octane booster/ fuel system cleaner

Dimethyl carbonate 30%; Acetylacetone 30%; Alcohols, C12-14 15%; Dodecanol 15%; 2-ethoxy-2-methylpropane 10%

Danger



Highly flammable liquid and vapour.

Harmful if swallowed.

May be harmful in contact with skin.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

[Prevention]:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed. Ground and bond container and receiving equipment.

Use explosion-proof [electrical/ventilating/lighting] equipment. Use non-sparking tools.

Take action to prevent static discharges.

Wear protective gloves/ protective clothing /eye protection /face protection/hearing protection.

Wash hands thoroughly after handling. Do not touch eyes.

Do not eat, drink or smoke when using this product.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Use only outdoors or with adequate ventilation.

Avoid release to the environment.

[Response]:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower]. Wash contaminated clothing before reuse.

In case of fire: Use Water spray, Dry chemical, Carbon dioxide or Suitable foam to extinguish.

IF SWALLOWED: Get medical help. Rinse mouth.

If ON SKIN: Get medical help.

If INHALED: Remove person to fresh air and keep comfortable for breathing.

If skin irritation occurs: Get medical help.

If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help. Collect spillage.

[Storage]:

Store in a well-ventilated place. Keep cool.

[Disposal]:

Dispose of contents/container in accordance with local, regional mational, and/or international regulations.

Please refer to SDS for detail information

Supplier: Hubei Qingding Energy Technology Co.

Address: Room 09, Office 9/F, Building B, , No. 977 Heping Avenue, Qingshan

IN CASE OF EMERGENCY: 86–18627111674





NO.262580800260

SAFETYDATASHEET

Product Name: octane booster/ fuel system cleaner

Effective Date: 2025-09-16

Compiler: Xia Barguei

Checker: Lru Wanqing

Approver: Dongxuesheng

Shanghai Institute of Chemical Industry Testing Co., Ltd.



Hubei Qingding Energy Technology Co.

SAFETY DATA SHEET

octane booster/ fuel system cleaner

SECTION1 PRODUCT AND COMPANY IDENTIFICATION

Product name:

octane booster/ fuel system cleaner

Company:

Hubei Qingding Energy Technology Co.

Address:

Room 09, Office 9/F, Building B, , No. 977 Heping Avenue, Qingshan

District, Wuhan City, Hubei Province, 430080, P.R. China

E-mail:

qingdingnengyuan@gmail.com

Fax:

86-18627111674

Emergency Phone:

86-18627111674

Recommend use of the chemical

For automotive aftermarket; Inedible.

and restrictions on use:

SDS Number:

262580800260

Effective Date:

2025-09-16

SECTION2 HAZARDS IDENTIFICATION

GHS Classification:

Physical Hazards:

Flammable liquids Category 2

Health Hazards:

Acute toxicity - Oral Category 4 Acute toxicity - Dermal Category 5 Acute toxicity - Inhalation Category 4 Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2

Environmental Hazards:

Hazardous to the aquatic environment-Acute hazard Category 1 Hazardous to the aquatic environment-Chronic hazard Category 2

The hazards not mentioned are not applicable or no data available.

Label Elements:

Pictogram:



Signal Word:

Danger

Hazard Statements:

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H313 May be harmful in contact with skin.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Prevention 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/hearing protection.

P264+P265 Wash hands thoroughly after handling. Do not touch eyes.

P270 Do not eat, drink or smoke when using this product.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or with adequate ventilation.

P273 Avoid release to the environment.

Response Precautionary Statements:

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: Use Water spray, Dry chemical, Carbon dioxide or Suitable foam to extinguish.

P301+P317 IF SWALLOWED: Get medical help.

P330 Rinse mouth.

P302+P317 If ON SKIN: Get medical help.

P304+P340 If INHALED: Remove person to fresh air and keep comfortable for breathing.

P332+P317 If skin irritation occurs: Get medical help.

P305+P351+P338 If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P317 If eye irritation persists: Get medical help. P391 Collect spillage.

Storage Precautionary Statements:

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

Disposal Precautionary Statements:

P501 Dispose of contents/container in accordance with local, regional, national, and/or international regulations.

Other Hazards:

No data available.

SECTION3 INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Product name: octane booster/ fuel system cleaner

Ingredient	Concentration(%)	CAS NO.	EC NO.
Dimethyl carbonate	30	616-38-6	210-478-4
Acetylacetone	30	123-54-6	204-634-0
Alcohols, C12-14	15	80206-82-2	279-420-3
Dodecanol	15	112-53-8	203-982-0
2-ethoxy-2-methylpropane	10	637-92-3	211-309-7

SECTION4 FIRST-AID MEASURES

Skin Exposure:

In case of skin contact, flush with copious amounts of water. If irritation persists, Call a physician.

Eye Exposure:

In case of contacting with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. If irritation persists, Call a physician.

Inhalation Exposure:

If inhaled, remove to fresh air immediately. If the person feels unwell, Call a physician.

Oral Exposure:

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Most Important Symptoms/Effects, Acute and Delayed:

No data available.

Indication of Immediate Medical Attention and Special Treatment Needed, if Necessary:

No data available.

SECTIONS FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Water spray, Dry chemical, Carbon dioxide or Suitable foam.

Specific Hazards Arising from the Chemical:

Highly flammable liquid and vapour. Environmentally hazardous substances. Take care as it may decompose upon combustion or in high temperatures to generate Carbon oxides, etc.

Special Protective Action for Fire-fighters:

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Fire-extinguishing work is done from the windward. Uninvolved persons should evacuate to a safe place. If the container suddenly makes an abnormal noise or has abnormal phenomena, it should be evacuated immediately.

SECTION6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment. Remove all sources of ignition. Avoid inhalation. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to noninvolved personnel should be controlled around the leakage area by roping off. All equipment used during work should be grounded. Keep spills dry.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Avoid entering drains. Avoid release to the environment. Collect spillage.

Methods and Materials for Containment and Cleaning up:

Mix with inert material (e.g. dry sand, vermiculite) and transfer to a dry, clean, lidded container for disposal. Using non-sparking tools. Avoid inhalation. Ventilate area and wash spill site after material pickup is complete.

SECTION7 HANDLING AND STORAGE

Precautions for Safe Handling:

Operators should be trained and strictly abide by operating procedures. Wear appropriate protective clothing and gloves (see Section 8). Avoid inhalation. Avoid contacting with eyes and skin. Handling is performed in a well ventilated place. Keep away from ignition sources, heat and flame. No smoking at working site. Take measures to prevent electrostatic discharge. Electrostatic charges may be generated during pumping. Ensure electrical continuity by bonding all equipment. Avoid contact with incompatible materials (see Section 10). Wash hands and face thoroughly after handling. Load and unload gently when handling. Prevent the package from breaking and getting damp so as to cause losses. Working place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep away from ignition sources, heat and flame. Should be stored separately from incompatible materials (see Section 10). Storage place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment. Prohibit the use of mechanical equipment and tools that are prone to sparks.

SECTIONS EXPOSURE CONTROL/PPE

Control Parameters:

GBZ 2.1-2019 Occupational Exposure Limits for Hazardous Agents in the Workplace - Part 1:

Not set up

ACGIH:

Acetylacetone TLV-TWA 25ppm(102mg/m³) Remarks :Skin

Appropriate Engineering Controls:

Mechanical exhaust required. Safety shower and eye bath.

Individual Protection Measures:

Eye/Face Protection:

Wear chemical safety glasses.

Skin Protection:

Hand Protection: Wear anti-static gloves.

Body Protection: Wear anti-static clothing.

Respiratory Protection:

Wear government approved respirator.

Thermal Hazards:

No data available.

Other Protect:

No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION9 PHYSICAL/CHEMICAL PROPERTIES

Appearance:

Sepia brown Liquid

Odor:

Weak odor

pH Value:

No data available

Solubility:

immiscible in water

Melting Point/Freezing

Point:

No data available

Boiling Point, Initial

Boiling Point and Boiling

>50°C

Range:

Flash Point (Closed Cup):

≤10.0°C

Density/Relative

Density:

No data available

Kinematic Viscosity:

No data available

Upper/Lower Flammability

or Explosive Limits:

No data available

Vapour Pressure:

No data available

Relative Vapor Density:

No data available

Partition Coefficient

N-Octanol/Water (Log

No data available

Value):

Autoingnition

Temperature:

No data available

Decomposition

Temperature:

No data available

Particle

Characteristics:

Not applicable

Flammability (Solid,

Gas):

Not applicable

SECTION10 STABILITY AND REACTIVITY

Reactivity:

No data available.

Chemical Stability:

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions:

No data available.

Conditions to Avoid:

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible Materials:

Combustible materials, etc.

Hazardous Decomposition Products:

Carbon oxides, etc.

SECTION11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Dimethyl carbonate:

 LD_{50} oral - rat - male and female - > 5000 mg/kg (OECD Test Guideline 401)

 LC_{50} Inhalation - Rat - male and female - 4 h - > 5.36 mg/l - vapour (OECD Test Guideline 403)

LD₅₀ transdermal - rabbit - male and female - > 2000 mg/kg Remarks: (ECHA)

Acetylacetone:

LD₅₀ Oral - Rat - female - 570 mg/kg Remarks: (ECHA)

LC₅₀ Inhalation - Rat - male and female - 4 h - 5.0305 mg/l - vapor (OECD Test Guideline 403)

LD₅₀ Dermal - Rabbit - female - 790 mg/kg Remarks: (ECHA)

Skin Corrosion/Irritation:

Causes skin irritation.

Serious Eye Damage/Irritation:

Causes serious eye irritation.

Respiratory Sensitization:

No data available.

Skin Sensitization:

No data available.

Germ Cell Mutagenicity:

No data available.

Carcinogenicity:

No data available.

Reproductive Toxicity:

No data available.

Specific Target Organ Toxicity -Single Exposure:

No data available.

Specific Target Organ Toxicity -Repeated Exposure:

No data available.

Aspiration Hazard:

No data available.

SECTION12 ECOLOGICAL INFORMATION

Toxicity:

Acetylacetone:

Toxicity to fish flow-through test LC_{50} - Pimephales promelas (fathead minnow) - 104 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates static test EC_{50} - Daphnia magna (Water flea) - 25.9 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae static test ErC_{50} - Pseudokirchneriella subcapitata (green algae) - 83.22 mg/l - 72 h (OECD Test Guideline 201)

Toxicity to fish (Chronic toxicity) flow-through test NOEC - Pimephales promelas (fathead minnow) - 10 mg/l - 34 d (OECD Test Guideline 210)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) semi-static test NOEC - Daphnia magna (Water flea) - 18 mg/l - 21 d (OECD Test Guideline 211)

Dodecanol:

Toxicity to fish flow-through test LC_{50} - Pimephales promelas (fathead minnow) - 1.01 mg/l - 96 h Remarks: (ECOTOX Database)

Toxicity to algae static test ErC_{50} - Desmodesmus subspicatus (green algae) - 0.33 mg/l - 72 h Remarks: (ECOTOX Database) (1-Dodecanol)

Persistence and Degradability:

Acetylacetone:

Biodegradability aerobic - Exposure time 28 d Result: 83 - 100 % - Readily biodegradable. (OECD Test Guideline 301C)

Dodecanol:

Biodegradability Result: 58 - 79 % - Readily biodegradable. Remarks: (IUCLID)

Bioaccumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION13 DISPOSAL CONSIDERATION

Disposal Methods:

Recycle as far as possible. If unable to recycle, it is recommended to use incineration method for disposal under supervision. This product should not be disposed of by discharge into sewers. Return empty containers to the manufacturer or dispose of them in accordance with national and local regulations. Follow the relevant provisions of national and local regulations before disposal. It is recommended to be disposed of by a qualified chemical waste treatment department.

SECTION14 TRANSPORT INFORMATION

RID/ADR (2023 Edition): Proper Shipping Name: Flammable liquid, n.o.s. (Dimethyl

carbonate, Acetylacetone)

Hazard Class: 3 UN Number: UN1993 Packing Group: II

IATA DGR (66th Edition): Proper Shipping Name: Flammable liquid, n.o.s. (Dimethyl

carbonate, Acetylacetone)

Hazard Class: 3 UN Number: UN1993 Packing Group: II

IMO IMDG CODE (2022 Edition): Proper Shipping Name: Flammable liquid, n.o.s. (Dimethyl

carbonate, Acetylacetone)

Hazard Class: 3 UN Number: UN1993 Packing Group: II EmS-No:F-E, S-E

Marine pollutant: Yes

Environmental Hazards: Yes

Special Precautions for User: No data available.

Transport in bulk according to IMO Not applicable

SECTION15 REGULATORY INFORMATION

Montreal Protocol:

Not listed.

instruments:

Stockholm Convention:

Not listed.

Rotterdam Convention:

Not listed.

EINECS/ELINCS:

All ingredients in the product are listed.

TSCA:

2-ethoxy-2-methylpropane, Dimethyl carbonate, Acetylacetone, Dodecanol in the product are listed. IECSC:

Dimethyl carbonate, Acetylacetone, Dodecanol, Alcohols, C12-14 in the product are listed.

SECTION16 OTHER INFORMATION

Preparation Date:

2025-09-16

Preparation Department:

Shanghai Institute of Chemical Industry Testing Co., Ltd. Tel(Fax): +86-21-52815377/31765555

Revision:

0

Reference Standard:

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), 10th revised edition

Abbreviations and Acronyms:

CAS: Chemical Abstracts Service EC: European Commission ACGIH: American Conference of Governmental Industrial Hygienists RID: Regulations concerning the International Carriage of Dangerous Goods by Rail ADR: Agreement concerning the International Carriage of Dangerous Goods by Road IATA DGR: International Air Transport Association Dangerous Goods Regulations IMO IMDG CODE: International Maritime Organization International Maritime Dangerous Goods Code MARPOL: International Convention for the Prevention of Pollution from Ships IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances TSCA: Toxic Substances Control Act IECSC: Inventory of Existing Chemical Substances in China TLV-TWA: Threshold limit value—time weighted average Skin: The substance causes systemic effects through entire skin absorption LD50: Lethal dose, 50% LC50: Median lethal dose EC50: Effective concentration of substance that causes 50% of the maximum response ErC50: EC50 in terms of reduction of growth rate NOEC: No observed effect concentration OECD: Organization for Economic Cooperation and Development ECHA: European Chemicals Agency ECOTOX: Ecotoxicology Knowledgebase

Other Information:

This SDS is compiled based on the information such as ingredients provided by the applicant and our current knowledge. This SDS shall be used only as a guide. The users of this SDS must make independent judgments on the correctness and completeness and then decide its suitability according to the actual situation. The users should take the relevant legal responsibilities for the consequences of use.

END OF REPORT