

Printing date 07/06/2015 Reviewed on 05/26/2015

1 Identification

· Product identifier

· Trade name: GR-70

· Article number: GR-70

- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: Chemical Consultants Inc. 1850 Wild Turkey Circle Corona, CA 92880 USA

+1 (951) 735-5511 ncollins@ccidom.com

- · Information department: Product safety department
- · Emergency telephone number: INFOTRAC 1-800-535-5053

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Repr. 1B H360 May damage fertility or the unborn child.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Flam. Liq. 4 H227 Combustible liquid.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS05

- · Signal word Danger
- · Hazard-determining components of labeling:

Nonylphenol ethoxylate

N-methyl-2-pyrrolidone

· Hazard statements

Combustible liquid.

Causes skin irritation.

Causes serious eye damage.

May damage fertility or the unborn child.

(Contd. on page 2)

Printing date 07/06/2015 Reviewed on 05/26/2015

Trade name: GR-70

(Contd. of page 1)

· Precautionary statements

Keep away from flames and hot surfaces. - No smoking.

Wear protective gloves / eye protection / face protection.

Wear protective gloves.

Wear eye protection / face protection.

Wash thoroughly after handling.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

Continue rinsing.

Specific treatment (see on this label).

IF exposed or concerned: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Store in a well-ventilated place. Keep cool.

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

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1Fire = 2Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *1Fire = 2

REACTIVITY $\boxed{0}$ Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:			
106-65-0	dimethyl succinate	1-10%	
872-50-4	N-methyl-2-pyrrolidone	1-10%	
	Nonylphenol ethoxylate	1-5%	

4 First-aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

(Contd. on page 3)

Printing date 07/06/2015 Reviewed on 05/26/2015

Trade name: GR-70

(Contd. of page 2)

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

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

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · 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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant 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.

For large spills: Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

 $Ensure\ adequate\ ventilation.$

· 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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- 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.

HIC

Printing date 07/06/2015 Reviewed on 05/26/2015

Trade name: GR-70

(Contd. of page 3)

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

872-50-4 N-methyl-2-pyrrolidone

WEEL Long-term value: 10 ppm

Skin

· Ingredients with biological limit values:

872-50-4 N-methyl-2-pyrrolidone

BEI 100 mg/L

Medium: urine Time: end of shift

Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone

- · 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.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· 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 has to 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

Printing date 07/06/2015 Reviewed on 05/26/2015

Trade name: GR-70

(Contd. of page 4)

Physical and chemical proper	rties		
Information on basic physical and	chemical properties		
General Information			
Appearance:	Fluid		
Form: Color:	r tuta According to product specification		
Odor:	Characteristic		
Odour threshold:	Not determined.		
pH-value:	Not determined.		
Change in condition			
Melting point/Melting range:	Undetermined.		
Boiling point/Boiling range:	174 °C (345 °F)		
Flash point:	88 °C (190 °F)		
Flammability (solid, gaseous):	Not applicable.		
Ignition temperature:	270 °C (518 °F)		
Decomposition temperature:	Not determined.		
Auto igniting:	Product is not selfigniting.		
Danger of explosion:	Not determined.		
Explosion limits:			
Lower:	1.9 Vol %		
Upper:	Not determined.		
Vapor pressure:	Not determined.		
Density at 20 °C (68 °F):	1.1 g/cm³ (9.18 lbs/gal)		
Relative density	Not determined.		
Vapour density	Not determined.		
Evaporation rate	Not determined.		
Solubility in / Miscibility with			
Water:	Fully miscible.		
Partition coefficient (n-octanol/wat	ter): Not determined.		
Viscosity:			
Dynamic:	Not determined.		
Kinematic:	Not determined.		
Solvent content:			
VOC content:	702.0 g/l / 5.86 lb/gl		
Other information	No further relevant information available.		

10 Stability and reactivity

- · Reactivity
- · 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.

(Contd. on page 6)

Printing date 07/06/2015 Reviewed on 05/26/2015

Trade name: GR-70

(Contd. of page 5)

· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

872-50-4 N-methyl-2-pyrrolidone

Oral LD50 3914 mg/kg (rat) Dermal LD50 8000 mg/kg (rabbit)

- Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · 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)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

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:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations. (Contd. on page 7)

Printing date 07/06/2015 Reviewed on 05/26/2015

Trade name: GR-70

(Contd. of page 6)

- · Uncleaned packagings:
- · Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations

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

1 4 70		C
14 Trans	nort in	formation
17 II with	port in	Joinmanon

· UN-Number

· DOT, ADN, IMDG, IATA not regulated

· UN proper shipping name

· DOT, ADN, IMDG, IATA not regulated

· Transport hazard class(es)

· DOT, ADN, IMDG, IATA

· Class not regulated

· Packing group

· DOT, IMDG, IATA not regulated

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· UN ''Model Regulation'':

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

872-50-4 N-methyl-2-pyrrolidone

· TSCA (Toxic Substances Control Act):

All 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 is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

872-50-4 N-methyl-2-pyrrolidone

(Contd. on page 8)

Printing date 07/06/2015 Reviewed on 05/26/2015

Trade name: GR-70

(Contd. of page 7)

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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

None of the ingredients is listed.

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS05

GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

Nonylphenol ethoxylate

N-methyl-2-pyrrolidone

· Hazard statements

Combustible liquid.

Causes skin irritation.

Causes serious eye damage.

May damage fertility or the unborn child.

· Precautionary statements

Keep away from flames and hot surfaces. – No smoking.

Wear protective gloves / eye protection / face protection.

Wear protective gloves.

Wear eye protection / face protection.

Wash thoroughly after handling.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

Specific treatment (see on this label).

IF exposed or concerned: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Store in a well-ventilated place. Keep cool.

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

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

(Contd. on page 9)

Printing date 07/06/2015 Reviewed on 05/26/2015

Trade name: GR-70

(Contd. of page 8)

· Department issuing SDS: Environment protection department.

· Contact: Mr. Collins

· Date of preparation / last revision 07/06/2015 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

ACGIH: American Conference of Governmental Industrial Hygienists 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

Flam. Liq. 4: Flammable liquids, Hazard Category 4 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Repr. 1B: Reproductive toxicity, Hazard Category 1B

US