According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

#### **SECTION 1. IDENTIFICATION**

Product name : BHC, Reformate Heartcut

Product code : X2355

Synonyms : BHC, Reformate Heartcut, C6 Heart Cut, High Benzene Py-

gas - C6 Heart Cut, Pygas Reformate

CAS-No. : 68955-35-1

### Manufacturer or supplier's details

Company : Shell Chemical LP

PO Box 576

**HOUSTON TX 77001** 

USA

SDS Request : 1-800-240-6737

Customer Service : 1-855-697-4355

Emergency telephone number

Chemtrec Domestic (24 hr) : 1-800-424-9300

Chemtrec International (24

: 1-703-527-3887

hr)

#### Recommended use of the chemical and restrictions on use

Restrictions on use : This product must not be used in applications other than those

listed in Section 1 without first seeking the advice of the sup-

plier.

# **SECTION 2. HAZARDS IDENTIFICATION**

# GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 2

Skin irritation : Category 2

Aspiration hazard : Category 1

Reproductive toxicity : Category 2

Germ cell mutagenicity : Category 1B

Carcinogenicity : Category 1B

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

Specific target organ toxicity

- single exposure (Inhalation)

Category 3 (Narcotic effects)

Long-term (chronic) aquatic

hazard

Category 2

#### **GHS** label elements

Hazard pictograms









Signal word : Danger

Hazard statements : PHYSICAL HAZARDS:

H225 Highly flammable liquid and vapour.

HEALTH HAZARDS: H315 Causes skin irritation.

H304 May be fatal if swallowed and enters airways. H361 Suspected of damaging fertility or the unborn child.

H340 May cause genetic defects.

H350 May cause cancer.

H336 May cause drowsiness or dizziness.

**ENVIRONMENTAL HAZARDS:** 

H411 Toxic to aquatic life with long lasting effects.

# Precautionary statements

# Prevention:

P201 Obtain special instructions before use.

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 equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

# Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately

all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep

at rest in a position comfortable for breathing.

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

P312 Call a POISON CENTER or doctor/ physician if you feel

unwell.

P332 + P313 If skin irritation occurs: Get medical advice/ atten-

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

tion.

P362 + P364 Take off contaminated clothing and wash it before

reuse.

P370 + P378 In case of fire: Use appropriate media to extin-

guish.

P331 Do NOT induce vomiting.

#### Storage:

P235 Keep cool.

P403 + P233 Store in a well-ventilated place. Keep container

tightly closed.

P405 Store locked up.

#### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

#### Other hazards which do not result in classification

Liquid evaporates quickly and can ignite leading to a flash fire, or an explosion in a confined space.

A component or components of this material may cause cancer.

This product contains benzene which may cause leukaemia (AML - acute myelogenous leukaemia).

This material is a static accumulator.

Even with proper grounding and bonding, this material can still accumulate an electrostatic charge.

If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable airvapour mixtures can occur.

May cause MDS (Myelodysplastic Syndrome).

The classification of this material is based on OSHA HCS 2012 criteria.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Substance

# **Hazardous components**

Chemical name	Synonyms	CAS-No.	Concentration (% w/w)
Naphtha (petroleum),	Naphtha (pe-	68955-35-1	100
catalytic reformed	troleum), cata-		
	lytic reformed		

#### **Further information**

#### Contains:

Chemical name	Identification number	Concentration (% w/w)
Benzene	71-43-2	>30 - <60
n-Hexane	110-54-3	>10 - <30
isopentane	78-78-4	>=10 - <=30
pentane	109-66-0	>=10 - <=30
butane	106-97-8	>=0 - <=10
isobutane	75-28-5	<=1

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

**SECTION 4. FIRST AID MEASURES** 

General advice : Not expected to be a health hazard when used under normal

conditions.

If inhaled : Remove to fresh air. If rapid recovery does not occur,

transport to nearest medical facility for additional treatment.

In case of skin contact : Remove contaminated clothing, Immediately flush skin with

large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical

facility for additional treatment.

In case of eye contact : Flush eye with copious quantities of water.

Remove contact lenses, if present and easy to do. Continue

rinsing.

If persistent irritation occurs, obtain medical attention.

If swallowed : If swallowed, do not induce vomiting: transport to nearest

medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

Most important symptoms and effects, both acute and delayed

The onset of respiratory symptoms may be delayed for several hours after exposure.

Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.

Skin irritation signs and symptoms may include a burning sensation, redness, or swelling.

Eye irritation signs and symptoms may include a burning sensation and a temporary redness of the eye.

If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest

congestion, shortness of breath, and/or fever.

If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing. Damage to blood-forming organs may be evidenced by: a) fatigue and anaemia (RBC), b) decreased resistance to infection, and/or excessive bruising and bleeding (platelet effect). Auditory system effects may include temporary hearing loss and/or ringing in the ears.

Peripheral nerve damage may be evidenced by impairment of motor function (incoordination, unsteady walk, or muscle weakness in the extremities, and/or loss of sensation in the

arms and legs).

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

**Revision Date:** SDS Number: Print Date: 03/14/2025 Version 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

Protection of first-aiders When administering first aid, ensure that you are wearing the

appropriate personal protective equipment according to the

incident, injury and surroundings.

Indication of any immediate medical attention and special

treatment needed

Treat symptomatically.

Call a doctor or poison control center for guidance.

Potential for chemical pneumonitis.

Do not induce vomiting.

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Foam, water spray or fog. Dry chemical powder, carbon diox-

ide, sand or earth may be used for small fires only.

Unsuitable extinguishing

media

Do not use direct water jets on the burning product as they

could cause a steam explosion and spread of the fire. Simultaneous use of foam and water on the same surface is

to be avoided as water destroys the foam.

Specific hazards during fire-

fighting

Hazardous combustion products may include:

A complex mixture of airborne solid and liquid particulates and

gases (smoke).

Unidentified organic and inorganic compounds.

Carbon monoxide may be evolved if incomplete combustion

occurs.

The vapour is heavier than air, spreads along the ground and

distant ignition is possible.

Will float and can be reignited on surface water.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Further information Clear fire area of all non-emergency personnel.

If the fire cannot be extinguished the only course of action is

to evacuate immediately.

Keep adjacent containers cool by spraying with water. If possible remove containers from the danger zone.

Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways.

Special protective equipment :

for firefighters

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if

large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to

relevant Standards (e.g. Europe: EN469).

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec- : tive equipment and emerDo not breathe fumes, vapour. Do not operate electrical equipment.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Revision Date: SDS Number: Print Date: 03/14/2025 Version 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

gency procedures

Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area and evacuate all personnel. Attempt to disperse the gas or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas meter. Vapour can travel for considerable distances both above and below the ground surface. Underground services (drains, pipelines, cable ducts) can provide preferential flow paths.

Environmental precautions

Take measures to minimise the effects on groundwater. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways.

Methods and materials for containment and cleaning up Take precautionary measures against static discharges. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

Observe all relevant local and international regulations.

Avoid contact with skin, eyes and clothing.

Evacuate the area of all non-essential personnel.

Ventilate contaminated area thoroughly.

If contamination of site occurs remediation may require spe-

cialist advice.

Ensure electrical continuity by bonding and grounding (earth-

ing) all equipment.

Additional advice

For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet.

Notify authorities if any exposure to the general public or the

environment occurs or is likely to occur.

For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

Local authorities should be advised if significant spillages cannot be contained.

Maritime spillages should be dealt with using a Shipboard Oil Pollution Emergency Plan (SOPEP), as required by MARPOL

Annex 1 Regulation 26.

U.S. regulations may require reporting releases of this material to the environment which exceed the reportable quantity

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

(refer to Section 15) to the National Response Center at (800) 424-8802.

Under Section 311 of the Clean Water Act (CWA) this material is considered an oil. As such, spills into surface waters must be reported to the National Response Center at (800) 424-8802.

This material is covered by EPA's Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Petroleum Exclusion. Therefore, releases to the environment may not be reportable under CERCLA.

#### **SECTION 7. HANDLING AND STORAGE**

Technical measures : Avoid breathing of or direct contact with material. Only use in

well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see

Section 8 of this Safety Data Sheet. Prevent spillages.

Do not use as a cleaning solvent or other non-motor fuel uses. Turn off all battery operated portable electronic devices (examples include: cellular phones, pagers and CD players)

before operating gasoline pump.

Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse. Air-dry contaminated clothing in a well-ventilated area before laundering.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Avoid contact with skin, eyes and clothing.

Advice on safe handling : Ensure that all local regulations regarding handling and stor-

age facilities are followed.

When using do not eat or drink.

Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks. Never siphon by mouth.

The vapour is heavier than air, spreads along the ground and

distant ignition is possible.

Avoid exposure.

Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols.

Properly dispose of any contaminated rags or cleaning mate-

rials in order to prevent fires.

Avoidance of contact : Strong oxidising agents.

Product Transfer : Wait 2 minutes after tank filling (for tanks such as those on

road tanker vehicles) before opening hatches or manholes. Wait 30 minutes after tank filling (for large storage tanks) before opening hatches or manholes. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumu-

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

late, electrostatic discharge and ignition of flammable airvapour mixtures can occur. Be aware of handling operations that may give rise to additional hazards that result from the accumulation of static charges. These include but are not limited to pumping (especially turbulent flow), mixing, filtering, splash filling, cleaning and filling of tanks and containers, sampling, switch loading, gauging, vacuum truck operations, and mechanical movements. These activities may lead to static discharge e.g. spark formation. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge ( $\leq 1$  m/s until fill pipe submerged to twice its diameter, then  $\leq 7$  m/s). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

Further information on storage stability

Tank storage:

Tanks must be specifically designed for use with this product. Bulk storage tanks should be diked (bunded).

Locate tanks away from heat and other sources of ignition. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of strict procedures and precautions.

Keep in a cool place.

Electrostatic charges will be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to reduce the risk.

The vapours in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flammable.

Refer to section 15 for any additional specific legislation covering the packaging and storage of this product.

Packaging material

Suitable material: For containers, or container linings use mild steel, stainless steel., Aluminium may also be used for applications where it does not present an unnecessary fire hazard., Examples of suitable materials are: high density polyethylene (HDPE), polypropylene (PP), and Viton (FKM), which have been specifically tested for compatibility with this product., For container linings, use amine-adduct cured epoxy paint., For seals and gaskets use: graphite, PTFE, Viton A, Viton B. Unsuitable material: Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Examples of materials to avoid are: natural rubber (NR), nitrile rubber (NBR), ethylene propylene rubber (EPDM), polymethyl methacrylate (PMMA), polystyrene, polyvinyl chloride (PVC), polyisobutylene., However, some may be suitable for glove materials.

Container Advice

: Do not cut, drill, grind, weld or perform similar operations on or near containers. Containers, even those that have been emptied, can contain explosive vapours.

Specific use(s) : Not applicable

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

 Version
 Revision Date:
 SDS Number:
 Print Date: 03/14/2025

 4.0
 03/07/2025
 800001007335
 Date of last issue: 08/05/2022

See additional references that provide safe handling practices for liquids that are determined to be static accumulators: American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practices on Static Electricity).

IEC/TS 60079-32-1: Electrostatic hazards, guidance

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Naphtha (petroleum), catalytic reformed	68955-35-1	TWA	500 ppm 2,000 mg/m3	OSHA Z-1
Benzene	71-43-2	TWA	0.25 ppm 0.8 mg/m3	Shell Internal Standard (SIS) for 8-12 hour TWA.
Benzene		STEL	2.5 ppm 8 mg/m3	Shell Internal Standard (SIS) for 15 min (STEL)
Benzene		TWA	0.02 ppm	ACGIH
Benzene		STEL	2.5 ppm	ACGIH
Benzene		PEL	1 ppm	OSHA CARC
Benzene		STEL	5 ppm	OSHA CARC
Benzene		TWA	10 ppm	OSHA Z-2
Benzene		CEIL	25 ppm	OSHA Z-2
Benzene		Peak	50 ppm (10 minutes)	OSHA Z-2
n-Hexane	110-54-3	TWA	500 ppm 1,800 mg/m3	OSHA Z-1
n-Hexane		TWA	50 ppm	ACGIH
isopentane	78-78-4	TWA	1,000 ppm	ACGIH
pentane	109-66-0	TWA	1,000 ppm 2,950 mg/m3	OSHA Z-1
pentane		TWA	1,000 ppm	ACGIH
butane	106-97-8	STEL	1,000 ppm	ACGIH
isobutane	75-28-5	STEL	1,000 ppm	ACGIH

# **Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentration	Basis
Benzene	71-43-2	S- Phenylmer- capturic acid	Urine	End of shift (As soon as possible after	25 μg/g creatinine	ACGIH BEI

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

 Version
 Revision Date:
 SDS Number:
 Print Date: 03/14/2025

 4.0
 03/07/2025
 800001007335
 Date of last issue: 08/05/2022

				exposure ceases)		
		t,t-Muconic acid	Urine	End of shift (As soon as possible after exposure ceases)	500 μg/g creatinine	ACGIH BEI
n-Hexane	110-54-3	2,5- Hexanedi- one	Urine	End of shift	0.5 mg/l	ACGIH BEI

#### **Monitoring Methods**

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. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods http://www.cdc.gov/niosh/

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hse.gov.uk/

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA) , Germany http://www.dguv.de/inhalt/index.jsp

L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/accueil

#### **Engineering measures**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:

Use sealed systems as far as possible.

Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits.

Local exhaust ventilation is recommended.

Eye washes and showers for emergency use.

Prevent unauthorised persons entering the zone.

Firewater monitors and deluge systems are recommended.

#### **General Information**

Consider technical advances and process upgrades (including automation) for the elimination of releases. Minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance. Where there is potential for exposure: restrict

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when there is potential for inhalation; clear up spills immediately and dispose of wastes safely. Ensure safe systems of work or equivalent arrangements are in place to manage risks. Regularly inspect, test and maintain all control measures. Consider the need for risk based health surveillance.

Do not ingest. If swallowed, then seek immediate medical assistance.

# Personal protective equipment

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.

Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

All respiratory protection equipment and use must be in accordance with local regulations.

Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Select a filter suitable for the combination of organic gases and vapours and particles [Type A/Type P boiling point >65°C (149°F)].

Hand protection Remarks

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

on the exact composition of the glove material.

Eye protection : Wear goggles for use against liquids and gas.

If a local risk assessment deems it so then chemical splash goggles may not be required and safety glasses may provide

adequate eye protection.

Skin and body protection : Wear chemical resistant gloves/gauntlets and boots. Where

risk of splashing, also wear an apron.

Protective measures : Personal protective equipment (PPE) should meet recom-

mended national standards. Check with PPE suppliers.

Hygiene measures : Always observe good personal hygiene measures, such as

washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

Practice good housekeeping.

#### **Environmental exposure controls**

General advice : Local guidelines on emission limits for volatile substances

must be observed for the discharge of exhaust air containing

vapour.

Information on accidental release measures are to be found in

section 6.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : Liquid.

Colour : clear

Odour : aromatic

Odour Threshold : Data not available

pH : Data not available

Melting point/ range : ca. -50 °C / -58 °F

Boiling point/boiling range : ca. 80 °C / 176 °F

Flash point :  $< -20 \, ^{\circ}\text{C} / < -4 \, ^{\circ}\text{F}$ 

Evaporation rate : Data not available

Flammability

Flammability (solid, gas) : Not applicable

Lower explosion limit and upper explosion limit / flammability limit

Upper explosion limit / Up- : 8 %(V)

per flammability limit

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

Lower explosion limit / Lower flammability limit

1 %(V)

Vapour pressure

Data not available (50.0 °C / 122.0 °F)

Relative vapour density : 3.3

Relative density : No data available

Density : ca. 707 kg/m3 (15 °C / 59 °F)

Method: ASTM D4052

Solubility(ies)

Water solubility : Data not available

Partition coefficient: n-

octanol/water

log Pow: 2 - 7

Auto-ignition temperature : Data not available

Decomposition temperature : Data not available

Viscosity

Viscosity, dynamic : ca. 0.5 - 1 mPa.s (20 °C / 68 °F)

Method: ASTM D445

Viscosity, kinematic : Data not available

Explosive properties : Classification Code: Not classified.

Oxidizing properties : Not applicable

Surface tension : Data not available

Conductivity: < 100 pS/m, The conductivity of this material

makes it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10,000 pS/m., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly

influence the conductivity of a liquid

Low conductivity: < 100 pS/m, The conductivity of this material makes it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10,000 pS/m., Whether a liquid is nonconductive or semiconductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and antistatic additives can greatly influence the conductivity of a liq-

uid

Particle size : Data not available

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

Data not available

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : May oxidise in the presence of air.

Chemical stability : Stable under normal conditions of use.

Possibility of hazardous reac-

tions

: No hazardous reaction is expected when handled and stored

according to provisions

Conditions to avoid : Avoid heat, sparks, open flames and other ignition sources.

In certain circumstances product can ignite due to static elec-

tricity.

Incompatible materials : Strong oxidising agents.

Hazardous decomposition

products

Hazardous decomposition products are not expected to form

during normal storage.

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degra-

dation.

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

Basis for assessment : Information given is based on product data, a knowledge of

the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual compo-

nent(s).

# Information on likely routes of exposure

Exposure may occur via inhalation, ingestion, skin absorption, skin or eye contact, and accidental ingestion.

#### **Acute toxicity**

**Product:** 

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Remarks: Low toxicity

Acute inhalation toxicity : LC 50 (Rat): > 5 mg/l

Exposure time: 4 h Remarks: Low toxicity

Remarks: Based on human experience, breathing of vapours or mists may cause a temporary burning sensation to nose,

throat and lungs.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2,000 mg/kg

Remarks: Low toxicity

Acute toxicity (other routes of

administration)

Remarks: Exposure may occur via inhalation, ingestion, skin

absorption, skin or eye contact, and accidental ingestion.

#### **Components:**

Naphtha (petroleum), catalytic reformed:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Remarks: Low toxicity

Acute inhalation toxicity : LC 50 (Rat): > 5 mg/l

Exposure time: 4 h Remarks: Low toxicity

Remarks: Based on human experience, breathing of vapours or mists may cause a temporary burning sensation to nose,

throat and lungs.

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg

Remarks: Low toxicity

Acute toxicity (other routes of

administration)

Remarks: Exposure may occur via inhalation, ingestion, skin

absorption, skin or eye contact, and accidental ingestion.

#### Skin corrosion/irritation

#### **Product:**

Remarks: Irritating to skin.

# **Components:**

#### Naphtha (petroleum), catalytic reformed:

Remarks: Irritating to skin.

### Serious eye damage/eye irritation

#### **Product:**

Remarks: Slightly irritating to the eye., Based on available data, the classification criteria are not met.

# Components:

#### Naphtha (petroleum), catalytic reformed:

Remarks: Irritating to eyes. (Hydrogen Sulfide), Based on available data, the classification criteria are not met.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

**Revision Date:** SDS Number: Print Date: 03/14/2025 Version

4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

# Respiratory or skin sensitisation

#### Product:

Remarks: Not a sensitiser.

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

#### **Components:**

### Naphtha (petroleum), catalytic reformed:

Remarks: Not a sensitiser. Based on available data, the classification criteria are not met.

### Germ cell mutagenicity

#### **Product:**

Genotoxicity in vivo : Remarks: Contains Benzene, CAS # 71-43-2., May cause

heritable genetic damage

Remarks: Mutagenicity studies on gasoline and gasoline blending streams have shown predominantly negative results.

Germ cell mutagenicity- As-

sessment

: Category 1B

#### **Components:**

### Naphtha (petroleum), catalytic reformed:

Genotoxicity in vivo : Remarks: Contains Benzene, CAS # 71-43-2., May cause

heritable genetic damage

Remarks: Mutagenicity studies on gasoline and gasoline blending streams have shown predominantly negative results.

#### Carcinogenicity

#### **Product:**

Remarks: Contains Benzene, CAS # 71-43-2., Known human carcinogen.

Remarks: Contains Benzene, CAS # 71-43-2., May cause leukaemia (AML - acute myelogenous leukaemia).

Remarks: Inhalation exposure to mice causes liver tumours, which are not considered relevant to humans.

Remarks: An epidemiology study of more than 18,000 petroleum marketing and distribution workers found no significantly increased risk of death from leukemia, multiple myeloma, or kidney cancer associated with gasoline exposure.

Carcinogenicity - Assess- : Category 1B

ment

### **Components:**

Naphtha (petroleum), catalytic reformed:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025

4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

Remarks: Contains Benzene, CAS # 71-43-2., Known human carcinogen.

Remarks: Contains Benzene, CAS # 71-43-2., May cause leukaemia (AML - acute myelogenous leukaemia)., May cause MDS (Myelodysplastic Syndrome).

Remarks: Inhalation exposure to mice causes liver tumours, which are not considered relevant to humans.

Remarks: An epidemiology study of more than 18,000 petroleum marketing and distribution workers found no significantly increased risk of death from leukemia, multiple myeloma, or kidney cancer associated with gasoline exposure.

IARC Group 1: Carcinogenic to humans

Benzene 71-43-2

Group 2B: Possibly carcinogenic to humans

Naphtha (petroleum), catalyt- 68955-35-1

ic reformed

OSHA specifically regulated carcinogen

Benzene 71-43-2

NTP Known to be human carcinogen

Benzene 71-43-2

#### Reproductive toxicity

### **Product:**

Effects on fertility

Remarks: Contains Toluene, CAS # 108-88-3., Causes foe-

totoxicity at doses which are maternally toxic.

Remarks: Contains n-Hexane, CAS # 110-54-3., May impair

fertility at doses which produce other toxic effects.

Remarks: Contains Toluene, CAS # 108-88-3., Many case studies involving abuse during pregnancy indicate that toluene can cause birth defects, growth retardation and learning diffi-

culties.

Reproductive toxicity - As-

sessment

: This product does not meet the criteria for classification in

categories 1A/1B.

#### Components:

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

# Naphtha (petroleum), catalytic reformed:

Effects on fertility

Remarks: Contains n-Hexane, CAS # 110-54-3.

May impair fertility at doses which produce other toxic effects.

### STOT - single exposure

#### **Product:**

Remarks: High concentrations may cause central nervous system depression resulting in head-aches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

#### **Components:**

# Naphtha (petroleum), catalytic reformed:

Remarks: High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

Remarks: Slightly irritating to respiratory system.

#### STOT - repeated exposure

#### **Product:**

Remarks: Kidney: caused kidney effects in male rats which are not considered relevant to humans

Remarks: Contains Benzene, CAS # 71-43-2., Blood-forming organs: repeated exposure affects the bone marrow.

Remarks: Contains n-Hexane, CAS # 110-54-3., Peripheral nervous system: repeated exposure causes peripheral neuropathy in animals.

### **Components:**

#### Naphtha (petroleum), catalytic reformed:

Remarks: Kidney: caused kidney effects in male rats which are not considered relevant to humans

Remarks: Contains Toluene, CAS # 108-88-3., Prolonged and repeated exposures to high concentrations have resulted in hearing loss in rats. Solvent abuse and noise interaction in the work environment may cause hearing loss., Abuse of vapours has been associated with organ damage and death.

#### **Aspiration toxicity**

#### **Product:**

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

#### Components:

### Naphtha (petroleum), catalytic reformed:

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

**Revision Date:** SDS Number: Print Date: 03/14/2025 Version

4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

#### **Further information**

#### **Product:**

Remarks: Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest.

Remarks: Contains Toluene, CAS # 108-88-3., Prolonged and repeated exposures to high concentrations have resulted in hearing loss in rats. Solvent abuse and noise interaction in the work environment may cause hearing loss.

Remarks: Contains Toluene, CAS # 108-88-3., Abuse of vapours has been associated with organ damage and death.

Remarks: Contains Benzene, CAS # 71-43-2., Myelodysplastic syndrome (MDS) was observed in individuals exposed to very high levels (50 ppm to 300 ppm range) of benzene over a long period of time in the workplace. The relevance of these results to lower levels of exposure is not known.

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

### **Components:**

#### Naphtha (petroleum), catalytic reformed:

Remarks: Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest.

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

#### **SECTION 12. ECOLOGICAL INFORMATION**

Basis for assessment Incomplete ecotoxicological data are available for this product.

> The information given below is based partly on a knowledge of the components and the ecotoxicology of similar products.

**Ecotoxicity** 

**Product:** 

Toxicity to fish (Acute toxici-

Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to daphnia and other :

aquatic invertebrates (Acute

Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ toxicity)

Toxicity to algae (Acute tox-

icity) Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to fish (Chronic tox-Remarks: Data not available

icity)

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025

4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

Remarks: NOEC/NOEL > 1.0 - <= 10 mg/l

Toxicity to microorganisms

(Acute toxicity)

Remarks: LL/EL/IL50 >10 <= 100 mg/l

Harmful

# **Components:**

### Naphtha (petroleum), catalytic reformed:

Toxicity to fish (Acute toxici: Remarks: Toxic

ty)  $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to daphnia and other :

aquatic invertebrates (Acute

toxicity)

Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to algae (Acute tox-

icity)

: Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to fish (Chronic tox-

icity)

Remarks: Data not available

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

Remarks: NOEC/NOEL > 1.0 - <= 10 mg/l

Toxicity to microorganisms

(Acute toxicity)

Remarks: LL/EL/IL50 >10 <= 100 mg/l

Harmful

#### Persistence and degradability

#### **Product:**

Biodegradability : Remarks: Oxidises rapidly by photo-chemical reactions in air.

Inherently biodegradable. Not Persistent per IMO criteria.

International Oil Pollution Compensation (IOPC) Fund definition: "A non-persistent oil is oil, which, at the time of shipment, consists of hydrocarbon fractions, (a) at least 50% of which, by volume, distills at a temperature of 340°C (645°F) and (b) at least 95% of which, by volume, distils at a temperature of 370°C (700°F) when tested by the ASTM Method D-86/78 or

any subsequent revision thereof."

# **Components:**

# Naphtha (petroleum), catalytic reformed:

Biodegradability : Remarks: Oxidises rapidly by photo-chemical reactions in air.

Inherently biodegradable. Not Persistent per IMO criteria.

International Oil Pollution Compensation (IOPC) Fund definition: "A non-persistent oil is oil, which, at the time of shipment,

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

consists of hydrocarbon fractions, (a) at least 50% of which, by volume, distills at a temperature of 340°C (645°F) and (b) at least 95% of which, by volume, distils at a temperature of 370°C (700°F) when tested by the ASTM Method D-86/78 or

any subsequent revision thereof."

### **Bioaccumulative potential**

**Product:** 

Bioaccumulation : Remarks: Contains components with the potential to bioac-

cumulate.

**Components:** 

Naphtha (petroleum), catalytic reformed:

Bioaccumulation : Remarks: Contains components with the potential to bioac-

cumulate.

Mobility in soil

**Product:** 

Mobility : Remarks: If the product enters soil, one or more constituents

will or may be mobile and may contaminate groundwater.

Floats on water.

Evaporates within a day from water or soil surfaces.

**Components:** 

Naphtha (petroleum), catalytic reformed:

Mobility : Remarks: If the product enters soil, one or more constituents

will or may be mobile and may contaminate groundwater.

Floats on water.

Evaporates within a day from water or soil surfaces.

Other adverse effects

No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal meth-

ods in compliance with applicable regulations.

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Do not dispose into the environment, in drains or in water

courses.

Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

 Version
 Revision Date:
 SDS Number:
 Print Date: 03/14/2025

 4.0
 03/07/2025
 800001007335
 Date of last issue: 08/05/2022

contamination.

Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

Contaminated packaging : Drain container thoroughly.

After draining, vent in a safe place away from sparks and fire.

Residues may cause an explosion hazard. Do not puncture, cut, or weld uncleaned drums. Send to drum recoverer or metal reclaimer.

Do not pollute the soil, water or environment with the waste

container.

**Local legislation** 

Remarks : Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

Local regulations may be more stringent than regional or na-

tional requirements and must be complied with.

#### **SECTION 14. TRANSPORT INFORMATION**

### **National Regulations**

**49 CFR** 

UN/ID/NA number : UN 3295

Proper shipping name : HYDROCARBONS, LIQUID, N.O.S.

Class : 3
Packing group : II
Labels : 3
Marine pollutant : no

Remarks : This material is an 'OIL' under 49 CFR Part 130 when trans-

ported in a container of 3500 gallon capacity or greater.

**International Regulations** 

IATA-DGR

UN/ID No. : UN 3295

Proper shipping name : HYDROCARBONS, LIQUID, N.O.S.

Class : 3
Packing group : II
Labels : 3

**IMDG-Code** 

UN number : UN 3295

Proper shipping name : HYDROCARBONS, LIQUID, N.O.S.

(Petroleum naphtha)

Class : 3 Packing group : II

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025

4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

Labels : 3 Marine pollutant : yes

#### Maritime transport in bulk according to IMO instruments

MARPOL Annex 1 rules apply for bulk shipments by sea.

#### Special precautions for user

Not applicable

#### **SECTION 15. REGULATORY INFORMATION**

### **EPCRA - Emergency Planning and Community Right-to-Know Act**

#### **CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Benzene	71-43-2	10	16
isobutane	75-28-5	100	*
n-Hexane	110-54-3	5000	*

<sup>\*:</sup> Calculated RQ exceeds reasonably attainable upper limit.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

Skin corrosion or irritation

Aspiration hazard Reproductive toxicity Germ cell mutagenicity

Carcinogenicity

Specific target organ toxicity (single or repeated exposure)

SARA 313 : The following components are subject to reporting levels es-

tablished by SARA Title III, Section 313:

Benzene 71-43-2 >= 50 - < 70 %

n-Hexane 110-54-3 >= 20 - < 30 %

#### **Clean Water Act**

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Benzene 71-43-2 59.9999 %

#### **US State Regulations**

# Pennsylvania Right To Know

Naphtha (petroleum), catalytic reformed 68955-35-1

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

Benzene	71-43-2
pentane	109-66-0
isopentane	78-78-4
n-Hexane	110-54-3
butane	106-97-8
isobutane	75-28-5

### California Prop. 65

WARNING: This product can expose you to chemicals including Benzene, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

#### California List of Hazardous Substances

Benzene	71-43-2
pentane	109-66-0
n-Hexane	110-54-3
butane	106-97-8

### **California Regulated Carcinogens**

Benzene 71-43-2

#### Other regulations:

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

### The components of this product are reported in the following inventories:

TSCA : All components listed or polymer exempt.

AIIC : All components listed or polymer exempt.

IECSC : All components listed or polymer exempt.

KECI : All components listed or polymer exempt.

TCSI : All components listed or polymer exempt.

PICCS : All components listed or polymer exempt.

DSL : All components listed or polymer exempt.

# **SECTION 16. OTHER INFORMATION**

# **Further information**

NFPA Rating (Health, Fire, Reac- 1, 3, 0

tivity)

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)

OSHA CARC : OSHA Specifically Regulated Chemicals/Carcinogens

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

Version Revision Date: SDS Number: Print Date: 03/14/2025 4.0 03/07/2025 800001007335 Date of last issue: 08/05/2022

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

OSHA Z-2 : USA. Occupational Exposure Limits (OSHA) - Table Z-2

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit

OSHA CARC / PEL : Permissible exposure limit (PEL)

OSHA CARC / STEL : Excursion limit

OSHA Z-1 / TWA : 8-hour time weighted average OSHA Z-2 / TWA : 8-hour time weighted average OSHA Z-2 / CEIL : Acceptable ceiling concentration

OSHA Z-2 / Peak : Acceptable maximum peak above the acceptable ceiling con-

centration for an 8-hr shift

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this docu-

ment can be looked up in reference literature (e.g. scientific

dictionaries) and/or websites.

ACGIH = American Conference of Governmental Industrial

Hygienists

ADR = European Agreement concerning the International

Carriage of Dangerous Goods by Road

AICS = Australian Inventory of Chemical Substances ASTM = American Society for Testing and Materials

BEL = Biological exposure limits

BTEX = Benzene, Toluene, Ethylbenzene, Xylenes

CAS = Chemical Abstracts Service

CEFIC = European Chemical Industry Council CLP = Classification Packaging and Labelling

COC = Cleveland Open-Cup

DIN = Deutsches Institut fur Normung DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level DSL = Canada Domestic Substance List

EC = European Commission EC50 = Effective Concentration fifty

ECETOC = European Center on Ecotoxicology and Toxicolo-

gy Of Chemicals

ECHA = European Chemicals Agency

EINECS = The European Inventory of Existing Commercial

**Chemical Substances** 

EL50 = Effective Loading fifty

ENCS = Japanese Existing and New Chemical Substances

Inventory

EWC = European Waste Code

GHS = Globally Harmonised System of Classification and

Labelling of Chemicals

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IC50 = Inhibitory Concentration fifty

IL50 = Inhibitory Level fifty

IMDG = International Maritime Dangerous Goods

INV = Chinese Chemicals Inventory

IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables

KECI = Korea Existing Chemicals Inventory

LC50 = Lethal Concentration fifty

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

# **BHC**, Reformate Heartcut

 Version
 Revision Date:
 SDS Number:
 Print Date: 03/14/2025

 4.0
 03/07/2025
 800001007335
 Date of last issue: 08/05/2022

LD50 = Lethal Dose fifty per cent.

LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading

LL50 = Lethal Loading fifty

MARPOL = International Convention for the Prevention of

Pollution From Ships

NOEC/NOEL = No Observed Effect Concentration / No Ob-

served Effect Level

OE\_HPV = Occupational Exposure - High Production Volume

PBT = Persistent, Bioaccumulative and Toxic

PICCS = Philippine Inventory of Chemicals and Chemical

Substances

PNEC = Predicted No Effect Concentration

REACH = Registration Evaluation And Authorisation Of

Chemicals

RID = Regulations Relating to International Carriage of Dan-

gerous Goods by Rail

SKIN DES = Skin Designation

STEL = Short term exposure limit

TRA = Targeted Risk Assessment

TSCA = US Toxic Substances Control Act

TWA = Time-Weighted Average

vPvB = very Persistent and very Bioaccumulative

This product is intended for use in closed systems only.

Revision Date : 03/07/2025

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.

US / EN