PAGE: 1 of 3 **PRINT DATE:** 31/07/2002

SAFETY DATA SHEET

REF: T24

Product name:		QGR					
Supplier:		MMP-International, Division of ITW Ltd.					
			lose, Park Farm				
		Ind Est,					
			orough, Northan	nts,			
		NN8 6QX					
Emergency telepho	one numbe	r: +44 (0)	1933 670870				
Fax No:		+44 (0)	1933 670800				
2. COMPOSITION/INF	ORMATION	I ON INGREE	DIENTS				
Identification of the	e preparati	on					
Chemical Name			CAS-No	EEC-No	Class	Weight	
DICHLOROMETHANE			75-09-2	602-004- 00-3	Carc. Cat.3; R40	30-60	
BUTANE			106-97-8	601-004- 00-0	F+; R12	5-10	
PROPANE			74-98-6	601-003- 00-5	F+; R12	10-30	
4-METHYLPENTAN-2-ON	NE		108-10-1	606-004- 00-4	F; R11	10-30	
3. HAZARDS IDENTIFI	ICATION						
Most important haz	zards: E	xtremely flamm	ahle				
			abic.				
Specific hazards	Ir	-	Irritating to skir	n slightly.			
Specific hazards 4. FIRST AID MEASUR		-		n slightly.			
-	RES	ritating to eyes,			sure.		
4. FIRST AID MEASUR	RES Move to free Remove imi	ritating to eyes, sh air, Consult a mediately adher	Irritating to skir	significant expo	sure. Iy with soap and		
4. FIRST AID MEASUR Inhalation:	RES Move to free Remove imi plenty of wa	ritating to eyes, sh air, Consult a mediately adher iter, If skin irrita ontact with eyes	Irritating to skir physician after s ing matter. Wash tion persists, cal	significant expo n off immediate I a physician.			
4. FIRST AID MEASUF Inhalation: Skin contact:	RES Move to free Remove imi plenty of wa In case of c medical adv	ritating to eyes, sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice.	Irritating to skir physician after s ing matter. Wash tion persists, cal	significant expo n off immediate I a physician. rely with plenty	ly with soap and		
4. FIRST AID MEASUR Inhalation: Skin contact: Eye contact:	RES Move to free Remove imi plenty of wa In case of c medical adv Call a physi	ritating to eyes, sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice.	Irritating to skir physician after s ing matter. Wash tion persists, cal , rinse immediat	significant expo n off immediate I a physician. rely with plenty	ly with soap and		
4. FIRST AID MEASUR Inhalation: Skin contact: Eye contact: Ingestion:	RES Move to free Remove imin plenty of wa In case of c medical adv Call a physi	ritating to eyes, sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice. cian immediatel	Irritating to skir physician after s ing matter. Wash tion persists, cal , rinse immediat	significant expo n off immediate II a physician. Tely with plenty e vomiting.	ly with soap and of water and seek	, Water	
4. FIRST AID MEASUR Inhalation: Skin contact: Eye contact: Ingestion: 5. FIRE-FIGHTING ME	RES Move to free Remove implenty of wa In case of c medical adv Call a physi EASURES ing media:	ritating to eyes, sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice. cian immediatel alcohol-resi spray.	Irritating to skir physician after s ing matter. Wash tion persists, cal , rinse immediat y, Do not induce	significant expo n off immediate II a physician. Tely with plenty e vomiting.	ly with soap and of water and seek	, Water	
4. FIRST AID MEASUE Inhalation: Skin contact: Eye contact: Ingestion: 5. FIRE-FIGHTING ME Suitable extinguish	RES Move to free Remove imin plenty of wa In case of c medical adv Call a physi EASURES ing media: In case of f	ritating to eyes, sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice. cian immediatel alcohol-resi spray. ire and/or explo	Irritating to skir physician after s ing matter. Wash tion persists, cal , rinse immediat y, Do not induce stant foam, Cark sion do not brea ers: In	significant expo n off immediate II a physician. Tely with plenty toon vomiting.	ely with soap and of water and seek D ₂), dry powder ar a self contained breath		
4. FIRST AID MEASUR Inhalation: Skin contact: Eye contact: Ingestion: 5. FIRE-FIGHTING ME Suitable extinguish Specific hazards:	RES Move to free Remove imin plenty of wa In case of c medical adv Call a physi EASURES ing media: In case of f equipment	sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice. cian immediatel alcohol-rest spray. ire and/or explo	Irritating to skir physician after s ing matter. Wash tion persists, cal , rinse immediat y, Do not induce stant foam, Cark sion do not brea ers: In	significant expo n off immediate II a physician. rely with plenty e vomiting. con Dioxide (CC the fumes. case of fire, we	ely with soap and of water and seek D ₂), dry powder ar a self contained breath		
4. FIRST AID MEASUR Inhalation: Skin contact: Eye contact: Ingestion: 5. FIRE-FIGHTING ME Suitable extinguish Specific hazards: Special protective of	RES Move to free Remove imin plenty of wa In case of c medical adv Call a physi EASURES ing media: In case of f equipment EASE MEAS	ritating to eyes, sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice. cian immediatel alcohol-resi spray. ire and/or explo for firefight URES	Irritating to skir physician after s ing matter. Wash tion persists, cal , rinse immediat y, Do not induce stant foam, Cark sion do not brea ers: In	significant expo n off immediate II a physician. rely with plenty e vomiting. con Dioxide (CC the fumes. case of fire, we paratus, protec	ely with soap and of water and seek D ₂), dry powder ar a self contained breath		
4. FIRST AID MEASUR Inhalation: Skin contact: Eye contact: Ingestion: 5. FIRE-FIGHTING ME Suitable extinguish Specific hazards: Special protective of 6. ACCIDENTAL RELE	RES Move to fres Remove imi plenty of wa In case of c medical adv Call a physi EASURES ing media: In case of f equipment CASE MEAS ns:	sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice. cian immediatel alcohol-rest spray. ire and/or explo for firefight URES Do not breath	Irritating to skir physician after s ing matter. Wash tion persists, cal , rinse immediat y, Do not induce stant foam, Cart sion do not brea ers: In ap	significant expo n off immediate II a physician. rely with plenty e vomiting. con Dioxide (CC the fumes. case of fire, we paratus, protect ay mist.	ely with soap and of water and seek D ₂), dry powder ar a self contained breath		
4. FIRST AID MEASUR Inhalation: Skin contact: Eye contact: Ingestion: 5. FIRE-FIGHTING ME Suitable extinguish Specific hazards: Special protective of 6. ACCIDENTAL RELE Personal precaution	RES Move to free Remove imin plenty of wa In case of c medical adv Call a physi EASURES ing media: In case of f equipment EASE MEAS ns: cautions:	ritating to eyes, sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice. cian immediatel alcohol-resi spray. ire and/or explo for firefight URES Do not breath Do not let pro Soak up with	Irritating to skir physician after s ing matter. Wash tion persists, cal , rinse immediat y, Do not induce stant foam, Cart stant foam, Cart stant foam, Cart stant foam, Cart asion do not brea ers: In ap	significant exponent off immediate a physician. Tely with plenty e vomiting. The fumes. case of fire, we paratus, protect ay mist. ns. material (e.g. s	ely with soap and of water and seek D ₂), dry powder ar a self contained breath		
4. FIRST AID MEASUR Inhalation: Skin contact: Eye contact: Ingestion: 5. FIRE-FIGHTING ME Suitable extinguish Specific hazards: Special protective of 6. ACCIDENTAL RELE Personal precaution Environmental prec	RES Move to fres Remove imi plenty of wa In case of c medical adv Call a physi EASURES ing media: In case of f equipment CASE MEAS ns: cautions: ng up:	ritating to eyes, sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice. cian immediatel alcohol-resi spray. ire and/or explo for firefight URES Do not breath Do not let pro Soak up with	Irritating to skir physician after s ing matter. Wash tion persists, cal , rinse immediat y, Do not induce stant foam, Cart stant foam, Cart stant foam, Cart stant foam, Cart asion do not brea ers: In ap	significant exponent off immediate a physician. Tely with plenty e vomiting. The fumes. case of fire, we paratus, protect ay mist. ns. material (e.g. s	ely with soap and of water and seek D ₂), dry powder ar a self contained breath tive suit.		
 4. FIRST AID MEASUE Inhalation: Skin contact: Eye contact: Ingestion: 5. FIRE-FIGHTING ME Suitable extinguish Specific hazards: Special protective of 6. ACCIDENTAL RELE Personal precaution Environmental precaution Methods for cleani 	RES Move to fres Remove imi plenty of wa In case of c medical adv Call a physi EASURES ing media: In case of f equipment EASE MEAS ns: cautions: ng up:	ritating to eyes, sh air, Consult a mediately adher iter, If skin irrita ontact with eyes vice. cian immediatel alcohol-resi spray. ire and/or explo for firefight URES Do not breath Do not let pro Soak up with binder, univer	Irritating to skir physician after s ing matter. Wash tion persists, cal , rinse immediat y, Do not induce stant foam, Cart stant foam, Cart s	significant expo n off immediate II a physician. rely with plenty e vomiting. con Dioxide (CC the fumes. case of fire, we paratus, protect ay mist. ns. material (e.g. s dust). Transfer t	ely with soap and of water and seek D ₂), dry powder ar a self contained breath tive suit.		

QGR

8. EXPOSURE CONTROL Chemical Name:		TECTION pational exposure	limits (Ref	: British COSHH -
DICHLOROMETHANE		3	50mg/m3	
BUTANE		1	450mg/m3	
PROPANE		/	Asphyxiant	
4-METHYLPENTAN-2-ONE	_			
Engineering measures reduce exposure	s to Ensure ad	dequate ventilation, esp	ecially in confined are	as
- Respiratory protec	tion: Breathing	apparatus with filter.		
- Hand protection:	gloves 9 ((Advice should be soug	nt on the type of glove	s) .
- Eye protection:	safety gla	SSES.		
- Skin and body pro	tection: protective	e suit.		
Hygiene measures:				
9. PHYSICAL AND CHEN				
Form: liquid - aerosol	Colour:	colourless	Odour:	Chlorinated hydrocarbons solvent
pH: g/I H	20) N/A			
Boiling point/range:	39	°C		
Flash point:	N/A	°C		
Melting point/range:	<0	°C		
Autoignition temperat	ure: >400	°C		
Flammability (solid, ga	as): LEL 0.8 (25°C), UE	% vol in air at EL 66.4		
Explosive properties:	None			
Oxidizing properties:	None			
Vapour pressure:	2.41 Bar			
Water solubility	insoluble			
0. STABILITY AND REA				
Stability:	Stable			
Conditions to avoid:		at and sources of ignition		
Materials to avoid:	0 0	rong acids, strong base	S.	
Hazardous decompos	ition products:	Hydrogen chloride, ph	osgene, chlorine.	
1. TOXICOLOGICAL INF	FORMATION			
Acute toxicity:	Components of the prod ingestion and through th Aliphatic Hydrocarbon S	ne skin.		ation,
Local effects:	May be harmful by inhal overexposure may be he	-		
Sensitization:	May cause skin irritatior	n and/or dermatitis.		
Long term toxicity:	Repeated or prolonged educe to degreasing prope		in irritation and derm	atitis,
Repeated or prolonge	ed exposure: Dar	nger of serious damage he renal / Central nerve		d exposure,

PAGE: 3 of 3 PRINT DATE: 31/07/2002

REF: T24

Mobility		Do not allow m	atorial to contaminate around	water system			
Mobility: Persistence / degradability:			Do not allow material to contaminate ground water system. Aquatic toxicity is unlikely due to low solubility.				
				ty.			
13. DISPOSAL CO Waste from resi							
Contaminated p		•	atainara can ba landfillad afta	r cleaning when in			
contaminated p	ackaging.		ntainers can be landfilled afte ce with local regulations.	r clearning, when in			
European waste	Catalogue No:	08 04 99)				
14. TRANSPORT I	NFORMATION						
Proper sh	ipping name:	Aerosol					
U	IN-No:	1950					
ADR/RID Class:		2					
			HI/UN No:	1950			
IMO Class:		2					
roper shipping na	me:	Aerosol					
ICAO Class:		2	UN/ID No:	1950			
Proper sh	ipping name	Aerosol					
Classification ad 93/21/EEC - Contains: - Symbol(s):	C		on classification of hat	PENTAN-2-ONE.			
93/21/EEC - Contains:	C	OROMETHANE, PRO F+	DPANE, BUTANE, 4-METHYLF	PENTAN-2-ONE.			
93/21/EEC - Contains:	DICHL	- OROMETHANE, PRO F+ Ex fla flammable. R36 - Irr	DPANE, BUTANE, 4-METHYLF	PENTAN-2-ONE.			
93/21/EEC - Contains: - Symbol(s):	DICHL R12 - Extremely f irreversible effect S2 - Keep out of S16 - Keep away vapour. S33 - Tal	OROMETHANE, PRO F+ Ex fla lammable. R36 - Irr s. reach of children. S & from sources of ignit ke precautionary mea	DPANE, BUTANE, 4-METHYLF	e risks of ntilated place. ot breathe es. S24/25 -			
93/21/EEC - Contains: - Symbol(s): R -phrase(s): S -phrase(s):	DICHL R12 - Extremely f irreversible effect S2 - Keep out of S16 - Keep away vapour. S33 - Tal Avoid contact wit gloves.	OROMETHANE, PRO F+ Ex fla lammable. R36 - Irr s. reach of children. S & from sources of ignit ke precautionary mea	PANE, BUTANE, 4-METHYLF	e risks of ntilated place. ot breathe es. S24/25 -			
93/21/EEC - Contains: - Symbol(s): R -phrase(s): S -phrase(s):	DICHL R12 - Extremely f irreversible effect S2 - Keep out of S16 - Keep away vapour. S33 - Tal Avoid contact wit gloves.	OROMETHANE, PRO F+ Ex fla lammable. R36 - Irr s. reach of children. S & from sources of ignit ke precautionary mea	PANE, BUTANE, 4-METHYLF	e risks of ntilated place. ot breathe es. S24/25 -			
93/21/EEC - Contains: - Symbol(s): R -phrase(s): S -phrase(s): 16. OTHER INFOR	DICHL R12 - Extremely f irreversible effect S2 - Keep out of S16 - Keep away vapour. S33 - Tal Avoid contact wit gloves.	OROMETHANE, PRO F+ Ex fla lammable. R36 - Irr s. reach of children. S & from sources of ignit ke precautionary mea	PANE, BUTANE, 4-METHYLF	e risks of ntilated place. ot breathe es. S24/25 -			
93/21/EEC - Contains: - Symbol(s): R -phrase(s): S -phrase(s): 16. OTHER INFOR Recommended Recommended	DICHL R12 - Extremely f irreversible effect S2 - Keep out of S16 - Keep away vapour. S33 - Tal Avoid contact wit gloves. CMATION use: restrictions:	OROMETHANE, PRO F+ Ex flammable. R36 - Irr s. reach of children. S 9 from sources of ignit ke precautionary mea h skin and eyes S36	PANE, BUTANE, 4-METHYLF	e risks of ntilated place. ot breathe es. S24/25 -			
93/21/EEC - Contains: - Symbol(s): R -phrase(s): S -phrase(s): 16. OTHER INFOR Recommended Recommended	DICHU R12 - Extremely fi irreversible effect S2 - Keep out of S16 - Keep away vapour. S33 - Tal Avoid contact wit gloves. CMATION use: restrictions: ture, read the labels	OROMETHANE, PRO F+ Ex flammable. R36 - Irr s. reach of children. S 9 from sources of ignit ke precautionary mea h skin and eyes S36	DPANE, BUTANE, 4-METHYLF	e risks of ntilated place. ot breathe es. S24/25 -			
 93/21/EEC Contains: Symbol(s): R -phrase(s): S -phrase(s): 16. OTHER INFOR Recommended Recommended When used in a mixt Revision date: 	DICHL R12 - Extremely f irreversible effect S2 - Keep out of S16 - Keep away vapour. S33 - Tal Avoid contact wit gloves. MATION use: restrictions: ture, read the label: 11	COROMETHANE, PRO F+ Ex flammable. R36 - Irr s. reach of children. S G from sources of ignif ke precautionary mea h skin and eyes S36 s and safety data she /07/2002	DPANE, BUTANE, 4-METHYLF	e risks of ntilated place. ot breathe es. S24/25 - e clothing and			