

Safety Data Sheet acc. to OSHA HCS

Printing date 09/10/2018

Reviewed on 09/10/2018

* 1 Identification

: Product identifier

: Trade name: Uniglow® FR1HF

: Application of the substance / the mixture

Dyestuff/Coloring agent

Dye for petroleum products

: Details of the supplier of the safety data sheet

: Manufacturer/Supplier:

United Color Manufacturing, Inc.
660 Newtown-Yardley Road
Newtown, PA 18940 USA

: For more information

Website: www.unitedcolor.com

U.S. (215) 860-2165 / 800-852-5942

: Telephone: U.S. (215) 860-2165 / 800-852-5942

: Emergency telephone number:

Within Continental U.S., CHEMTREC 1-800-424-9300

Outside U.S., CHEMTREC 001-703-527-3887

Within Continental U.S., CHEMTREC 1-800-424-9300; Outside U.S., CHEMTREC 1-703-527-3887

* 2 Hazard(s) identification

: Classification of the substance or mixture



Health hazard

May damage fertility or the unborn child.



Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

: Label elements

: GHS label elements

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

: Hazard pictograms



GHS07



GHS08

: Signal word Danger

: Hazard-determining components of labeling:

N-methyl-2-pyrrolidone

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: Hazard statements

- H332 Harmful if inhaled.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H360 May damage fertility or the unborn child.
- H335 May cause respiratory irritation.

: Precautionary statements

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 If on skin: Wash with plenty of water.
- 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.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P312 Call a poison center/doctor if you feel unwell.
- P321 Specific treatment (see on this label).
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

: Additional information:

25 % of the mixture consists of component(s) of unknown toxicity.

: Classification system:

: NFPA ratings (scale 0 - 4)



Health = 2
Fire = 1
Reactivity = 0

: HMIS-ratings (scale 0 - 4)



Health = *2
Fire = 1
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.

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: Dangerous components:		
872-50-4	N-methyl-2-pyrrolidone	50-70%

* 4 First-aid measures

: Description of first aid measures

: General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

: After inhalation:

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

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

: 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: Use fire fighting measures that suit the environment.

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

: Advice for firefighters

: Protective equipment: Mouth respiratory protective device.

* 6 Accidental release measures

: Personal precautions, protective equipment and emergency procedures Not required.

: Environmental precautions: No special measures required.

: 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.

: Protective Action Criteria for Chemicals

: PAC-1:		
872-50-4	N-methyl-2-pyrrolidone	30 ppm
112-80-1	oleic acid, pure	220 mg/m ³
: PAC-2:		
872-50-4	N-methyl-2-pyrrolidone	32 ppm

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112-80-1	oleic acid, pure	2,400 mg/m ³
: PAC-3:		
872-50-4	N-methyl-2-pyrrolidone	190 ppm
112-80-1	oleic acid, pure	15,000 mg/m ³

*** 7 Handling and storage**

- : Handling:**
- : Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- : Information about protection against explosions and fires:** No special measures required.
- : 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.

*** 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.
- 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.

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: 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

9 Physical and chemical properties

: Information on basic physical and chemical properties

: General Information

: Appearance:

: Form: Fluid
: Color: Red
: Odor: Characteristic
: Odor threshold: Not determined.

: pH-value: Not determined.

: Change in condition

: Melting point/Melting range: Undetermined.
: Boiling point/Boiling range: Undetermined.

: Flash point: >100 °C (>212 °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: Product does not present an explosion hazard.

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: Explosion limits:	
: Lower:	1.3 Vol %
: Upper:	9.5 Vol %
: Vapor pressure at 20 °C (68 °F): 0.3 hPa (0.2 mm Hg)	
: Density at 20 °C (68 °F): 1 g/cm ³ (8.345 lbs/gal)	
: Relative density	Not determined.
: Vapor density	Not determined.
: Evaporation rate	Not determined.
: Solubility in / Miscibility with	
: Water:	Not miscible or difficult to mix.
: Partition coefficient (n-octanol/water): Not determined.	
: Viscosity:	
: Dynamic:	Not determined.
: Kinematic at 40 °C (104 °F):	100 mm ² /s
: Solvent content:	
: Organic solvents:	55.0 %
: VOC content:	55.00 %
: Solids content:	25.0 %
: 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 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	4,150 mg/kg (rat) (OECD test guideline 401)
Dermal	LD50	>5,000 mg/kg (rabbit) (OECD test guideline 402)
Inhalative	LC50/4 h	5.1 mg/l (rat) (OECD test guideline 403)
509-34-2 3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one		
Oral	LD50	1,830 mg/kg (rat)

- : Primary irritant effect:**
- : on the skin:** Irritant to skin and mucous membranes.

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- : **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:
Harmful
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**

: **Toxicity**

: Aquatic toxicity:	
872-50-4 N-methyl-2-pyrrolidone	
EC50	1,107 mg/kg (Palaemonetes vulgaris)
	>500 mg/kg (Scenedesmus subspicatus)

- : **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:** Not known to be hazardous to water.
- : **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:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- : **Uncleaned packagings:**
 - : **Recommendation:** Disposal must be made according to official regulations.

*** 14 Transport information**

: UN-Number	Void
: DOT, ADN, IMDG, IATA	Void

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: UN proper shipping name : DOT, ADN, IMDG, IATA	Void
: Transport hazard class(es) : DOT, IMDG, IATA	
: Class : Label : ADN/R Class:	Void NOTREGULATED Void
: Packing group : DOT, IMDG, IATA	Void
: 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":	Void

***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
: Sara 311/312 Hazards Fire Hazard, Acute Health Hazard, Chronic Health Hazard
None of the ingredients is listed.
: CERCLA Hazardous Substances and Corresponding RQ's
None of the ingredients is listed.
: Clean Water Act
None of the ingredients is listed.
: Massachusetts Extraordinary Harardous Substances
None of the ingredients is listed.
: Sara Section 302 (Reportable Ingredients)
None of the ingredients is listed.

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: SARA Section 304 (Reportable Ingredients)		
None of the ingredients is listed.		
: TSCA (Toxic Substances Control Act):		
All ingredients are listed.		
: California Right to Know Law		
None of the ingredients is listed.		
: Massachusetts Right to Know Law		
872-50-4	N-methyl-2-pyrrolidone	Yes
: Minnesota Right to Know Law		
509-34-2	3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one	Yes
: New Jersey Right to Know Law		
872-50-4	N-methyl-2-pyrrolidone	
509-34-2	3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one	
: Pennsylvania Right to Know Law		
872-50-4	N-methyl-2-pyrrolidone	Yes
509-34-2	3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one	Yes
: Rhode Island Right to Know Law		
None of the ingredients is listed.		
: New Jersey Special Hazardous Substances		
None of the ingredients is listed.		
: Illinois Toxic Air Contaminants		
None of the ingredients is listed.		
: Pennsylvania Right to Know Special Hazardous Substances		
None of the ingredients is listed.		
: TSCA new (21st Century Act) (Substances not 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	
: Pennsylvania Right to Know Environmental Hazard		
None of the ingredients is listed.		
: Carcinogenic categories		
: EPA (Environmental Protection Agency)		
None of the ingredients is listed.		

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: 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.
: Clean air act section 111 SOCM I intermediate or final VOC's (40 CFR 60.489)
None of the ingredients is listed.

: GHS label elements

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

: Hazard pictograms



GHS07 GHS08

: Signal word Danger

: Hazard-determining components of labeling:

N-methyl-2-pyrrolidone

: Hazard statements

- H332 Harmful if inhaled.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H360 May damage fertility or the unborn child.
- H335 May cause respiratory irritation.

: Precautionary statements

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 If on skin: Wash with plenty of water.
- 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.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P312 Call a poison center/doctor if you feel unwell.
- P321 Specific treatment (see on this label).
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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United Color Manufacturing, Inc.

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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.

: **Department issuing SDS:** Regulatory Affairs department.

: **Contact:** Michael P. Hinton, PhD.

: **Date of preparation / last revision** 09/10/2018 / -

: **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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Repr. 1: Reproductive toxicity – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

: * **Data compared to the previous version altered.**