, IATA Not applicable.

Environmental hazards: Not applicable.

Safety Data Sheet

According to OSHA HazCom Standard [2012]

Printing date 02/22/2024

Version 1

Reviewed on 02/22/2024

Trade name: NovaHol

Special precautions for user Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

No further relevant information available.

Sara

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

67-63-0 | Propan-2-ol

Hazardous Air Pollutants

None of the ingredients are listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value)

67-63-0 | Propan-2-ol

A4

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS02 GHS07

Signal word Warning

Hazard-determining components of labeling:

Propan-2-ol

Hazard statements

Flammable liquid and vapor.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.

Safety Data Sheet
According to OSHA HazCom Standard [2012]

Printing date 02/22/2024

Version 1

Reviewed on 02/22/2024

Trade name: NovaHol

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a poison center/doctor if you feel unwell.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Contact:

Date of preparation / last revision 02/22/2024

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

BEI: Biological Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2

Flammable Liquids 3: Flammable liquids – Category 3

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3