SAFETY DATA SHEET

Gasoline, Certified Reference Materials

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

1.1. Product identifier

Trade name

Gasoline, Certified Reference Materials

Product no.

CRM-DEGA01, CRM-DIGA01

Other means of identification

Index No.: 649-378-00-4
EC No.: 289-220-8
CAS No.: 86290-81-5

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

Relevant identified uses of the substance or mixture

Laboratory use
Restricted to professional users.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

ARO Scientific Ltd
Unit 1 Bridgeway Business Park,
Ditton Road
WA8 0QE Widnes
England
+44 (0)151 424 2828

Contact person

Technical Help

E-mail

technical@aroscientific.com

Revision

06/10/2023

SDS Version

1.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).
See section 4 “First aid measures”.

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.1. Classification of the substance or mixture

Flam. Liq. 1; H224, Extremely flammable liquid and vapour.
Skin Irrit. 2; H315, Causes skin irritation.
Muta. 1B; H340, May cause genetic defects.
Carc. 1B; H350, May cause cancer.
Repr. 2; H361fd, Suspected of damaging fertility. Suspected of damaging the unborn child.
STOT SE 2; H371, May cause damage to organs.
STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)

Signal word
Danger

Hazard statement(s)
Extremely flammable liquid and vapour. (H224)
Causes skin irritation. (H315)
May cause genetic defects. (H340)
May cause cancer. (H350)
Suspected of damaging fertility. Suspected of damaging the unborn child. (H361fd)
May cause damage to organs. (H371)
May cause damage to organs through prolonged or repeated exposure. (H373)
Toxic to aquatic life with long lasting effects. (H411)

Precautionary statement(s)

General
-

Prevention
Obtain special instructions before use. (P201)
Wear eye protection/protective gloves/protective clothing. (P280)

Response
IF exposed or concerned: Get medical advice/attention. (P308+P313)
Get medical advice/attention if you feel unwell. (P314)

Storage
Store in a well-ventilated place. Keep cool. (P403+P235)

Disposal
Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances
Gasoline;Low boiling point naphtha - unspecified;[A complex combination of hydrocarbons consisting primarily of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons having carbon numbers predominantly greater than C3 and boiling in the range of 30°C to 260°C (86°F to 500°F).]

Additional labelling

2.3. Other hazards

Additional warnings
This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product/substance	Identifiers	% w/w	Classification	Note
Gasoline;Low boiling point naphtha - unspecified;[A complex combination of hydrocarbons consisting primarily of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons having carbon numbers predominantly greater than C3 and boiling in the range of 30°C to 260°C (86°F to 500°F).]	CAS No.: 86290-81-5 EC No.: 289-220-8 UK-REACH: Index No.: 649-378-00-4	95-100%	Flam. Liq. 1, H224 Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1B, H350 Repr. 2, H361fd STOT SE 2, H371 STOT RE 2, H373 Aquatic Chronic 2, H411	

3.2. Mixtures
Not applicable. This product is a substance.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information
-

SECTION 4: First aid measures

4.1. Description of first aid measures
General information
In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.
Inhalation
Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.
Skin contact
Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.
Eye contact
If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.
Ingestion
In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.
Burns
Rinse with water until pain stops then continue to rinse for 30 minutes.
4.2. Most important symptoms and effects, both acute and delayed
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.
4.3. Indication of any immediate medical attention and special treatment needed
IF exposed or concerned:
Get immediate medical advice/attention.
Information to medics
Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.
5.2. Special hazards arising from the substance or mixture
Extremely flammable liquid and vapour.
In use may form flammable/explosive vapour-air mixture.
Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
5.3. Advice for firefighters
Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.
Hazchem Code: 3YE

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure

sufficient ventilation.
Avoid direct contact with spilled substances.
Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ground and bond container and receiving equipment.
Use explosion-proof [electrical/lighting/ventilating] equipment.
Use non-sparking tools.
Take action to prevent static discharges.
It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.
Avoid direct contact with the product.
Avoid contact during pregnancy and while nursing.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Take action to prevent static discharges.
Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material

Keep only in original packaging.

Storage temperature

Refrigerator, 2 to 8°C

Incompatible materials

Strong oxidizing agents
Strong acids

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

Gasoline;Low boiling point naphtha - unspecified;[A complex combination of hydrocarbons consisting primarily of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons having carbon numbers predominantly greater than C3 and boiling in the range of 30°C to 260°C (86°F to 500°F).]

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	178.57 mg/m³
Long term – Local effects - Workers	Inhalation	837.5 mg/m³
Long term – Systemic effects - General population	Inhalation	410 µg/m³
Long term – Systemic effects - Workers	Inhalation	1.9 mg/m³
Short term – Local effects - General population	Inhalation	640 mg/m³

Short term – Local effects - Workers	Inhalation	1066.67 mg/m³
Short term – Systemic effects - General population	Inhalation	1152 mg/m³
Short term – Systemic effects - Workers	Inhalation	1286.4 mg/m³

PNEC

No data available.

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Do not recirculate outlet air that contain the substances.
Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Work situation	Type	Class	Colour	Standards
In case of inadequate ventilation	No special when used as intended.			

Skin protection

Recommended	Type/Category	Standards
Wear appropriate protection clothing, e.g. coveralls in polypropylene or working clothes in cotton or polyester.	-	-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0,38	> 480	EN374-2, EN374-3, EN388

Eye protection

Type	Standards
Safety glasses with side shields.	EN166

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Colourless

Odour / Odour threshold
Characteristic
pH
Testing not relevant or not possible due to the nature of the product.
Density (g/cm³)
Testing not relevant or not possible due to the nature of the product.
Kinematic viscosity
Testing not relevant or not possible due to the nature of the product.
Particle characteristics
Does not apply to liquids.

Phase changes
Melting point/Freezing point (°C)
Testing not relevant or not possible due to the nature of the product.
Softening point/range (waxes and pastes) (°C)
Does not apply to liquids.
Boiling point (°C)
38
Vapour pressure
Testing not relevant or not possible due to the nature of the product.
Relative vapour density
Testing not relevant or not possible due to the nature of the product.
Decomposition temperature (°C)
Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards
Flash point (°C)
-40
Flammability (°C)
The material is ignitable.
Auto-ignition temperature (°C)
Testing not relevant or not possible due to the nature of the product.
Lower and upper explosion limit (% v/v)
Testing not relevant or not possible due to the nature of the product.

Solubility
Solubility in water
Testing not relevant or not possible due to the nature of the product.
n-octanol/water coefficient
Testing not relevant or not possible due to the nature of the product.
Solubility in fat (g/L)
Testing not relevant or not possible due to the nature of the product.

9.2. Other information
Oxidizing properties
Testing not relevant or not possible due to the nature of the product.
Other physical and chemical parameters
No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available.
10.2. Chemical stability
The product is stable under the conditions, noted in section 7 “Handling and storage”.
10.3. Possibility of hazardous reactions
None known.
10.4. Conditions to avoid
Mechanical influences (e.g. Shock, pressure, impact, friction). Fire, sparks or other ignition sources.
10.5. Incompatible materials
Strong oxidizing agents
Strong acids

10.6. Hazardous decomposition products
The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law
Acute toxicity
Based on available data, the classification criteria are not met.
Skin corrosion/irritation
Causes skin irritation.
Serious eye damage/irritation
Based on available data, the classification criteria are not met.
Respiratory sensitisation
Based on available data, the classification criteria are not met.
Skin sensitisation
Based on available data, the classification criteria are not met.
Germ cell mutagenicity
May cause genetic defects.
Carcinogenicity
May cause cancer.
Reproductive toxicity
Suspected of damaging fertility. Suspected of damaging the unborn child.
STOT-single exposure
May cause damage to organs.
STOT-repeated exposure
May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard
Based on available data, the classification criteria are not met.

11.2. Information on other hazards
Long term effects
Carcinogenic effects: This product contains substances considered or proven to be carcinogenic. The carcinogenic effects may be triggered subsequent to exposure through inhalation, skin contact or ingestion.
Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders. This product contains reprotoxic substances, which may harm the reproductive capacity. Adverse effects include: sterility, effects on the sexual function, lowered effective fertility and dysfunctional menstrual cycle.
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.
Endocrine disrupting properties
This mixture/product does not contain any substances considered to have hormone-disrupting properties in relation to health.
Other information
None known.

SECTION 12: Ecological information

12.1. Toxicity
Toxic to aquatic life with long lasting effects.
12.2. Persistence and degradability
No data available.
12.3. Bioaccumulative potential
No data available.
12.4. Mobility in soil
No data available.
12.5. Results of PBT and vPvB assessment
This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste. (*)
HP 3 - Flammable
HP 4 - Irritant (skin irritation and eye damage)
HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 7 – Carcinogenic
HP 10 – Toxic for reproduction
HP 11 – Mutagenic
HP 14 – Ecotoxic
Dispose of contents/container to an approved waste disposal plant.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

13 07 02* Petrol

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN1203	GASOLINE	Transport hazard class: 3 Label: 3 Classification code: F1 	II	Yes	Limited quantities: 1 L Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN1203	GASOLINE	Transport hazard class: 3 Label: 3 Classification code: F1 	II	Yes	Limited quantities: 1 L EmS: F-E S-E See below for additional information.
IATA	UN1203	GASOLINE	Transport hazard class: 3 Label: 3 Classification code: F1 	II	Yes	See below for additional information.

14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
					

* Packing group
** Environmental hazards

Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.
IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.
IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.
This product is within scope of the regulations of transport of dangerous goods.
Hazchem Code: 3YE

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.
People under the age of 18 shall not be exposed to this product.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

P5a - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 10 tonnes / (upper-tier): 50 tonnes
E2 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 200 tonnes / (upper-tier): 500 tonnes

Additional information

Not applicable.

Sources

The Management of Health and Safety at Work Regulations 1999.
The Health and Safety at Work etc. Act 1974 Regulations 2013.
Control of Major Accident Hazards (COMAH) Regulations 2015.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H224, Extremely flammable liquid and vapour.
H315, Causes skin irritation.
H340, May cause genetic defects.
H350, May cause cancer.
H361fd, Suspected of damaging fertility. Suspected of damaging the unborn child.
H371, May cause damage to organs.

H373, May cause damage to organs through prolonged or repeated exposure.
H411, Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the mixture in regard to physical hazards has been based on experimental data.

The safety data sheet is validated by

Technical Help

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: GB-en