Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH)

Initial preparation date: 11.04.2016

Revision date: 07.17.2019

Rub-O Matic

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

1.1 Product identifier

Product Name: Rub-O Matic
Product code: 704, 704G, 704-5G, 704-55G
Additional information: Rev. 10

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

Relevant identified uses: Not determined or not applicable.
Uses advised against: Not determined or not applicable.
Reasons why uses advised against: Not determined or not applicable.

1.3 Details of the manufacturer/supplier of the safety data sheet

Manufacturer:	**Supplier:**
North America	**European Union**
Tech International	Tech International Europe
200 East Coshocton Street	Koeybleuken 16
Johnstown, OH 43031	2300 Turnhout, Belgium
1-740-967-9015	00 32 1442 3103
www.tech-international.com	info@techeurope.co.uk

1.4 Emergency telephone number:

European Union
CHEMTREC
Brussels +(32) - 28083237

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 (CLP):

Flammable liquids, category 2
Aspiration hazard, category 1
Skin irritation, category 2
Specific target organ toxicity - single exposure, category 3, central nervous system
Chronic aquatic hazard, category 2

Hazard-determining components of labeling:

Heptane, branched, cyclic and linear
Heptane

2.2 Label elements

Hazard pictograms:

Signal word: Danger
Hazard statements:

H225 Highly flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash skin thoroughly after handling.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P302+P352 IF ON SKIN: Wash with plenty of water/soap.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.
P331 Do NOT induce vomiting.
P332+P313 If skin irritation occurs: Get medical advice/attention
P312 Call a POISON CENTER/doctor/physician if you feel unwell.
P321 Specific treatment (see supplemental first aid instructions on this label).
P370+P378 In case of fire: Use agents recommended in Section 5 to extinguish.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage
P403+P235 Store in a well ventilated place. Keep cool.
P405 Store locked up.
P403+P233 Store in a well ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards: None known

SECTION 3: Composition/information on ingredients

3.1 Substance: Not applicable.

3.2 Mixture:

Identification	Name	Classification according to Regulation (EC) No. 1272/2008 (CLP)	Weight %
CAS number: 426260-76-6	Heptane, branched, cyclic and linear	Asp. Tox. 1; H304 Aquatic Chronic 2; H411 Flam. Liq. 2; H225 Stot SE 3; H336 Skin Irrit. 2 ; H315	>95

CAS number: 142-82-5 EC number: 205-563-8	Heptane	Asp. Tox. 1; H304 Skin Irrit. 2 ; H315 Stot SE 3; H336 Flam. Liq. 2; H225 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	<5

Additional information: None
Full Text of H and EUH statements: See section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes:
Not determined or not available.

Following inhalation:
Loosen clothing as necessary and position individual in a comfortable position
Maintain an unobstructed airway
Get medical advice/attention if you feel unwell

Following skin contact:
Take off all contaminated clothing
Gently blot or brush away excess product
Wash with plenty of lukewarm, gently flowing water
Get medical advice if skin irritation occurs or you feel unwell

Following eye contact:
Rinse/flush exposed eye(s) gently using water for 15-20 minutes
If symptoms develop or persist, seek medical attention

Following ingestion:
Rinse mouth thoroughly
Seek medical attention if irritation, discomfort, or vomiting persists

4.2 Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:
Not determined or not available.

Delayed symptoms and effects:
Not determined or not available.

4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment:
Not determined or not available.

Notes for the doctor:
Not determined or not available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:
Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing media:
Do not use a water stream as an extinguisher.

5.2 Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.
Vapors can flow to distant ignition sources and flashback.
Liquid is volatile and may generate an explosive atmosphere.

5.3 Advice for firefighters

Personal protection equipment:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

Special precautions:

Shut off sources of ignition.
Carbon monoxide and carbon dioxide may form upon combustion.
Heating causes a rise in pressure, risk of bursting and combustion.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.
Ensure air handling systems are operational.
Wear protective eye wear, gloves and clothing.
Beware of vapors accumulating to form explosive concentrations.
Vapors can accumulate in low areas.

6.2 Environmental precautions:

Should not be released into the environment.
Prevent from reaching drains, sewer or waterway.

6.3 Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing.
Use spark-proof tools and explosion-proof equipment.
Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders).
Dispose of contents / container in accordance with local regulations.

6.4 Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Use only with adequate ventilation.
Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.
Take precautionary measures against electrostatic discharges.
Use only non-sparking tools.

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.
Protect from freezing and physical damage.
Store in a cool, well-ventilated area.
Store away from all ignition sources (open flames, hot surfaces, direct sunlight, spark sources).

7.3 Specific end use(s):

Not determined or not applicable.

SECTION 8: Exposure controls/personal protection



8.1 Control parameters

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Czech Republic	Heptane, branched, cyclic and linear	426260-76-6	8-hour TWA: 1000 mg/m³
	Heptane, branched, cyclic and linear	426260-76-6	Ceiling limit: 2000 mg/m³
	Heptane	142-82-5	8-hour TWA: 1000 mg/m³
	Heptane	142-82-5	Ceiling limit (NPK-P): 2000 mg/m³
Bulgaria	Heptane	142-82-5	TWA: 1600 mg/m³
Croatia	Heptane	142-82-5	Maximum (8 hr) allowable concentration: 500 ppm (2085 mg/m³)
Estonia	Heptane	142-82-5	8-hour TWA: 500 ppm (2085 mg/m³)
Hungary	Heptane	142-82-5	8-hour TWA (ÁK Value): 2000 mg/m³
	Heptane	142-82-5	60-minute STEL (CK value): 8000 mg/m³
Latvia	Heptane	142-82-5	8-hour TWA: 350 mg/m³ (85 ppm)
	Heptane	142-82-5	15-minute STEL: 2085 mg/m³ (500 ppm)
Lithuania	Heptane	142-82-5	8-hour TWA: 2085 mg/m³ (500 ppm)
	Heptane	142-82-5	15-minute STEL: 3128 mg/m³ (750 ppm)
Malta	Heptane	142-82-5	TWA: 500 ppm (2085 mg/m³)
Poland	Heptane	142-82-5	8-hour TWA (NDS): 1200 mg/m³
	Heptane	142-82-5	15-minute STEL (NDSCh): 2000 mg/m³
Romania	Heptane	142-82-5	8-hour TWA: 2085 mg/m³ (500 ppm)
Slovakia	Heptane	142-82-5	8-hour TWA (NPEL): 500 ppm (2085 mg/m³)
Slovenia	Heptane	142-82-5	8-hour TWA: 2085 mg/m³ (500 ppm)
European Union	Heptane	142-82-5	IOEL threshold limit: 2085 mg/m³ (500 ppm)
	Heptane	142-82-5	SCOEL 8-hour TWA: 500 ppm (2085 mg/m³)

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Belgium	Heptane	142-82-5	8-hour TWA: 400 ppm (1664 mg/m³)
	Heptane	142-82-5	15-minute STEL: 500 ppm (2085 mg/m³)
Denmark	Heptane	142-82-5	TWA: 200 ppm (820 mg/m³)
Finland	Heptane	142-82-5	8-hour limit: 300 ppm (1200 mg/m³)
	Heptane	142-82-5	15-minute limit: 500 ppm (2100 mg/m³)
France	Heptane	142-82-5	Time weighted average (VME): 400 ppm (1668 mg/m³)
	Heptane	142-82-5	Short term exposure limit: 500 ppm (2085 mg/m³)
Germany	Heptane	142-82-5	AGW limit value: 500 ppm (2100 mg/m³)
	Heptane	142-82-5	AGW Short term (15 min) exposure limit: 500 ppm (2100 mg/m³)
Greece	Heptane	142-82-5	8-hour TWA:: 500 ppm (2000 mg/m³)
	Heptane	142-82-5	15-minute STEL: 500 ppm (2000 mg/m³)
Ireland	Heptane	142-82-5	8-hour OEL (TWA): 500 ppm (2085 mg/m³)
Italy	Heptane	142-82-5	8-hour TWA: 500 ppm (2085 mg/m³)
Netherlands	Heptane	142-82-5	Binding 8-hour TWA: 1200 mg/m³
	Heptane	142-82-5	Binding STEL (15 min): 1600 mg/m³
Portugal	Heptane	142-82-5	Decree-Law No. 24/2012 8-hour TWA: 500 ppm (2085 mg/m³)
	Heptane	142-82-5	NP 1796-2007 8-hour exposure limit: 400 ppm
	Heptane	142-82-5	NP 1796-2007 Short-term exposure limit: 500 ppm
Spain	Heptane	142-82-5	8-hour daily exposure limit (VLA-ED): 500 ppm (2085 mg/m³)
Sweden	Heptane	142-82-5	Level Limit Value (NGV): 200 ppm (800 mg/m³)
	Heptane	142-82-5	Short Term Limit (KTV): 300 ppm (1200 mg/m³)
United Kingdom	Heptane	142-82-5	TWA: 500 ppm (2085 mg/m³)
Luxembourg	Heptane	142-82-5	TWA: 500 ppm (2085 mg/m³)
Austria	Heptane	142-82-5	TWA: 2000 mg/m³ (500 ppm)
	Heptane	142-82-5	STEL: 8000 mg/m³ (2000 ppm)

Biological limit values:

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

Derived No Effect Level (DNEL):

Not determined or not applicable.

Predicted No Effect Concentration (PNEC):

Not determined or not applicable.

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls
Biological monitoring may also be appropriate for some substances

8.2 Exposure controls

Appropriate engineering controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.
Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance in compliance with European Standard EN 374 and/or EN 420. For continuous contact, we recommend nitrile gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model. Always seek advice from glove suppliers.

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.
Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Use a European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Comply with the European Standard EN149.

General hygienic measures:

Avoid contact with skin, eyes and clothing.
Wash hands before breaks and at the end of work.
Wash contaminated clothing before reuse.

Environmental exposure controls:

Select controls based on a risk assessment of local conditions.
See section 6 for information on accidental release measures.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Clear liquid
Odor	Strong solvent
Odor threshold	Not determined or not available.

pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	190°F (88°C)
Flash point (closed cup)	15 °F (-9°C)
Evaporation rate	> 1 (Butyl Acetate = 1)
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	6.7% (V)
Lower flammability/explosive limit	1.2% (V)
Vapor pressure	119 mmHg at 20°C (68°F)
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	0.69 g/cm³ (6.22 lbs./gal) @ 20°C
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

9.2 Other information

VOC	691 g/L

SECTION 10: Stability and reactivity

10.1 Reactivity:
Does not react under normal conditions of use and storage.

10.2 Chemical stability:
Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions:
None under normal conditions of use and storage.

10.4 Conditions to avoid:
Excess heat, ignition source or flames.

10.5 Incompatible materials:
None known.

10.6 Hazardous decomposition products:
None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.

Substance data:

Name	Route	Result
Heptane	inhalation	LC50 Rat: > 29.29 mg/L (4 hr)
	oral	LD50 Rat: > 5000 mg/kg

Skin corrosion/irritation

Assessment:
Causes skin irritation

Product data:
No data available.

Substance data:

Name	Result
Heptane	Causes skin irritation.
Heptane, branched, cyclic and linear	Causes skin irritation.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:
No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:
No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:
No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment:
May cause drowsiness or dizziness

Product data:
No data available.

Substance data:

Name	Result
Heptane, branched, cyclic and linear	May cause drowsiness or dizziness.
Heptane	May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment:

May be fatal if swallowed and enters airways

Product data:

No data available.

Substance data:

Name	Result
Heptane, branched, cyclic and linear	May be fatal if swallowed and enters airways.
Heptane	May be fatal if swallowed and enters airways.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute (short-term) toxicity

Assessment:

Toxic to aquatic life

Product data: No data available.

Substance data:

Name	Result
Heptane	LC50 - Carassius auratus (goldfish) - 4 mg/l - 24.0 h
	EC50 - Daphnia magna - 82.5 mg/L - 96 h

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

12.2 Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Heptane	Readily biodegradable in water.

12.3 Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Heptane	Calculated BCF: 552 (Not expected to bioaccumulate).

12.4 Mobility in soil

Product data: No data available.

Substance data:

Name	Result
Heptane	Moderately Mobile (log Koc: 2.38)

12.5 Results of PBT and vPvB assessment

PBT assessment:

Heptane	This substance is not PBT.

vPvB assessment:

Heptane	This substance is not vPvB.

12.6 Other adverse effects: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Relevant information:

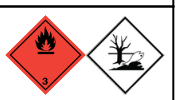
It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

UN number	UN1206
UN proper shipping name	Heptanes
UN transport hazard class(es)	3 
Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Heptane, branched, cyclic and linear)
Special precautions for user	None

International Carriage of Dangerous Goods by Inland Waterways (ADN)

UN number	UN1206
UN proper shipping name	Heptanes
UN transport hazard class(es)	3 

Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Heptane, branched, cyclic and linear)
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN1206
UN proper shipping name	Heptanes
UN transport hazard class(es)	3 
Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Heptane, branched, cyclic and linear)
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1206
UN proper shipping name	Heptanes
UN transport hazard class(es)	3 
Packing group	II
Environmental hazards	Marine Pollutant (Heptane and Heptane, branched, cyclic and linear)
Special precautions for user	None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	
Bulk Name	None
Ship type	None
Pollution category	None

SECTION 15: Regulatory information

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

European regulations

Inventory listing (EINECS):

426260-76-6	Heptane, branched, cyclic and linear	Not Listed
142-82-5	Heptane	Listed

REACH SVHC candidate list: None of the ingredients are listed.

REACH SVHC Authorizations: None of the ingredients are listed.

REACH Restriction: None of the ingredients are listed.

Water hazard class (WGK) (Product): Water hazard class 3: highly hazardous to water

Water hazard class (WGK) (Substance):

Ingredient Name	CAS	Class
Heptane, branched, cyclic and linear	426260-76-6	Non-hazardous to water
Heptane	142-82-5	Non-hazardous to water

Other regulations

Germany TA Luft: Not applicable.

Germany MAK: Heptane: 8-hour TWA: 500 ppm (2100 mg/m³)

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

Indication of changes:

March 26, 2019: Composition change, consequently changing the occupational exposure limits and resulting in a classification change

July 17, 2019: Section 14 Transportation information was updated

Abbreviations and Acronyms: None

Classification procedure:

Classification according to Regulation (EC) No. 1272/2008 (CLP)	Method Used
Flammable liquids, category 2	Calculation method
Aspiration hazard, category 1	Calculation method
Skin irritation, category 2	Calculation method
Specific target organ toxicity - single exposure, category 3, central nervous system	Calculation method
Chronic aquatic hazard, category 2	Calculation method

Summary of classification in section 3:

Asp. Tox. 1; H304	Aspiration hazard, category 1
Aquatic Chronic 2; H411	Chronic aquatic hazard, category 2
Flam. Liq. 2; H225	Flammable liquids, category 2
Stot SE 3; H336	Specific target organ toxicity - single exposure, category 3, central nervous system
Skin Irrit. 2 ; H315	Skin irritation, category 2
Aquatic Acute 1; H400	Acute aquatic hazard, category 1
Aquatic Chronic 1; H410	Chronic aquatic hazard, category 1

Summary of hazard statements in section 3:

H304	May be fatal if swallowed and enters airways
H411	Toxic to aquatic life with long lasting effects
H225	Highly flammable liquid and vapour
H336	May cause drowsiness or dizziness
H315	Causes skin irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Disclaimer:

This product has been classified in accordance with EC No. 1272/2008 (CLP) and EC No. 1907/2006 (REACH). The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet