

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture	MR 920 Liquid Release
Registration number	-
Synonyms	None.
Issue date	08-October-2013
Version number	01
Revision date	-
Supersedes date	-

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Release agent.
Uses advised against	Use in accordance with supplier's recommendations.

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier	TR Industries a Division of Granitize Products Inc.
Address	11022 Vulcan Street South Gate, CA 90280-0893 United States
Telephone:	(562) 923-5438
Emergency	CHEMTREC: (800) 424-9300 CHEMTREC International: 00 1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification R10, Carc. Cat. 2;R45, Muta. Cat. 2;R46, Xi;R38, R67, N;R51/53

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards

Flammable gases	Category 1	H220 - Extremely flammable gas.
Flammable liquids	Category 3	H226 - Flammable liquid and vapour.

Health hazards

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Germ cell mutagenicity	Category 1B	H340 - May cause genetic defects.
Carcinogenicity	Category 1B	H350 - May cause cancer.
Specific target organ toxicity - single exposure	Category 3 narcotic effects	H336 - May cause drowsiness or dizziness.

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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Hazard summary

Physical hazards	Flammable.
Health hazards	May cause cancer. May cause heritable genetic damage. Irritating to skin. Vapours may cause drowsiness and dizziness. Occupational exposure to the substance or mixture may cause adverse health effects.
Environmental hazards	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Specific hazards	Vapors may form explosive vapor/air mixtures. Repeated exposure may cause skin dryness or cracking.
Main symptoms	Swallowing or vomiting of the liquid may result in aspiration into the lungs.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Naphtha (petroleum), hydrotreated heavy

Hazard pictograms**Signal word**

Danger

Hazard statements

H220 - Extremely flammable gas.
 H226 - Flammable liquid and vapour.
 H315 - Causes skin irritation.
 H336 - May cause drowsiness or dizziness.
 H340 - May cause genetic defects.
 H350 - May cause cancer.
 H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements**Prevention**

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.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P201 - Obtain special instructions before use.
 P202 - Do not handle until all safety precautions have been read and understood.
 P264 - Wash thoroughly after handling.
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
 P271 - Use only outdoors or in a well-ventilated area.
 P273 - Avoid release to the environment.

Response

P370 + P378 - In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
 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.
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P308 + P313 - IF exposed or concerned: Get medical advice/attention.
 P391 - Collect spillage.

Storage

P403 + P235 - Store in a well-ventilated place. Keep cool.
 P405 - Store locked up.
 P233 - Keep container tightly closed.

Disposal

P501 - Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Supplemental label information Not applicable.

2.3. Other hazards Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Naphtha (petroleum), hydrotreated heavy	> 90	64742-48-9 265-150-3	-	649-327-00-6	
Classification:		DSD: R10, Carc. Cat. 2;R45, Muta. Cat. 2;R46, Xn;R65, Xi;R38, R67, N;R51/53			
		CLP: Flam. Liq. 3;H226, Asp. Tox. 1;H304, Skin Irrit. 2;H315, STOT SE 3;H336, Muta. 1B;H340, Carc. 1B;H350, Aquatic Chronic 2;H411			
Proprietary resin	< 10	Proprietary	-	-	
Classification:		DSD: -			
		CLP: -			

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

Composition comments

The full text for all R- and H-phrases is displayed in section 16. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures

General information	Take off contaminated clothing and shoes immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.
4.1. Description of first aid measures	
Inhalation	Move into fresh air and keep at rest. If breathing is difficult, give oxygen. Get medical attention if discomfort develops or persists.
Skin contact	Immediately flush skin with plenty of water. Get medical attention if irritation develops and persists. Wash clothing separately before reuse.
Eye contact	Immediately flush with plenty of water for up to 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	Immediately rinse mouth and drink a cupful of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention immediately.
4.2. Most important symptoms and effects, both acute and delayed	Swallowing of the liquid, or vomiting as a result, may result in aspiration into the lungs.
4.3. Indication of any immediate medical attention and special treatment needed	Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards	The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.
5.1. Extinguishing media	
Suitable extinguishing media	Foam. Dry chemical powder.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from the substance or mixture	Vapours may form explosive mixtures with air. Containers may explode under fire conditions - use water spray to cool unopened containers.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Special fire fighting procedures	Containers should be cooled with water to prevent vapor pressure build up. Cool containers exposed to flames with water until well after the fire is out. Move containers from fire area if you can do so without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not smoke or use open fire or other sources of ignition. Avoid breathing mist or vapour. See Section 8 of the SDS for Personal Protective Equipment.
For emergency responders	Wear protective clothing as described in Section 8 of this safety data sheet. Keep unnecessary personnel away.
6.2. Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
6.3. Methods and material for containment and cleaning up	
	Remove sources of ignition. Prevent entry into waterways, sewers, basements or confined areas. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
	Large Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Following product recovery, flush area with water.
	Small Spills: Wipe up spilled material and place in a suitable container for disposal. Clean surface thoroughly to remove residual contamination.
	Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Dike the spilled material, where this is possible.
6.4. Reference to other sections	For waste disposal, see Section 13 of the SDS. For personal protection, see Section 8 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Wear personal protective equipment. Avoid breathing mist or vapour. Do not get in eyes, on skin, on clothing. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. All equipment used when handling the product must be grounded. When using, do not eat, drink or smoke. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Keep containers tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

7.3. Specific end use(s)

Proprietary resin solution.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Finland. Workplace Exposure Limits

Components	Type	Value
Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)	TWA	500 mg/m ³

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)	TWA	300 mg/m ³
		50 ppm

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value
Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)	STEL	900 mg/m ³
	TWA	300 mg/m ³

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)	STEL	600 mg/m ³
		100 ppm
	TWA	300 mg/m ³
		50 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no-effect level (DNEL)

Not available.

Predicted no effect concentrations (PNECs)

Not available.

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide easy access to water supply or an emergency shower. Explosion proof exhaust ventilation should be used.

Individual protection measures, such as personal protective equipment

General information

Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection

Wear approved safety glasses or goggles. Wear face shield if there is risk of splashes.

Skin protection

- Hand protection	Chemical resistant gloves are recommended.
- Other	Wear protective gloves.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister.
Thermal hazards	Not applicable.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Handle in accordance with good industrial hygiene and safety practices. Follow up on any medical surveillance requirements.
Environmental exposure controls	Contain spills and prevent releases and observe national regulations on emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Colourless liquid.
Physical state	Liquid.
Form	Liquid.
Colour	Colourless.
Odour	Characteristic of solvents.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	160 - 182,22 °C (320 - 360 °F)
Flash point	> 37,8 °C (> 100,0 °F)
Evaporation rate	0,2
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0,9
Flammability limit - upper (%)	6
Vapour pressure	Not available.
Vapour density	5 (Air = 1)
Relative density	0,876
Solubility(ies)	Negligible in water.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.
9.2. Other information	
VOC (Weight %)	> 90 %

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Stable at normal conditions.
10.3. Possibility of hazardous reactions	Will not occur.
10.4. Conditions to avoid	Heat, flames and sparks. Electrostatic Discharge.
10.5. Incompatible materials	Moisture. Strong oxidizers, strong acids, and strong bases.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Fumes. Smoke.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

- Ingestion** May cause discomfort if swallowed.
- Inhalation** Vapours may irritate throat and respiratory system and cause coughing.
- Skin contact** Irritating to skin.
- Eye contact** Direct contact with eyes may cause temporary irritation.

Symptoms Swallowing or vomiting of the liquid may result in aspiration into the lungs.

11.1. Information on toxicological effects

- Acute toxicity** May cause central nervous system effects.
- Skin corrosion/irritation** Irritating to skin.
- Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.
- Respiratory sensitisation** Not assigned.
- Skin sensitisation** Not a skin sensitiser.
- Germ cell mutagenicity** May cause genetic defects.
- Carcinogenicity** May cause cancer.
- Reproductive toxicity** Not assigned.
- Specific target organ toxicity - single exposure** Not assigned.
- Specific target organ toxicity - repeated exposure** Not assigned.
- Aspiration hazard** May be fatal if swallowed and enters airways. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
- Mixture versus substance information** Not available.
- Other information** Symptoms may be delayed. Components of the product may be absorbed into the body through the skin. Repeated exposure may cause skin dryness or cracking.

SECTION 12: Ecological information

- 12.1. Toxicity** Toxic to aquatic life with long lasting effects.
- 12.2. Persistence and degradability** Not available.
- 12.3. Bioaccumulative potential** Not available.
- Partition coefficient n-octanol/water (log Kow)** Not available.
- Bioconcentration factor (BCF)** Not available.
- 12.4. Mobility in soil** Expected to be highly mobile in soil.
- 12.5. Results of PBT and vPvB assessment** Not a PBT or vPvB substance or mixture.
- 12.6. Other adverse effects** No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Residual waste** Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
- Contaminated packaging** Offer rinsed packaging material to local recycling facilities.
- EU waste code** Waste codes should be assigned by the user based on the application for which the product was used. The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
- Disposal methods/information** Do not incinerate sealed containers. Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container.

SECTION 14: Transport information

ADR

14.1. UN number	UN1866
14.2. UN proper shipping name	Resin Solution, flammable
14.3. Transport hazard class(es)	3
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	Yes
Tunnel restriction code	Not available.
Labels required	3
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number	UN1866
14.2. UN proper shipping name	Resin Solution, flammable
14.3. Transport hazard class(es)	3
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	Yes
Labels required	3
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number	UN1866
14.2. UN proper shipping name	Resin Solution, flammable
14.3. Transport hazard class(es)	3
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	Yes
Labels required	3
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number	UN1866
14.2. UN proper shipping name	Resin Solution, flammable
14.3. Transport hazard class(es)	3
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	Yes
Labels required	3
ERG code	3L
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

14.1. UN number	UN1866
14.2. UN proper shipping name	Resin Solution, flammable
14.3. Transport hazard class(es)	3
Subsidiary class(es)	-
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	Yes
Labels required	3
EmS	F-E, S-E*
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU regulations

- Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I**
Not listed.
- Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II**
Not listed.
- Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**
Not listed.
- Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**
Not listed.
- Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**
Not listed.
- Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**
Not listed.
- Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**
Not listed.
- Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**
Not listed.
- Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA**
Not listed.

Authorisations

- Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended**
Not listed.

Restrictions on use

- Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**
Not listed.
- Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**
Not regulated.
- Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding**
Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)

Other EU regulations

- Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**
Not regulated.
- Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**
Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)
- Directive 94/33/EC on the protection of young people at work**
Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. 96/82/EC (Seveso II) Directive; Part 2 (Classified Substances) - Flammable

National regulations

Young people under 18 years old are not allow to work with this product according to the EU Directive 94/33/EC on the protection of young people at work. Pregnant women should not work with the product, if there is the least risk of exposure. Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

Not available.

SECTION 16: Other information

List of abbreviations

DNEL: Derived No-Effect Level.
PNEC: Predicted No-Effect Concentration.
CLP: Regulation No. 1272/2008.
DSD: Directive 67/548/EEC.

References

IUCLID
HSDB
CONCAWE Hazard classification and labelling of petroleum substances in the European Economic Area - 2010

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R10 Flammable.
R38 Irritating to skin.
R45 May cause cancer.
R46 May cause heritable genetic damage.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H340 May cause genetic defects.
H350 May cause cancer.
H411 Toxic to aquatic life with long lasting effects.

Training information

Follow training instructions when handling this material.